REPORT OF THE WORKSHOP ON ASSESSING GOVERNANCE IN THE BAY OF BENGAL LARGE MARINE ECOSYSTEM
October 28-30, 2014, Bangkok, Thailand
Report of the workshop on assessing governance in the Bay of Bengal Large Marine Ecosystem - October 28-30, 2014, Bangkok, Thailand

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<th>Full Form</th>
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<tbody>
<tr>
<td>ACS</td>
<td>Association of Caribbean States</td>
</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>APFIC</td>
<td>Asia-Pacific Fishery Commission</td>
</tr>
<tr>
<td>ASCLME</td>
<td>Agulhas-Somali Current LME</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of South East Asian Nations</td>
</tr>
<tr>
<td>BIMSTEC</td>
<td>Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation</td>
</tr>
<tr>
<td>BOBLME</td>
<td>Bay of Bengal Large Marine Ecosystem</td>
</tr>
<tr>
<td>BOBP-IGO</td>
<td>Bay of Bengal Programme – Intergovernmental Organisation</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBD-EBSA</td>
<td>Convention on Biodiversity - Ecologically or Biologically Significant Areas</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species</td>
</tr>
<tr>
<td>CLME</td>
<td>Caribbean Large Marine Ecosystem</td>
</tr>
<tr>
<td>CMS</td>
<td>Convention on Migratory Species</td>
</tr>
<tr>
<td>CNRS</td>
<td>Centre for Natural Resource Studies (Bangladesh)</td>
</tr>
<tr>
<td>COBSEA</td>
<td>Coordinating Body on the Seas of East Asia</td>
</tr>
<tr>
<td>CROP</td>
<td>Council of Regional Organisations of the Pacific</td>
</tr>
<tr>
<td>CSC</td>
<td>Caribbean Sea Commission</td>
</tr>
<tr>
<td>DRR</td>
<td>Disaster Response and Relief</td>
</tr>
<tr>
<td>EAF</td>
<td>Ecosystem Approach to Fisheries</td>
</tr>
<tr>
<td>EBM</td>
<td>Ecosystem Based Management</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation of the United Nations</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GESAMP</td>
<td>Group of Experts on the Scientific Aspects of Marine Environmental Protection</td>
</tr>
<tr>
<td>GPA</td>
<td>UNEP Global Programme of Action</td>
</tr>
<tr>
<td>ICSF</td>
<td>International Collective in Support of Fishworkers</td>
</tr>
<tr>
<td>IGO</td>
<td>Intergovernmental Organization</td>
</tr>
<tr>
<td>IMO</td>
<td>UN International Maritime Organisation</td>
</tr>
<tr>
<td>INFO-FISH</td>
<td>Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asian and Pacific Region</td>
</tr>
<tr>
<td>IOC</td>
<td>UNESCO Intergovernmental Oceanographic Commission</td>
</tr>
<tr>
<td>IOC-WESTPAC</td>
<td>IOC Sub-Commission for the Western Pacific</td>
</tr>
<tr>
<td>IOMEC</td>
<td>Indian Ocean Marine Environmental Conference</td>
</tr>
<tr>
<td>IOSEA</td>
<td>Indian Ocean - South-East Asian (IOSEA) Marine Turtle Memorandum of Understanding</td>
</tr>
<tr>
<td>IOTC</td>
<td>Indian Ocean Tuna Commission</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>IW</td>
<td>GEF International Waters</td>
</tr>
<tr>
<td>LBS</td>
<td>Land Based Sources</td>
</tr>
<tr>
<td>LME</td>
<td>Large Marine Ecosystem</td>
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</tbody>
</table>
MBS  Marine Based Sources
MEA  Multilateral Environmental Agreement
MFF  Mangroves for the Future
MIMA  Malaysia Institute of Marine Affairs
MPA  Marine Protected Area
NGO  Non-governmental Organization
PIF  Pacific Islands Forum
RFB  Regional Fisheries Body
ROGF  Regional Ocean Governance Framework
SAARC – CZMC Coastal Zone Management Center
SAARC  South Asian Association for Regional Cooperation
SACEP  South Asia Co-operative Environment Programme
SAP  Strategic Action Programme
SEAFDEC Southeast Asian Fisheries Development Center
TDA  Transboundary Diagnostic Analysis
TWAP  Transboundary Waters Assessment Programme
UNEP  United Nations Environment Programme
WCS  Wildlife Conservation Society
WF  WorldFish Center
WWF  World Wildlife Fund
Background to the workshop

Poor governance has been identified as a root cause of environmental degradation and overexploitation of natural resources in the Bay of Bengal Large Marine Ecosystem (BOBLME). It is therefore imperative that the countries of this transboundary water body begin to assess the governance arrangements in place for these issues, and to consider interventions that will be required in order to improve governance. The assessment of governance arrangements is a multifaceted process that must cover the many aspects of natural resource governance at multiple organisational and geographical scales. These aspects include, inter alia, the principles and values that governance is based upon; the institutional arrangements that facilitate governance processes; the nature of the processes required; and the many types of interactions desired among stakeholders for effective governance.

A comprehensive programme of governance assessment for a large marine ecosystem (LME), especially one as complex as the BOBLME, can be expected to take several years. The activities carried out in this workshop and immediately after are aimed at getting that process started by identifying critical areas that require assessment, and by conducting preliminary assessments. The activities to be carried out are initially based on lessons learned during the Caribbean Large Marine Ecosystem (CLME) Project and the GEF Transboundary Waters Assessment Programme (TWAP). An initial governance assessment was carried out for BOBLME in the latter programme. The assessment carried out for the CLME Project led to the development of a Regional Ocean Governance Framework that formed the basis for the development of the Strategic Action Programme (SAP) and the second phase of the project. The work carried out in the CLME has resulted in a shift in the regional conversation from being mainly about management to the broader issue of governance arrangements within which management takes place.

The approach that was taken by the BOBLME Project was to convene a regional workshop for the BOBLME that would be run by experts from the CLME Project and the TWAP. At the workshop, the experts would share the concepts, approaches and methods used in the CLME Project and the TWAP and work with participants to determine their applicability to the BOBLME area. To the extent possible, the workshop would use facilitated participatory exercises to achieve its objectives. The experts would also outline possible areas for preliminary assessments and work with participants to develop a small number of priority projects to be carried out over the following months by the participants with guidance from the experts. The results of these preliminary assessments would then be reviewed by the group, either at the second workshop (if funds allow) or virtually, and compiled into a report. The report will identify areas for initial intervention to improve governance and further assessments required to gain a fuller picture of governance in the BOBLME.

Two main outcomes were expected from this workshop. The first was to promote awareness and dialogue among stakeholders in the BOBLME region regarding the complexities of governance analysis and the diversity of aspects that must be considered in assessing governance. The second expected outcome was the production of preliminary assessments of some key areas of governance and the identification of priority assessments and interventions needed to carry this work forward.
Workshop Summary

Introduction

The Bay of Bengal Large Marine Ecosystem (BOBLME) Project is one of several Global Environment Facility International Waters (GEF IW) Programme Projects globally. The first full project began in 2009 and conducted a Transboundary Diagnostic Analysis (TDA) which identifies three main transboundary issues for the BOB:

- Overexploitation of marine living resources
- Degradation of mangroves, coral reefs and seagrasses
- Pollution and water quality

The Project also prepared a Strategic Action Programme (SAP) to address these issues and will begin implementing the SAP in the next phase.

Poor governance was identified in the TDA as a root cause of environmental degradation and overexploitation of natural resources in the Bay of Bengal Large Marine Ecosystem (BOBLME). Consequently, the SAP includes strengthening transboundary governance mechanisms. The SAP implementation phase is expected to begin in 2015. Implementation will include attention to transboundary governance arrangements. These arrangements include a variety of global and regional agreements and organisations with mandates to address the three key issues identified above. Together these comprise the governance architecture for the region. Workshop participants concurred with the view that it is of critical importance for the countries of the Bay of Bengal to begin to assess the transboundary governance architecture and performance for the key issues and develop the interventions that will be required in order to improve them.

The workshop

The objective of the workshop was to begin a structured discussion on regional ocean governance in the BOBLME, drawing on lessons from a developing region with similar issues to identify key areas of concern and to carry out preliminary assessments by:

- Sharing the approach to regional ocean governance in the Caribbean LME Project
- Determining which aspects of the CLME approach are relevant for BOBLME
- Exploring next steps in assessing and improving transboundary ocean governance in the BOBLME

Participants came from Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand from government departments - primarily fisheries and environment - as well as regional IGOs and NGOs.

There were seven working sessions over three days:

1. The opening - looked at governance in general.
2. The big picture – examined how the CLME had approached governance through the LME Governance Framework.
3. Principles – explored the importance and role of principles as a foundation for governance.
4. Transboundary governance arrangements in BOBLME – examined the structure and integration of regional agreements for the key transboundary issues.
5. National-regional interfaces – reviewed the mechanisms in place for countries to engage with regional bodies and projects to address transboundary issues.

6. Science-policy interfaces – examined the mechanisms by which knowledge informs policy in the region.

7. Planning post-workshop activities

**Workshop conclusions**

**Principles**
As the stakeholders of the BOBLME proceed towards principled ocean governance, the process should include opportunities for them to reflect explicitly on the principles that are most relevant to the issues that concern them, and how these should be put into practice.

**Regional governance arrangements**
The policy processes (arrangements) associated with the transboundary issues are an important aspect of governance. Participants concluded that it would be useful to continue to assess their structure, performance and integration to determine governance effectiveness in the region and guide its improvement. This would include analyses of organizational mandates, actual activities and networking among organizations in the BOBLME. The findings of these analyses would inform the development of the ‘consortium’ proposed in the SAP.

**The national-regional interface**
Good regional ocean governance in the BOBLME will require greater attention to the national level arrangements for engagement with agencies and projects at the regional level. Development and enhancement of national level, multi-stakeholder mechanisms will also provide improved integration at the national level. Participants concluded that the types and functioning of these mechanisms in BOBLME countries should be explored in greater depth to determine gaps and gather best practices for the region.

**Regional science-policy interfaces**
The use of ‘best available knowledge’ in regional ocean governance processes requires effective science-policy interfaces for these arrangements. The constraints to uptake of science by regional level ocean governance arrangements should be examined to determine how to develop such interfaces and promote use of ‘best available knowledge’. Addressing this will require strategic and tactical action within the context of the BOBLME, but will also require the active engagement of science producers, knowledge holders and consumers at many levels.

**Future work**
Further work is planned in two parts:

- The first part will collect further information needed to complete the analyses started at the workshop, this includes preliminary assessments for the BOBLME of;
  - national-regional interface mechanisms
  - science-interfaces in the BOBLME,
  - transboundary governance arrangements
These reports will be available in the first quarter of 2015,
• The second part will involve planning and implementation of work to be done over the duration of the next phase of the BOBLME Project. This will involve more detailed assessments and development of the proposed coordinating ‘consortium’.

**Key messages from the workshop**

The net must be cast wider when dealing with governance assessment and include other players such as private sector associations, law-makers and politicians.

**Principles** - Explicit attention should be given to understanding principles as perceived by stakeholders in various settings, as this is foundational to good governance.

**Regional governance arrangements** - There is the need to further assess both governance arrangements and performance for transboundary ocean issues.

**National regional interface** – promotion of good regional ocean governance in the BOBLME will require greater attention to national level arrangements for engagement in regional matters.

**Science-Policy interfaces** - The science-policy gap in regional level ocean governance must be addressed if governance is to use ‘best available knowledge (scientific and traditional)’.
Session 1: Opening

1.1 Welcome and participant introductions

The Workshop was opened by Dr. Chris O’Brien, Regional Project Coordinator, Bay of Bengal LME (BOBLME) Project. He recognised the inter-governmental agencies that support the BOBLME Project and explained to the group the expected outputs of the project. These are: the Transboundary Diagnostic Analysis (TDA), a technical report on the major transboundary issues and their causes; and the Strategic Action Plan (SAP) which addresses these issues and their origins which is nearing completion.

Dr. O’Brien pointed out that poor governance is a root cause of environmental degradation and overexploitation of natural resources. He noted that the BOBLME Project is promoting awareness and dialogue which includes assisting countries to assess the governance arrangements in place for transboundary issues so as to consider what changes to governance are needed to improve the health of the Bay. He expressed his appreciation to participants for taking the time to participate in the workshop and provide their input which will directly benefit project goals.

Next Dr. Robin Mahon welcomed participants on behalf of the workshop team, whom he introduced. He then invited participants to introduce themselves and made note of which organisations and countries were represented in the room. The results of this activity showed that workshop participants were from government agencies, non-governmental organisations and intergovernmental organisations in BOBLME (Table 1)(Appendix 1.1).

<table>
<thead>
<tr>
<th>IGO/NGO</th>
<th>Countries (number of persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNEP</td>
<td>Myanmar – 3</td>
</tr>
<tr>
<td>IUCN</td>
<td>India – 1</td>
</tr>
<tr>
<td>SEAFDEC</td>
<td>Sri Lanka – 3</td>
</tr>
<tr>
<td>ICSF</td>
<td>Maldives – 3</td>
</tr>
<tr>
<td>SACEP</td>
<td>Indonesia – 2</td>
</tr>
<tr>
<td>MIMA</td>
<td>Malaysia – 2</td>
</tr>
<tr>
<td>World Fish</td>
<td>Bangladesh – 2</td>
</tr>
<tr>
<td>CNRS</td>
<td></td>
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<tr>
<td>BOBP-IGO</td>
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1.2 Objectives of the workshop

The objectives of the workshop were stated which were to begin a structured discussion in the BOBLME on regional governance, to identify key areas of concern and to carry out preliminary assessments. This was approached by:

- Sharing the overall approach to regional ocean governance in the Caribbean LME Project
- Determining which aspects of the CLME approach are relevant for BOBLME
• Exploring which aspects could be dealt with at the workshop (even in a preliminary way), which aspects could be covered in post-workshop activities by end of January, and which activities may need to be taken up in the next phase

The following meeting guidelines were proposed and adopted for the duration of the workshop (Table 1.2).

<table>
<thead>
<tr>
<th>Table 1.2. Meeting guidelines</th>
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<tbody>
<tr>
<td><strong>Guidelines for high quality conversations</strong></td>
</tr>
<tr>
<td>• Only one person speaks at a time</td>
</tr>
<tr>
<td>• Actively listen – respect different views</td>
</tr>
<tr>
<td>• Ask questions if you need to</td>
</tr>
<tr>
<td>• Stay on topic – use the Parking Lot</td>
</tr>
<tr>
<td>• No side conversations please</td>
</tr>
<tr>
<td>• Go for depth without going on and on and on and on …</td>
</tr>
<tr>
<td><strong>Guidelines for maximizing our productivity:</strong></td>
</tr>
<tr>
<td>• Please be punctual – Respect designated times</td>
</tr>
<tr>
<td>• Respect also small group discussion timing</td>
</tr>
<tr>
<td>• Turn off, or set to vibrate cell phone, use them only during breaks</td>
</tr>
<tr>
<td>• Leave email for breaks</td>
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</table>

1.3 Overview of the workshop
Dr. Lucia Fanning provided an overview of the workshop which consisted of seven sessions. Sessions two through six each began with a presentation and continued with discussions and group activities. It was explained that the workshop was designed to be participatory and interactive. Therefore, emphasis had been placed on activities aimed at engaging and acquiring information from participants. The workshop agenda is provided in Appendix 1.2.

1.4 Introduction to governance concepts and assessment
The presentation ‘GEF International Waters Programme, Governance Indicator Framework’ provided background and context for the subject area of the workshop (Appendix 1.3). The presentation started with an inclusive definition of governance as “…the whole of public as well as private interactions 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.” (Kooiman et al., 2005). Most modern definitions take this broad perspective of governance as being much more than government and including attention to principles and institutions. The indicator framework presented comprises seven categories of indicators that are being discussed in the GEF Transboundary Waters Programme (TWAP) (Figure 1.1). This is an expansion of the three indicator category version that the GEF International Waters Programme has been using. The expanded version includes new indicator categories of ‘governance architecture’, ‘stakeholder engagement’, ‘social justice’ and ‘human well-being’ (Figure 1.1). This shifts the emphasis from primarily conservation to human well-being which is considered to be the ultimate goal of governance interventions.
The purpose of taking this broad perspective on governance was to set the context for the current workshop, which is focussed primarily on the first two indicator categories ‘Governance architecture’ and ‘Governance process’. These categories are assessed primarily on the basis of having ‘good governance’ as guided by accepted principles and practices. ‘Effective governance’, on the other hand, is assessed primarily on the basis of whether the societal goals are achieved and is related largely to the impact indicators later in the sequence. It was emphasised that the time lags between action and outcomes or impacts increase from top to bottom (Figure 1) and achieving and measuring impacts such as improved ecosystem status and human well-being may take many years, or even decades.

In conclusion, it was noted that while local and national levels of governance are critical components of governance for transboundary issues, the workshop would focus primarily on regional arrangements. This would include linkages among arrangements at the regional level, as well as between the regional level and the global and national levels above and below.

2  Session 2: The big picture

The objective of this session was to (a) introduce the approach to governance taken in the Caribbean Large Marine Ecosystem (CLME) Project, and (b) explore the applicability of this approach to the BOBLME.

2.1  Presentation on the CLME approach to governance

The presentation of the ‘CLME Governance Approach’ first provided an overview of the key living marine resource governance issues facing the Wider Caribbean Region; namely unsustainable fisheries, marine and land-based pollution and habitat destruction and degradation (Appendix 2.1). It was pointed out that, as was the case in the BOBLME, the CLME TDA had identified poor governance as a primary root cause of these problems. The CLME Project decided to place emphasis on analyzing transboundary governance arrangements and developing interventions that would address weaknesses and gaps identified.

From the outset of the extended PDF-B there was difficulty in finding an operational framework within which to carry out this assessment and design interventions. The project therefore set out to develop a framework that was well-founded in governance concepts, but also practical and understandable by project stakeholders. The Large Marine Ecosystem Governance Framework was therefore developed (Fanning et al 2007) and applied in both the Project Development and first Full-Size Project phases of the CLME Project (Mahon et al. 2014). The LME Governance Framework is...

Figure 1.1: The expanded GEF IW indicator framework of Mahon et al. (2013). The original GEF IW indicator categories (Duda 2002) are shaded in grey. The additional indicator categories are unshaded.
based on policy cycles at multiple scale levels (local-global) and the lateral and vertical linkages among these cycles.

A variety of assessment activities were pursued for the CLME within the context of the framework. Some targeted specific areas of the framework while a few examined the framework as a whole:

- The mandates and interactions among regional organisations;
- The existence and role of an overarching regional ocean governance coordinating mechanism;
- The interface between national and regional levels and how countries prepared for engagement with, and received information from, regional activities;
- The regional level science policy interfaces;
- The regional arrangements for Ecosystem Approach to Fisheries (EAF) for Central American Lobster, eastern Caribbean flyingfish, Guianas-Brazil shrimp and groundfish, large pelagic resources.
- The local-national-regional arrangements for reef ecosystems on the Pedro Bank, Jamaica and the Seaflower Marine Reserve, Colombia.

The emphasis in reviewing the above was on the use of the framework in taking a structured approach to governance assessment and interventions within the LME. It was presented as providing a way of breaking down a complex structure so that it could be approached in rational parts and improved incrementally towards the long term-goal of a comprehensive fully-functioning regional framework.

The final aspect of the CLME governance approach was the development of a proposed Regional Ocean Governance Framework. This was presented as a set of nested arrangements covering the key set of issues to be addressed in the second full-phase of the CLME Project (see Mahon et al. 2014 for a fuller explanation). It was noted that over time, the framework would have to be expanded to encompass other living marine resource issues and to include other sectors such as tourism, shipping and energy.

### 2.2 Discussion of presentation

The use of the term ‘nested’ in describing the CLME Regional Ocean Governance Framework (ROGF) was queried. It was explained that this was the conventional term used when governance arrangements are at multiple levels with the lower level arrangements contained within the higher level ones (Ostrom 2009).

Clarification was sought on the relationship between the Cartagena Convention¹ and the CLME ROGF. The Cartagena Convention has given the CLME region practice in cooperating. It is one of the most active of UNEP’s Regional Seas programmes. However, it has not taken as much of a regional perspective as it could have, and building it into the CLME ROGF will increase the incentive for it to take up this role fully. Its primary mode has been coordination of local and national projects around the region. The Cartagena Convention and its Regional Coordinating Unit have a clear role in the ROGF. This allows them to see where they fit into the framework and what they need to do to fulfil that role. They have been fully involved in the ROGF development and are a key partner in it.

A participant observed that some of the relevant international agreements are global in nature and therefore play a broader role in ocean governance. They enquired as to whether these global agreements...
agreements were included in the CLME ROGF. It was explained that while global agreements such as the Convention on Biological Diversity (CBD), the International Convention on Trade in Endangered Species (CITES) and MARPOL, are considered to be an important part of ocean governance in the CLME region, they were not included in the ROGF because most of them are represented at the regional level by regional organisations. For example, The UNEP RCU has a mandate to promote the Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species (CITES) and Ramsar Multilateral Environmental Agreements (MEAs) in the Wider Caribbean.

The discussion turned to the extent to which imbalances in power among the countries of the region had influenced the outcomes of the development of the ROGF. It was pointed out that there were political influences in the development of the ROGF. For example, the Caribbean Sea Commission (CSC) of the Association of Caribbean States (ACS) was a strong candidate for the role of overarching policy coordination. However, its inclusion in the ROGF and CLME SAP was vetoed by the USA as they were not a member of the ACS. Another important aspect of the imbalance among countries is the capacity for implementation of agreed measures, particularly enforcement, which inevitably devolves to the national level. It was noted that smaller and less developed countries often did not have the necessary capacity. Therefore, for the ROGF to be successful there is the need to pay a lot of attention to building national capacity.

The question of whether the CLME ROGF was already in place, or had to be put in place was posed. It was explained that large parts of it are already in place. Therefore, to a large extent the framework describes what is already there, however, it also provides the means to determine what is missing and where there is the need to fill gaps, build linkages and harmonise activities. The approach taken was to work with what was already there and seek to improve it. If there had been a clean slate and the ROGF could have been built from scratch it might have been different from what was developed. The glaring aspect of the ROGF that was missing is the overarching policy coordination mechanism.

The question of the role of bilateral issues in the framework was raised. These were considered to be relevant and separate from the ROGF when the issue is truly bilateral, but it was noted that some bilateral arrangements arise when the issue is actually multi-country, with the result that some countries are not included in matters of importance to them. For example in the case of Eastern Caribbean flyingfish there are seven countries involved, but there is a bilateral agreement between the two of them that take the largest shares of catch. This undermines the subregional approach that should involve all seven countries. Nonetheless, if the most serious aspects of the issues, e.g. IUU fishing are specific to two of the countries, there can be a bilateral agreement between two countries to address that specific issue within the context of a broader regional agreement. In this context, the example of India and Sri Lanka was provided by a participant.

The discussion then examined how the CLME ROGF dealt with the diversity of (sub)ecosystems within the LME. It was explained that the ROGF included a geographical component wherein issues that pertained to specific geographical areas were partitioned out to be dealt with by an arrangement that was specific to the issue and area. For example, the North coast of South America is a continental shelf ecosystem dominated by large rivers with fisheries and environmental issues that are specific to that ecosystem. In contrast, Caribbean island and Central American ecosystems are dominated by coral reefs. The ROGF deals with these as separate issues each with its own geographic extent. In the case of lobster there are four areas within the LME where lobster fisheries are prominent. Management can take place at the scale of each area, but should take account of the
linkages between areas, and should interact with other areas to harmonise approaches, share experiences and best practices, hence the need for a multi-level nested approach. What is often lacking is the spatial data on the resources and the human activities needed to delineate the issues clearly for management purposes. It is expected that this information will be developed as the ROGF is implemented and refined.

2.3 Presentation on substantive and structural issues

A brief presentation was then used to focus the discussion on the applicability of the CLME Governance approach and key issues to the BOBLME (Appendix 2.2). The presentation distinguished between substantive issues (such as over-exploitation of fishery resources, land-based and marine-based sources of pollution, habitat degradation and biodiversity loss) and structural issues (such as roles and mandates of organizations, interactions among organizations, national-regional interfaces and science-policy interfaces). It pointed out that attention is usually focused on the substantive issues, but that for effective governance it is also important to focus on structural issues, as was done in the CLME Project.

Dr Jerker Tamelander then updated the workshop on new information regarding ocean governance that had emerged from a UNEP Regional Seas meeting earlier in the year (Box 1).

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### Box 1: Regional Ocean Governance – How can existing mechanisms work better together

Jerker Tamelander, UNEP; Intervention at BOBLME governance workshop, Bangkok, October 2014

- Regional environment governance is a cornerstone of international environmental law and policy, mainly taking place through Regional Seas programmes, many supported or coordinated by UNEP; regional fishery bodies, some established under FAO; and LME mechanisms, including projects supported by the GEF.
- Although based on a similar geographical approach, these different mechanisms raise issues relating to coordination, efficiency and possible overlaps.
- An upcoming report by UNEP reviews existing regional oceans governance mechanisms to clarify distinctions between mandates, highlight successes and challenges and cooperation between them. Options are identified for strengthening existing mechanisms and cooperation between them, as well as for the creation of new regional oceans governance mechanisms, with particular reference to the ecosystem approach.
- Among its main findings, the report notes that each type of regional oceans governance mechanism has had many successes, but they continue to face a variety of challenges. Regional oceans governance mechanisms have been designed successively and independently from one another, not as a bundle of complementary tools. This means cooperation and coordination between them is a challenge, and varies from one region to another.
- RSPs and RFBs are well established, but key problems they were meant to resolve remain as pressing, or worse than, when they were founded. Many Regional Seas programmes lack modern and well-funded institutions.
- LME mechanisms have strengthened regional oceans governance, for instance by generating scientific data and assessments and capacity building. However, their principal challenge is to ensure that their successes secure sufficient support by regional stakeholders and are fed into adequate governance mechanisms.
- Among recommendations towards applying EBM in regional oceans governance, the report strongly advises against bypassing existing regional oceans governance mechanisms, also in cases where they are deemed weak; developing action plans without close consideration of future implementation, means, resources and actors; and ‘maintaining weak regional oceans governance mechanisms.’
- It is suggested that mandates of various regional oceans governance mechanisms are revised to fill gaps and facilitate EAF implementation by RFBs and EBM by RSPs. The functioning of individual mechanisms should be strengthened in parallel with efforts to improve their coordination.

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coordination arrangements should also be promoted, as these are often more realistic for historical and institutional reasons than formal reorganization.

- In relation to LME mechanisms, it is noted that many have materialized thanks to a GEF project, which raises concerns as to their sustainability. Others have given birth to formal organizations, with some concerns about their ‘niche’ in the crowded oceans governance landscape.

- While the added value of LME TDAs and SAPs is widely acknowledged, development of a strategy with regard to LME governance is recommended. Some guiding principles for this could include:
  - Governance and its knowledge needs should drive scientific assessments;
  - LME mechanisms may form a platform for scientific assessments, capacity building and interventions, but these should be operated under existing regional oceans governance mechanisms wherever possible;
  - If a new body is deemed necessary to implement the LME approach in a sub-geographic area of a Regional Seas programme, it should be established under its umbrella;
  - LME mechanisms should be used primarily as catalyzers of change in existing regional oceans governance mechanisms.

### 2.4 Group activity on scoping structural issues in the BOBLME

Participants were asked to consider the relevance and applicability of the structural issues addressed in the CLME Project to the BOBLME region from the perspective of each of the major substantive issues identified in the TDA: fisheries, biodiversity and habitat degradation and pollution by taking part in group discussions. There was discussion about the substantive issues to determine if there was a need to consider any others beyond those already identified in the TDA.

Participants opted for a fourth discussion group on socioeconomics. The discussions took place at four tables, one for each substantive issue, among persons from various countries and organisations that self-selected according to interest.

The instructions for the exercise were to consider the applicability of the structural issues identified in the CLME Project to the BOBLME region by addressing the following questions for each issue:

1. Are the roles and mandates of regional organisations well known?
2. Are the interactions among them adequate?
3. Are there mechanisms for interactions between national and region levels?
4. Are there linkages between the science and policy making components?

The question arose as to how to determine which regional organisations were to be included in the exercise. It was agreed that all regional organisations with a mandate (even partial) for the issues under consideration should be included. There is some difficulty in determining which regional economic organisations to include, in particular, the Association of Southeast Asian Nations (ASEAN) and the South Asian Association for Regional Cooperation (SAARC). It is often the case that such
organisations are weakly connected to living marine resource and environmental issues. However, it is increasingly recognised that for the issues to become mainstreamed it is necessary to build strong linkages between regional organisations that focus on these issues and the broader regional economic integration bodies.

It was also recognised that some issues are not regional in nature, but are more global, such as migration and climate change. While this was agreed, it was noted that there would also be the need for regional capacity to deal with the implications of these global issues at the regional level. This regional function should then be reflected in the mandate of the responsible organisation.

The extent to which the roles of non-state actors should also be reflected was considered. It was agreed that they could play significant roles and should be included. It was also recognised that it might be that for some issues there was no organisation with a regional level mandate. In the CLME this was the case for piracy at the Guianas-Brazil region level, where piracy was a transboundary issue.

Each group then reported back to the meeting on its conclusions regarding the questions asked. Following are the results of those table discussions and the names of the persons involved at each of the four tables.

2.5 Discussion of the scoping activity

The Biodiversity/Habitat group reported that while they recognised that fisheries organisations also deal with biodiversity they had not included them. The workshop agreed that they should be included in the group of organisations responsible for biodiversity, so that the need for functional linkages among them would be recognised. For example the BOBP-IGO is engaged with IUCN on biodiversity, and is also doing planning for sharks, in collaboration with BOBLME, so they have an important role. This is also true of the IOTC.

Following the report of the Fisheries group it was asked whether there were instances in which other users of ocean space ever sought to engage with fisheries organisations. The BOBP-IGO indicated that in each of their meetings they bring out other key issues for the region. Thus their background documentation for the meeting may include topics other than fisheries, for example increasing maritime traffic in BOBLME Region which is “turning into another Malacca Straights”. This affects BOBLME harbours, boats, etc. and has major impact on fisheries and on pollution.

In response to the report from the pollution group it was noted that there are global agreements under the IMO that need to be implemented at the regional level. The question of atmospheric
pollution was also raised. It was shared that this is addressed by a global agreement\textsuperscript{2}, but also needs action at the regional level. However, the impacts are not only on the sea, they also affect land areas and it was by no means clear how this issue should be dealt with at the regional level.

In reporting, the biodiversity and socio-economics group noted that their issue area should probably be treated as cross-cutting, as it might then get greater attention from a range of regional bodies with mandates for the key substantive issues. In this regard it was thought that climate change is also a cross-cutting issue with considerable externality in terms of source, but with the need for regional efforts at assessing vulnerability and planning for adaptation. Disaster Response and Relief (DRR) is another cross-cutting issue that is closely tied to socio-economics.

The concern was raised that in some cases there are several regional programs that address the same issue, creating a duplication of effort. It was explained that in the CLME Project the aim was to minimise this by promoting interaction among organisations with similar mandates, so that they could align their activities. In some cases apparent overlaps arise when different organisations are serving different client groups regarding the same issue area. Looking at this is part of the process of rationalising the roles and mandates of the existing regional organisations. Again, it is a matter of recognising that there are many players already established and seeking to make the best possible use of them.

\subsection*{2.6 Conclusion}

The discussion and preliminary scoping revealed that the structural issues that had been the focus of governance assessment in the TDA and intervention planning in the SAP of the CLME Project were also of concern in the BOBLME.

\textsuperscript{2} 1979 Convention on Long-Range Transboundary Air Pollution
Table 2.1. Group discussion feedback on the applicability of the structural issues identified in the CLME Project to the BOBLME region.

<table>
<thead>
<tr>
<th>Substantive issue</th>
<th>Fisheries issue group</th>
<th>Socioeconomics issue group</th>
<th>Biodiversity-habitat degradation issue group</th>
<th>Pollution issue group</th>
</tr>
</thead>
</table>
| Are roles and mandates of organisations known? | 1. BOBP-IGO - Artisanal fishery focus; Good management capacity building plus regional cooperation  
2. World Fish - Poverty reduction with fish and agriculture  
3. APFIC - Advisory and coordination  
4. IOTC - Management of tuna and tuna-like species  
5. SEAFDEC - Good management and capacity building  
6. SAARC - Coastal Zone Management Center, includes coastal fisheries  
7. BIMSTEC - Fisheries cooperation, economics  
8. INFOFISH - Trade and marketing  
- Main UN organisations (UNEP, FAO, UNDP, etc., have not been included. | 1. Mainly cross-cutting issues such as: poverty, economic imbalance/instability, poor level of education, migration of fishing vessels/fishers, political situation, imbalance and willingness, gender and culture.  
- Several organizations take these up.  
1. SAARC  
2. ASEAN  
3. BOBLME  
4. MFF  
5. BOBP – IGO  
6. SAARC CZMC  
7. IUCN  
8. IOTC | 1. SEAFDEC – EAF, awareness building, ecosystem enhancement  
2. SACEP – South ASAP – 5/4 BOBLME - SACRIF  
3. CMS-IOSEA – turtles  
4. Bird Life Asia Partnership – birds  
5. COBSEA – 9 countries, 3 are BOBLME  
6. MFF project – 08/7 Best practice  
8. ASEAN Biodiversity Center  
9. SAARC CZMC  
7. IOC – WESTPAC  
10. IUCN – country programmes | 1. GEF  
2. GESAMP  
3. GPA  
4. SACEP  
5. UNEP  
6. IMO  
7. COBSEA |
| Are the interactions among them adequate? | • Interactions are inadequate in general, but strong between some, e.g. BOBP-IGO plus APFIC are good. BOBP-IGO has standing invitations to meetings of all other fisheries bodies.  
• No formal mechanisms in mandates for interactions and regional cooperation. | • Interactions between the above are not adequate and need to be strengthened | • Interaction is often minimal because mandates are not well known, especially between fisheries and biodiversity. In one example, CITES, a biodiversity organization, was dealing with sharks, a fishery issue, and the connection was not clear.  
• In some cases the mandate is split between organizations such as | • Interactions between organisations is a non-issue. |
Mandates of listed organisations actually do not overlap much. SACEP and COBSEA

Are there mechanisms for interactions between national and region levels?
- On paper these are strong in terms of IGOs, because these are formed by their members.
- Weaknesses lie in involving IGO Secretariats in policy formulation, program implementation, etc.
- There are inter-agency interaction problems within most countries.
- For non-IGOs the strength of linkages varies considerably among countries.
- Yes there are linkages between national and regional, but they are minimal.
- The mechanism is normally through the national focal agencies. Sometimes a single agency may have to deal with several regional bodies.
- However, at the national level the linkages may not always be happening.
- Linkage between national and regional organisations is not an issue. LBS pollution issues are thought to be mainly national in nature.

Are there linkages between the science and policy-making components?
- In Bangladesh the linkages are weak; data and monitoring are inadequate.
- The interface for Hilsa is better than most, but still weak.
- The IGOs are weak in this regard, e.g. BOBP-IGO has a Technical Advisory Committee, but advice to countries is mainly informal.
- Linkages between science component and policy component are present at the national level – varies among countries - there but are not adequate.
- Some issue that must be addressed include: Poverty, economic imbalance/instability, poor level of education, migration of fishing vessels/fishers, political situation, imbalance and willingness; gender and culture.
- Mandate exists for a science-policy interface but is not strongly implemented.
- Linkages between science-policy component for decision-making needs to be strengthened.
- Sector-based approaches which are typical make sharing of data and information needed for integrated management difficult.
- Limited data to support decision making in certain areas.
- Lack of participation from relevant stakeholders.
- Lack of updated up dated information and relevancy to policy making needs.

Table participants

| Dr. Doug Beare, Dr. Yugraj Singh Yadava, Mr. M. Mokhles Rahman, Mr. Md Iqbal Haroon, Dr. Mohammad Enamul Hoq, Mr. Ibrahim Naeem | Dr. D. M. R. B. Dissanayake, Mr H. M. B. C. Herath, Ms Aishath Farheth Ali, Mr Sirimewan Rohana Rajapakse, Mr Sebastian Mathew, Mr Abdullah Fairooz | Ms Beela Rajesh, Ms Nishanthi Perera, Mr Jerker Tamelander, Ms Panitnard Taladon, U Saw Aung Yae Htut Lwin, Mr Petch Manopawitr | Ms Julianah Dulaidi, Ms Cheryl Rita Kaur, Mr Aris Budiarto, Ms Erni Widjajanti, Miss Saint |
3 Session 3: Governance principles

Over the past two decades, primarily as a result of the 1992 United Nations Convention on Environment and Development (UNCED), the importance of principles to guide decision-making affecting the sustainability of ecosystem goods and services has been gaining prominence. The 1992 UNCED resulted in a major shift in global thinking from environment to ecosystems through the vehicles of the Rio Declaration, Agenda 21, and the Convention on Biological Diversity (Vallega 2001). It also helped to bring civil society to the fore in sustainable development. Subsequently, new ideas are steadily gaining currency, e.g., thinking in terms of governance rather than government, considering entire ecosystems rather than their separate parts, and promoting resilience through self-organisation.

Principles are now articulated in the preamble of numerous multi-lateral environmental agreements, national laws and regional level conventions. Their importance in ocean governance has grown as the diversity of stakeholders who influence and who are affected by decisions that are made at multiple levels has grown. Consequently, it has been argued that there is an increasing need to ensure institutions and processes for decision-making are guided by commonly agreed upon principles.

This session of the workshop introduced the importance of principles as a key component of governance. It stressed the need to understand how the careful selection and implementation of an explicit suite of agreed upon principles to guide ocean governance decisions in the Bay of Bengal LME could significantly alter the decision making process and its subsequent outcomes. The session consisted of a presentation on principles (Appendix 3.1), a discussion and an exercise on prioritisation of principles.

3.1 Summary of presentation

Following on the definition of governance in the earlier session, participants were reminded that currently accepted definitions of governance all refer to the use of principles as a requirement for guiding decision-making (Kooiman et al. 2005). As used in these definitions, principles are derived from our fundamental values and beliefs about how humans should behave. They are an attempt to encode how values and norms can be expressed in decision-making and some actions.

It is useful to divide principles into two categories: (1) Substantial, based on deep beliefs that guide our vision for the future and thus the way that we approach governance; and (2) Procedural, that guide the way we interact, make decisions, and do business on a daily basis. Some common substantial principles that are regularly encountered in ocean governance (and many other arenas as well) are summarised in Table 3.1 while one formulation of procedural principles is shown in Table 3.2. These principles have evolved from those focusing primarily on natural or ecological systems through those that encompass social-ecological systems to a suite of commonly accepted principles for ocean governance that include both substantive (e.g. equity) and procedural (e.g. transparency) principles. However, it is important to recognize that while some principles are complementary, others are conflicting.
Table 3.1: Some substantial principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability</td>
<td>Preservation of opportunities and options of future generations</td>
</tr>
<tr>
<td>Efficiency</td>
<td>The avoidance of waste of any commodity that is of value, whether material or immaterial</td>
</tr>
<tr>
<td>Rationality</td>
<td>What is to be done or being done should make logical sense</td>
</tr>
<tr>
<td>Inclusiveness</td>
<td>The need to involve those who are affected</td>
</tr>
<tr>
<td>Equity</td>
<td>Fairness and justice in the way that benefits are allocated</td>
</tr>
<tr>
<td>Precaution</td>
<td>Acknowledgement of uncertainty and risk and the consequent exercise of care to avoid undesirable outcomes</td>
</tr>
</tbody>
</table>

Table 3.2: Some procedural principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent</td>
<td>Everyone sees how decisions are made and who makes them</td>
</tr>
<tr>
<td>Accountable</td>
<td>Decision makers are answerable to those they represent</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>All interests are considered in defining the problem or opportunity before management decisions are taken</td>
</tr>
<tr>
<td>Inclusive</td>
<td>All those who have a legitimate interest are involved</td>
</tr>
<tr>
<td>Representative</td>
<td>Decision makers are representative of all interest groups</td>
</tr>
<tr>
<td>Informed</td>
<td>All interest groups understand the process and have adequate and timely access to relevant information</td>
</tr>
<tr>
<td>Empowered</td>
<td>All interest groups are capable of actively participating in decision-making in a non-dominated environment</td>
</tr>
</tbody>
</table>

In many stakeholder discussions, principles are often assumed and seldom made explicit. As principles may vary with the perspectives of different stakeholders, explicit articulation is essential in order to ensure that actors operate from a common or agreed upon set (Mahon et al. 2011). This necessity was exemplified in the example from the Guianas-Brazil subregion of the CLME. In this example, three different stakeholders (fishers and fishing industry representatives, governmental decision makers and governmental technical advisors) were provided with a list of questions relating to the presence of 13 principles in the governance of shrimp and groundfish in the region. The results, presented to the participants in graphical form in Appendix 3.1, clearly confirmed large discrepancies in the assessment of the presence of principles among the three groups.

The presentation concluded with a summary of key points surrounding the need and use of principles in regional ocean governance. These emphasized the difficulty in getting agreement on a suite of principles to guide decision-making in the BOBLME and even when there is agreement, seeing their application in the decision-making process can be seen as present by some stakeholders and absent by others.
3.2 Discussion of presentation

The question surrounding differences in power among different stakeholders and how this could affect the decision being made was raised - specifically, the notion that the disenfranchised rarely see their values or belief systems reflected in decisions being made. While acknowledging that power relationships are in fact about the struggle to see whose values get reflected in decisions, it was suggested that an explicit effort to assess what principles different stakeholders in the BOBLME would like to see included in the process, prior to decision-making, could help to alleviate these inequities. At the very least, the explicit agreement on a suite of principles to guide decision-making would allow stakeholders to hold decision makers to account if the decision appears to be contrary to the agreed principles.

The principle of subsidiarity was raised as one that potentially could be included in ocean governance decision-making. This principle, in which decisions are made at the level that is most capable to make the decision, has been adopted in a number of ocean governance decision-making processes. However, it was noted that the principle does speak to capability to make the decision hence it appears to be one that requires the ability of the those making the decision to have the capacity to do so, both legally and having the competence to do so. In the event that competence is lacking, capacity development should be encouraged.

In discussing the Guianas-Brazil example, participants noted that differences in the perceptions of the presence of the principles was a problem but was expected due to the different priorities each of the stakeholder groups would have. However, once again, the need for agreed consensus of the suite of principles and a shared understanding of what each principle actually means prior to the decisions being made could alleviate some of these differences in perception.

3.3 Prioritization of principles

Each table was provided a sheet listing 22 principles derived from various publications and multilateral agreements (Mahon et al. 2010) and asked to review them to ensure they each had a common understanding of the principles and also to indicate whether they thought any principles were missing (Appendix 3.2). After reviewing the list at their tables two additional principles were suggested: 1) ‘Human rights and dignity’ and 2) ‘Access to information’. The list of principles which were shared in the CLME project was then posted in the room in a large format for each person to self select their top five principles using sticky dots. The dot prioritisation was differentiated between IGO/NGO membership and government. Dot prioritization is an established facilitation method for prioritizing ideas with a large number of people (Diceman 2010).

The results of the dot prioritization were presented and as a comparison, were superimposed over the results for the CLME. Participants then had the opportunity to discuss the results of the exercise, identifying any surprises and/or insights and whether an evaluation on principles should be incorporated into future work on the substantive issues in the BOBLME. The top five principles identified by the dot voting exercise in declining order of votes were accountability, transparency, participation, sustainability and use of science/knowledge (Figure 3.1). These accounted for 21%, 18%, 17% and 16%, respectively, of all the votes casted. This should not be interpreted as a suggestion that the remaining principles are not important, but instead as an indication of the relative importance of the top five, based on the participants at the workshop.
The comparison of the prioritization of principles by the BOBLME participants with those in the CLME is provided in Figure 3.2. Participants in the Caribbean ranked the following principles as the top five: participation, use of science, equity, empowerment and precaution/conservation. Since governance is context specific and the dot prioritization results depend on the mix of participants voting, it is not considered appropriate to infer any reasons for the differences (or similarities) observed between the two LMEs.

3.4 Discussion of activities

Not surprising, the participants noted the differences between the results from the CLME dot prioritization process as compared to that obtained for the BOBLME ranking. Attempts were made by the participants to find explanations for the differences in priority between the two regions and while some were plausible to consider, the previously mentioned difference in the make up of the participants suggested this was not worth pursuing at this time.

What was of interest and instructional from a governance perspective in the BOBLME region was the ranking by all participants, regardless of affiliation, of accountability and participation as the two most important principles to guide decision-making the region. This suggests the recognition of the
need for decision makers to be aware of their responsibilities to all stakeholders when making decisions and the desire for participation in the process to ensure the legitimacy of the decisions being made among all stakeholders.

Participants were reminded that this exercise was not the definitive prioritization of principles to guide decision-making in the BOBLME; but were asked whether they felt the assessment of priority for principles to guide decision-making was worth pursuing in the region. The comment was made that the suite of principles chosen may vary depending on the goals being pursued and as such, further exploration may be relevant to determine if consensus can be achieved among a selected suite of substantial principles.

### 3.5 Conclusion

As the stakeholders of the BOBLME proceed towards principled ocean governance, the process should include opportunities to reflect explicitly on the substantial principles that are most relevant to the issues of concern to them and the details of how these should be elaborated to meet their needs. As with most other endeavours, there is much that can be learned from what others have done, but the final product must be tailored to the context of the region where it will be used.

### 4 Session 4: Transboundary governance arrangements in BOBLME

The purpose of this session was to review the assessment of transboundary governance arrangements for the BOBLME carried out by the GEF Transboundary Waters Assessment Project (TWAP)(IOC-UNESCO 2011). This assessment was part of a larger initiative to assess all transboundary LMEs (Fanning et al. in press). It was explained that the assessments were based entirely on documents, including the agreements, reports from organisations and project reports. When completed they were submitted to one or two reviewers in each region. In many cases reviewers responded that the assessments were on track but that there was much more information available regionally that could have been used. This session was intended as a start to getting that more detailed information.

The session began with a presentation, continued with two exercises and concluded with a presentation and discussion on a network approach to interactions among regional organisations within a region, or LME.

#### 4.1 Summary of the presentation on the TWAP assessment of BOBLME

This presentation was in two parts: (1) The methodology used for the assessment, and (2) The findings of the assessment for the BOBLME (Appendix 4.1). At the outset it was emphasized that this
assessment had been focused on the governance arrangements or architecture, as a context for governance process, and not on the performance of the organizations involved in governance.

Participants were reminded of the conceptual basis for governance assessment developed in the previous session in which: (1) The basis for governance action is actual or potential issues, (2) IW issues are transboundary, (3) Each issue must have an identifiable and functional arrangement, and (4) There must be linkages among arrangements within a system. They were also reminded that arrangements must have certain characteristics in order to be considered functional (Appendix 4.1). The steps for the assessment were outlined and explained (Figure 4.1). The presentation then focused on the assessment that had been done for the BOBLME. The assessment report was provided to participants (Appendix 4.2). The details of the methodology were further explained as the assessment was presented.

Regarding system identification, it was noted that the BOBLME had been defined in the initial process of delineating LMEs. Nonetheless, there were some questions regarding the appropriateness of the initial delineation which had led to the use of a somewhat different area, including the EEZ of the Maldives, in the BOBLME Project. Some spatial statistics comparing the original and revised LMEs were provided.

The identification of issues was taken from the TDA, however, there is usually some need for discussion regarding how much to break issues down, and which ones can be treated together within a single governance arrangement. The BOBLME issues for which it was thought that separate governance arrangements would be needed were:

- Fisheries
  - Small pelagic resources
  - Demersal finfish fisheries (including reefs?)
  - Tuna resources
- Habitat degradation and modification
  - Mangroves, coral reefs and seagrass
  - Degradation and modification of seabed habitat and seamounts
- Pollution
  - Land Based Sources (LBS)
  - Marine Based Sources (MBS)
Regarding assessment of arrangements, two examples of the arrangements in place for the above issues were presented: the tuna fisheries arrangement, for which IOTC was the agency with primary responsibility, and the pollution arrangements, for which the two Regional Seas programmes covering the BOB region had shared responsibility. The criteria for assessing the completeness of each of these arrangements were outlined (Appendix 4.2).

The average completeness was derived from the summary table which was presented and discussed (Table 4.1). It was noted that given the ‘desktop’ nature of the assessment it could only be considered as preliminary. The missing information would have to be obtained from the countries and pertinent regional organisations. It was hoped that some of this information could be obtained at the current workshop.
Table 4.1: Bay of Bengal LME governance architecture - System summary

<table>
<thead>
<tr>
<th>IW category: LME</th>
<th>Countries: all</th>
<th>System name: Bay of Bengal LME</th>
<th>Region: South Asia, Indian Ocean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trans-boundary issue</td>
<td>Number of countries</td>
<td>Collective importance</td>
<td>Complete-ness %</td>
</tr>
<tr>
<td>Fisheries - small pelagic resources, demersal finfish and invertebrates</td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Fisheries - small pelagic resources, demersal finfish and invertebrates</td>
<td></td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>Fisheries - tuna</td>
<td></td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>Pollution – LBS</td>
<td></td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Pollution – MBS</td>
<td></td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Pollution – LBS</td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Pollution – MBS</td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Biodiversity – habitat degradation</td>
<td></td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Biodiversity – habitat degradation</td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Biodiversity – specific (sea turtles)</td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Biodiversity – specific (dugong)</td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>System architecture completeness index</td>
<td></td>
<td></td>
<td>50%</td>
</tr>
</tbody>
</table>

The level of system integration was then discussed, noting that integration, based on formal interactions among the regional organisations as determined from their documentation, was found to be low. Furthermore, there was no regional organization with a mandate to provide overall policy coordination and integration for the oceans, nor any multi-organisational mechanism. This was not uncommon for LMEs although such organisations/mechanisms did exist in a few, such as the Pacific Islands Region and the Benguela Current LME. It was recognized that the BOBLME Project was playing an integrating role, although it was a transient agency; and that it had identified the need for a ‘consortium’ approach to integration to be developed in the next phase of the Project.

Finally, two other governance indicators, engagement of countries and fit of arrangements to the system to be governed were presented. Country engagement in regional arrangements was found to be high for the BOBLME (93%) (Appendix 4.1), indicating that most countries had signed most agreements. Participants were reminded that this did not necessarily mean they were honoring their
commitments, just that they had signed. An assessment of the extent to which commitments are honored would be an extensive assessment.

With regard to fit, in contrast, none of the relevant arrangements fit the BOBLME exactly and they formed a complex multilevel, overlapping set, ranging in spatial extent from the entire Indian Ocean (IOTC) to a subarea of the Bay of Bengal (BOBP-IGO). This lack of fit was considered to be a significant governance challenge for the region. This is especially the case when responsibility for a particular issue is split among two or more organizations for different parts of the LME.

### 4.2 Discussion of the presentation

The discussion of the presentation focussed on two areas. The first was the extent to which there were other arrangements for issues that had not been identified in the preliminary assessment. The second was on approaches to integration in LMEs and their possible applicability to the BOBLME.

With regard to the identification of arrangements, participants noted that there were regional arrangements for whales and porpoises and for migratory birds[^3] that should be considered. These are in addition to the MOUs that exist for sea turtles and dugong under the Convention for Migratory Species. There is also a regional initiative for marine sanctuaries that could be considered.

The discussion on the most appropriate approach to regional integration began with questions regarding the approaches taken in other LMEs, and the expectations of the GEF for the outcomes of its LME projects. It was explained that the GEF LME projects (as part of their international waters programme) had initially taken the view that LMEs should work towards establishing LME level commissions as had been done for the Benguela Current LME, and initiated for the Guinea Current LME. However, more recent LME projects had expressed concern about the challenges of establishing commissions in complex regions, and had taken the view that other types of arrangements might be more appropriate. The CLME and Agulhas-Somali Current LME (ASCLME) Project were two of these which had explored ‘network approaches’ to achieving integration. In neither case was the possibility of a commission ruled out, rather it was seen as being a long-term possibility that should be explored by pursuing ‘softer’ governance approaches first.

Other examples of softer approaches aimed at coordination were provided. These included the Antarctic Treaty System, the Arctic Council and the Council of Regional Organisations of the Pacific (CROP) formed under the auspices of the Pacific Islands Forum (PIF). It was noted that in the latter case an integrated Pacific Ocean Framework was developed to guide ocean governance in the region. The interim proposal in the BOBLME SAP is also starting with a softer approach. It specifies a ‘consortium’ of regional organisations for which operational details are to be developed in the next phase of the project. This will provide the opportunity for regional cooperation to evolve in practice while the details of the regional mechanism are being developed.

Participants noted that integration of governance across issues and sectors was problematic at the national level as well, because this can have implications for the feasibility of integration at the regional level. It was explained that the question of national level integration as it relates to engagement in regional initiatives would be taken up in Session 5 of the workshop.

4.3 Prioritisation of issues by countries and organisations

Participants were invited to engage in the second step of the process for assessing governance architecture which is prioritization of the key issues as follows.

- Fisheries overexploitation - small pelagic resources such as demersal finfish and invertebrates
- Tuna fisheries
- Land-based sources of pollution
- Marine-based sources of pollution
- Biodiversity impacts from habitat degradation
- Biodiversity impacts for species such as sea turtles, dugong and others

Participants were grouped by country, or for organisation representatives according to the type of organisation they represented (IGO or NGO). Each group was asked to discuss and prioritise the six issues listed above in order of importance to their country or group (Table 4.2). Some groups could not distinguish between the level of importance for two or more issues. In these cases the issues were given an average level\(^4\).

Table 4.2: Prioritisation of the relative importance of regional issues as perceived by countries, IGOs and NGOs.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Issue</th>
<th>Fisheries – small pelagic, demersal finfish, invertebrates</th>
<th>Fisheries – tuna</th>
<th>Pollution – LBS</th>
<th>Pollution – MBS</th>
<th>Biodiversity – habitat degradation</th>
<th>Biodiversity- sea turtles, dugong, other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bangladesh</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td>1.5</td>
<td>1.5</td>
<td>5.5</td>
<td>5.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Maldives</td>
<td>6</td>
<td>1.5</td>
<td>4</td>
<td>3</td>
<td>1.5</td>
<td>5</td>
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<tr>
<td></td>
<td>Myanmar</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>4</td>
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<td>5</td>
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<tr>
<td></td>
<td>Sri Lanka</td>
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<td>1</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>Thailand(^5)</td>
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<td>3</td>
<td>4</td>
<td>6</td>
<td>1.5</td>
<td>4</td>
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<tr>
<td></td>
<td>IGO</td>
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<td></td>
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<tr>
<td></td>
<td>BOB-IGO</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>SACEP</td>
<td>2.5</td>
<td>6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>SEAFDEC</td>
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<td>1.5</td>
<td>3.5</td>
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<tr>
<td></td>
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<td></td>
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<td></td>
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<td>2.5</td>
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<tr>
<td></td>
<td>IUCN</td>
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<td>4.5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MIMA</td>
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<td>6</td>
<td>4</td>
<td>3</td>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>World Fish</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

\(^4\) For example, if three issues were given a score of 1, these were assumed to span the range of 1-3, each was given an average of 2, and the next issue was given a score of 4.

\(^5\) Interim value provided by the SEAFDEC representative who was from Thailand.
4.4 Exercise to explore the policy cycle for the key issues

To assess the diversity of stakeholders involved, and the completeness of transboundary arrangements for the key issues in the BOBLME as understood by the participants, they engaged in an exercise to explore the respective policy cycles for these issues. The exercise consisted of the following steps:

1. Select which of the four major issues (tuna fisheries, other fisheries, pollution, habitat and biodiversity) to work on and join that working group table.

2. At each table identify (brainstorm first individually and then as a team) the transboundary stakeholders working in these issues in the BOBLME region.

3. Consider as a table team which stakeholders are involved in each stage of the policy cycle (Data and information, analysis and advice, decision making, implementation, review and evaluation)

4. Write the name of each stakeholder (one per card) on the coloured card specified for that issue, then add the cards to the sticky wall\(^6\) next to the appropriate policy cycle stage.

4.5 Outputs and discussion of the policy cycle exercise

Once all stakeholder cards were posted next to the policy cycle they are associated with, the group was led in a reflection on their work with the following questions:

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\(^6\) A nylon sheet sprayed with a non-permanent adhesive that allows for the repositioning of cards by a facilitator.
• Considering your specific issue, do the stakeholders you identified comprise a ‘complete’ policy cycle?
• Is there integration among stakeholders at each policy cycle stage?
• Is there overall integration between stakeholders, including structural areas such as linkages among regional organisations?
• Do science-policy interfaces or an integration mechanism exist?
• What gaps are there in stakeholder functions in the policy cycle?

The results of the policy cycle exercise are shown in Figure 4.3.

The discussion began with a look at the policy cycle patterns that had emerged on the sticky wall and the question as to whether there were aspects that should be examined in depth. Participants observed that the larger picture brought out very clearly that there is appreciable functionality in the ‘analysis and advice’, ‘data and information’ and ‘review and evaluation’ policy cycle stage but that ‘decision-making and ‘implementation’ stages are much less populated. The ‘decision making’ and implementation’ stages appear to be the weakest links in the cycle. This illustrates that ultimately, because there are few decision-making functions at the regional level, there is a broad range of analysis and advice that may not be utilized for decision-making. This can be seen as a critical breakdown in the governance cycle. Indeed, looking at the decision-making stage of the policy cycles, it is just the IOTC that makes binding decisions. The other intergovernmental agencies are merely advisory rather than decision-making. This could be addressed to a certain extent through increased attention to decision-making functions, in addition to fostering increased interaction among organisations to improve information exchange.

Regarding decision-making it was thought necessary to make a distinction between decisions pertaining to programmatic issues and those relating to management of the substantive issue. It was noted that SACEP decision-making was primarily on a project basis. Representatives take recommendations back to the countries who then decide if they will carry them out. A similar situation was thought to prevail for the COBSEA Forum, however as it was offered that decisions were more likely to be supported as the countries were present at the meeting.

Participants suggested that one possible solution would be to make use of regional sustainable development strategies as an overarching influence. This would require an appeal to the higher economic integration bodies, such as SAARC and ASEAN to take up ocean issues. There should be greater effort to mainstream some of these issues into the broader economic development fora which is where decisions on the allocation of resources are made. These big economic integration bodies may be in a better position to make binding decisions more quickly.

Participants also expressed concern about the extent to which even existing decision-making bodies were making use of available data and information. This was recognised as a separate problem underscoring the need for attention on whether analysis and advice is geared toward decision making. Science-policy interface failure was thought to have several possible causes, such as whether the information was packaged or communicated in the right way, whether there were adequate arrangements for two-way dialogue, and whether there was a culture of decision-makers wanting science input.
**DATA AND INFORMATION**

| Tuna fisheries: | IOTC, BOBP-IGO |
| Other fisheries: | WWF, IUCN, FAO, INFO-FISH, BOBP-IGO, APFIC, SEAFDEC |
| Pollution: | IMO, UNEP, SACEP, GPA, GESAMP, COBSEA |
| Biodiversity and habitats: | WWF, IUCN, IOSEA, IOTC, SEAFDEC |

**ANALYSIS AND ADVICE**

| Tuna fisheries: | IOTC |
| Other fisheries: | IUCN, INFO-FISH, APFIC, SEAFDEC, BOBP-IGO, WF, FAO |
| Pollution: | GESAMP, GPA, SACEP, COBSEA, IMO, UNEP |
| Biodiversity and habitats: | CBD-EBSA, IUCN, BOBP-IGO, SACEP project basis, SEAFDEC, IOC |

**DECISION-MAKING**

| Tuna fisheries: | IOTC |
| Other fisheries: | (None) |
| Pollution: | SACEP, COBSEA |
| Biodiversity and habitats: | SACEP, COBSEA |

**IMPLEMENTATION**

| Tuna fisheries: | IOTC |
| Other fisheries: | SEAFDEC, WWF, Countries |
| Pollution: | SACEP, COBSEA |
| Habitat and biodiversity: | Countries, SEAFDEC, ...

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**REVIEW AND EVALUATION**

| Tuna fisheries: | IOTC |
| Other fisheries: | INFO-FISH, WF, SEAFDEC, BOBP-IGO, APFIC |
| Pollution: | SACEP, UNEP, IMO, COBSEA, GEF, GESAMP, GPA |
| Biodiversity and habitats: | SACEP |

**ANALYSIS AND ADVICE**

| Tuna fisheries: | IOTC |
| Other fisheries: | INFO-FISH, WF, SEAFDEC, BOBP-IGO, APFIC |
| Pollution: | SACEP, UNEP, IMO, COBSEA, GEF, GESAMP, GPA |
| Biodiversity and habitats: | SACEP |

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Figure 4.3: The regional stakeholder organisations and the policy cycle stage that each is involved in (see list at beginning of document for acronyms)
The question of the role of global organisation such as the secretariats of the CBD and CITES, in influencing or guiding region decision making was also raised. It was noted that vertical connectivity between regional organisations and how they plug into the global level is an important topic to explore. SACEP was thought to provide an example of countries at the regional level that relate to the global level of the UNEP Regional Seas Programme. However, the global organisations are not usually present and influencing at the regional level, and therefore need functional regional organisations and countries to pursue regional level implementation.

It was observed that there are other structural issues needing to be pursued. For example, there are some organisations that do not know much about each other’s roles and activities. Many of them, NGOs in particular, are more involved in projects than in ongoing governance. They are not directly involved in the policy cycle as it relates to governance. Therefore, outputs may not be taken up in the policy cycle and this is a sustainability issue. Some organisations take on a pseudo-policy cycle role even though they do not have a mandate to do so, and attempt to bring about management change. IUCN is one NGO that has a more persistent presence than some of the other NGOs. However, it is somewhat different than other NGOs because of its governmental membership.

4.6 Presentation and discussion on the CLME regional network assessment

It was explained that the CLME Project had undertaken an analysis of the networking among regional organisations to explore linkages among organisations and the roles they played in the regional organisational structure. The presentation provided a brief overview of the approach, noting that it had been a substantial study conducted as part of a PhD study, and that there was not enough time in the workshop to go into it in detail (Appendix 4.3).

There are about 25 organisations in the CLME area with a mandate for some aspect of ocean governance. The approach taken was to develop a questionnaire asking them which organisations they interacted with on each of the major issues (fisheries overexploitation, habitat degradation, pollution) and which aspect of the policy cycle the interaction pertained to. The network diagrams developed for ‘decision-making’ and ‘data and information/advisory’ aspects of the policy cycle showed the organisations that were central to and crucial for these stages and those which were only loosely involved.

It was also explained that the network analysis was accompanied by (1) a detailed assessment of the stated mandate of each organisation, based on its documentation, and (2) an evaluation of its actual activities in relation to its mandate gleaned from documentation and interviews.

4.7 Conclusions
It was agreed that the policy processes associated with the various issues are an important aspect of governance assessment and that it would be useful to examine their structure and functionality in greater detail than had been possible in the TWAP study. This could proceed in two stages; (1) short-term (2-3 months) improvement of the TWAP assessment with input from regional organisations and (2) a longer term assessment that would include the overall regional arrangements and the performance of the organisations in the region.

Participants were of the view that analyses of mandates, actual activities and networking among organisations in the BOBLME similar to the ones carried out for the CLME would be useful in developing an understanding of the relationships among organisations in the BOB. The results of these analyses could underpin the development of a ‘consortium’. It was recognised that this would be a long-term activity extending through the next phase of the BOBLME Project.

5 Session 5: National-regional interfaces

All states, including those within the Bay of Bengal LME, have a variety of linkages with regional and international organizations and processes. These arise from the need to:

- Service commitments under Multilateral Environmental Agreements (MEA);
- Derive technical and financial benefits from funding agencies; and
- Participate in regional/international activities of mutual benefit.

These interactions also have real and transaction costs for associating with consultation at the national level, gathering and processing of data and information, reporting and participating in meetings, and providing feedback to stakeholders. When multiplied by the number of MEAs and intergovernmental processes that each state must engage in to be a full partner in regional development, these costs can be extremely burdensome, especially for small states and/or because of limited resources (Mahon et al. 2010). Consequently, the engagement with these processes may not be as effective as needed for states to obtain the full benefits of the relationships. Conversely, weak engagement may result in regional processes not getting the quality of involvement that is needed for effective action at the regional level. Both of these consequences can significantly impact the quality of regional level ocean governance within the BOBLME.

This session of the workshop introduced the importance of effective preparation and feedback by national representatives who are engaged in regional level mechanisms. Its purpose was to demonstrate opportunities for enhancing existing national/regional preparatory and participatory processes aimed at enhancing the benefits to be gained from meaningful regional level participation by national representatives. It stressed the need to understand how soliciting prior input from a cross-section of national stakeholders with an interest in the topic at the regional level could significantly improve the contributions made by a national representative as well as the regional level decision-making outcomes. Additionally, sharing such outcomes with these stakeholders upon return from regional meetings serves to build legitimacy and constituency support for actions needed to be taken by national governments, as a result of the decisions made at the regional level.
The session consisted of a presentation on the methodology to examine and strengthen regional/national linkages, as well as a discussion and an interview exercise to gather data from country participants on the engagement and communication processes currently in place.

5.1 Summary of presentation

Participants were reminded that the LME Governance Framework described in Session 2 provided the structure for examining a number of key governance related components at multiple horizontal and vertical levels within the LME. This presentation focused on examining the vertical linkage between the national and regional levels, with relevant connections to both sub-national and extra-regional/global levels (Appendix 5.1).

Recognizing that regional organizations and projects all hold meetings at which national representation is required, the key questions explored in the Caribbean LME were discussed and participants were asked to consider these within the context of their country setting:

- (How) is genuine national representation generated?
- Who are the players and what are the processes?
- How resilient are national representation routines?
- How do patterns of preparation and feedback vary?
- What can we learn from research to guide improvements?

The methodology employed within the CLME to answer the above questions involved a two-step process. First, a preliminary telephone assessment targeting three experts in different departments from each of 39 countries and territories in the region was conducted. The experts were asked to comment on their understanding of national delegates’ preparatory and feedback communication regarding meetings of intergovernmental agencies and/or regional projects dealing with marine matters. Following a review of the survey results, eight countries and territories were selected for more in-depth and face-to-face interviews with a selection of government, NGOs and private sector agencies. Questions probed prior knowledge of the issue to be discussed at the regional level, who receives the invitation to attend, how decisions to attend are made, including who should represent the country, preparation, attendance, reporting and follow-up. Respondents were also asked for their views on how the process in place can be enhanced to facilitate better efforts at ocean governance. The interview questionnaire for government representatives is provided in Appendix 5.2 while the questionnaire targeting NGO or private sector respondents is provided in Appendix 5.3.

Figure 5.1 was used as a schematic to illustrate the ideal process that would be expected to enhance ocean governance while Figure 5.2 showed the more likely scenarios that were often found in practice in the Caribbean LME.

Key findings from the CLME assessment were shared with participants as they prepared to participate in the in-workshop activity aimed at conducting interviews with representatives from countries within the BOBLME. These included:

- Sectoral/fragmented approach reduces effectiveness
- Ad hoc (in)formal committees hold infrequent meetings
- Multi-stakeholder arrangements recognized as promising
- Inadequate civil society/private sector representation
- Narrow forum agendas restrict input into marine meetings
- Post-meeting feed-back and communication is irregular
- Weak NGOs and CBOs make communication challenging
- Inappropriate representative = ineffective representation
• Informal relations/social networks key for communication
• Patterns of interaction are typically dynamic and complex

Figure 5.1: Schematic of the ideal process for national engagement at regional meetings

Figure 5.2: Schematic of two likely processes in practice for national engagement at regional meetings

5.2 Discussion of presentation

Participants expressed familiarity with the challenges posed regarding the processes in place to participate more effectively in regional level meetings. Many noted the similarities with the findings of the CLME project. Questions of clarification centered around the time period between receipt of invitation by national focal points from the regional organizations as well as the period following approval to travel and the actual meeting, as this time element was seen as key factor in the ability of national representatives to prepare for meetings. Regarding this issue, it was unlikely that there was any difference in the time element for the CLME as compared to the BOBLME.

Participants were also interested in the number of countries within the CLME that had a national level, multi-stakeholder forum. While this is identified in the CLME Project Document and funds were provided to facilitate the establishment and holding of meetings for such a forum, it was noted that few countries in the Caribbean took advantage of this funding. While few countries had a multi-sectoral forum that included NGOs and the private sector, most countries in the Caribbean had processes already in place to solicit input from other government units. However, it was noted that the communication between different departments and other organizations in the CLME was primarily informal and dependent on the personal relationship of the representatives of these organizations. Participants noted this was also the case in the BOBLME countries.

5.3 Discussion on national/regional interface interviews

National participants at the workshop were grouped according to countries and were interviewed using the questionnaire provided in Appendix 5.2 by NGO or IGO participants. Following the interviews and based on the collective experience of the representatives from each country, each interviewer briefly shared the findings by focusing on the following five questions:
1. Were you able to respond to the questionnaire at a depth you consider adequate or would you have to solicit input from others not at this workshop?
2. What are your impressions regarding the presence of a regional-national mechanism in place in your country?
3. Is there a process in place to prepare for regional-level meetings?
4. Is there a process in place to report after attending regional-level meetings?
5. Does the mechanism include stakeholders other than those in government agencies?

In general, the participants were able to provide a good understanding of the national/regional interface process within their countries, from the perspective of their organization (Appendix 5.4). As with the Caribbean, the responses varied by country – with some having a detailed process similar to Figure 5.1 and some having versions of the scenarios illustrated in Figure 5.2. The detailed responses and analysis of the interviews will subsequently be provided in a more technical report focusing on this component of governance. However, for this report, it is worth noting that participants agreed there were opportunities to improve the national/regional interface. To that end, they agreed upon their return home to conduct additional interviews with other departments, IGOs and NGOs as appropriate using the questionnaire provided in Appendix 5.4.

**5.4 Conclusion**

The need for national level, multi-stakeholder mechanisms for integration and engagement identified in this session and agreed to by participants is highly consistent with emerging ecosystem approaches to ocean governance, both globally and in other large marine ecosystems such as the CLME (Fanning et al. 2011). There are, however, many questions remaining regarding how best to structure these mechanisms within the member countries of the BOBLME. Should they focus on marine affairs or ocean governance only, or should they be broad, encompassing all aspects of sustainable development? Given the differences in size and capacity among countries, different approaches are likely to be appropriate for different states.

It is clear from this preliminary discussion that there is agreement among participants that promotion of good regional ocean governance in the BOBLME will require greater attention to national level arrangements for engagement in regional matters. In particular there appears to be a need for integrating mechanisms in the majority of countries. In both the governance literature and in practice, these types of national level arrangements and interactions are seen as important for enhancing decision-making and for facilitating regional consensus-based adaptive responses to unpredictable stresses and impacts.

**6 Session 6: Science-policy interfaces**

Over the past decades, there has been an explosion in the acquisition of new knowledge regarding the world’s oceans yet ironically, over this same time period, there has been an almost exponential decline in the state of the marine environment. This has led to a growing recognition of the gap between the acquisition of knowledge and its transfer and influence over the policy making process. As noted by UNEP (2012),
“The upshot, as articulated by Juntti and others (2009), is that relatively few policy decisions are based on a balance of environmental, economic and social considerations. To close the circle, this reinforces the opinion of scientists, as observed by Choi and others (2005), that research is not particularly useful or of interest to policymakers. Hence, on one hand only a small amount of science is driven by requests from policymakers, and on the other, science is seldom used in the policy arena where it is needed, or at times it is ‘cherry-picked’ to legitimize decisions already taken. This is a dilemma because it seriously hampers the uptake of urgent environmental information by policymakers and stakeholders at a time when solving environmental challenges require, more than ever, scientific results with a high level of clarity, accessibility, credibility and legitimacy.” (UNEP, 2012, p.10).

The challenges faced by countries in developing regions are further exacerbated by limited scientific knowledge resulting in limited availability, compounded oftentimes by poor accessibility to the pool of existing knowledge. The gap between science and other forms of knowledge and the decision-making process is a significant challenge to good and effective governance as it creates a break in the policy cycle between data and information, analysis and advice and decision-making.

This session of the workshop introduced the importance of bridging the science-policy gap by drawing on the efforts undertaken in the CLME (McConney et al. 2012). Its purpose was to demonstrate opportunities for enhancing the interface between knowledge and policy making. The session consisted of a presentation on the methodology to examine and strengthen the national and regional science-policy interface, a discussion and an interview exercise to gather data and feedback from all participants on the processes currently in place to bridge the science-policy gap in their organization.

### 6.1 Summary of presentation

Participants were reminded that the LME Governance Framework described in Session 2 provided the structure for examining a number of key governance-related components at multiple horizontal and vertical levels within the LME. By sharing the experience from the CLME, this presentation focused primarily on the methodology used to examine the science-related needs of national level decision makers and their advisors in order to make and contribute to better and more informed decisions at national and regional levels (Appendix 6.1).

The methodology employed within the CLME centred on development of a suite of 10 questions that were used to gather feedback from an array of decision-makers and their advisors (Appendix 6.2). The interviews were directed to representatives in the Fisheries, Environment, Tourism and Foreign Affairs ministries of countries in the region. A total of 20 countries and 4 regional organizations responded, generating 73 interviews from 103 respondents (as some interviews were done with a number of respondents at the same time).

Key findings from the CLME assessment were shared with participants as they prepared to participate in the in-workshop activity aimed at conducting interviews with representatives from countries within the BOBLME. The major lessons learned from the Caribbean exercise focused on the need to target multiple audiences, including the general public as well as policy makers and advisors, on the importance of providing and using knowledge to inform decision-making. This is a significant challenge as first there needs to be efforts made at improving the culture for evidenced-based policy making. Improving the accessibility and availability of scientific information and other forms of knowledge so that it can be better incorporated into the decision-making process was recognized as a key need. Suggestions to improve acquisition of knowledge included better linkages with
universities and research institutions and building capacity where necessary, while accessibility to existing knowledge led to recommendations for data sharing to be formalized. Finally, the importance of matching information to the appropriate scale of the problem was flagged as most available data are either at too high or too low a resolution to address most transboundary problems.

6.2 Discussion of presentation

The question of whether the Caribbean assessment led to a ranking of which countries had better science-policy interfaces than others was raised. It was noted that while the data collected could be interpreted to provide such a ranking, the intent of the exercise was to address the broad issue within the region of the governance challenge arising from gaps in the policy cycle. Given the range of capacities among countries in the region, it is not surprising for some to have a larger science-policy gap than others. It was also noted that while efforts were made to interview representatives from all countries and within the four targeted departments, the response from Foreign Affairs was low. It was also noted that efforts focused on governmental decision makers at the national and regional level and did not include NGOs or the private sector.

The participants noted the similar lack of access and availability within the BOBLME and suggested efforts to target accessibility may be addressed by putting in place a legal requirement within and among the countries to do so.

Participants noted that the demand for information by country representatives to participate in regional level decision-making was similarly low in the BOBLME as it was for the CLME. However, at the regional level, it was noted that getting access to raw data from publicly funded institutions within the region was a significant challenge. Once again, it appeared that sharing of data and information was more likely to be successful as a result of who one knows.

6.3 Discussion on science-policy interface interviews

A total of 12 interviews, comprising representatives from nine country and three IGOs, were conducted during the workshop by fellow participants. The detailed responses and analysis of the interviews will subsequently be provided in a more technical report focusing on this component of governance. However, for this report, participants agreed on the importance of understanding the science-policy gap within their country and the region and noted there were opportunities to improve the data collected beyond the small subset of participants attending the workshop. To that end, they agreed upon their return home to conduct additional interviews with senior level decision makers and advisors for other departments, IGOs and NGOs as appropriate.

Following the workshop interviews, the interviewers were asked to report briefly on their findings for each of the questions asked. Some general comments and discussion points follow.

In terms of the type of regional meetings and purpose for scientific input, participants cited meetings of SEAFDEC, IOTC and IOSEA as most often using science in decision-making and noted its
use in decisions regarding MPAs, biodiversity and fisheries. It was noted that sometimes science (or its lack) could be used to delay decisions.

The issue of credible sources for scientific knowledge generated considerable discussion. It was noted that regional analysis is generally dependent on what is provided by countries and the issues of quality, accessibility and availability are not consistent across countries. Furthermore, the need for a regional science-policy interface was raised to ensure regional organizations have a collective awareness of what is needed and that the data and information can be provided, especially from publicly funded research institutions and academia with little constraints, e.g. payment for data.

There was general consensus that a mechanism to share and pull data and information together in the region was lacking and that this was in part exacerbated by the two sub-regions within the Bay of Bengal – the south-east region and the north-western region of the Bay.

In terms of data sharing, it was noted that some sharing could have economic consequences hence confidentiality could constrain this. Additionally, discrepancies among different sources for the same information arise due to lack of standardized protocols. Some effort has been made by some countries, (e.g. Malaysia), to have a centralized data centre but getting the information is still dependent on the providers.

It was noted that academia as a provider of information was not mentioned and suggestions were made to tap into this as a possible resource. Additionally, a number of data providers exist that were not in attendance and effort should also be made to engage them in the discussion.

Suggestions were also made on the need to institutionalize data collection and quality control, to have time series data collection and to make it more readily accessible. However the technical, financial and human resources needed to do this were also recognized.

Participants agreed that it was important to understand exactly what the science and knowledge needs were not only from national governments but also regional organizations. It was also noted that social science data and information was also important to inform the decision making process and that a recognition of information pertaining to marine sectors should be made. For example, information on the labour and human rights conditions for seafarers was cited, especially since some of this information may be easy to access.

It was also mentioned that ownership for a regional approach is not as universally shared at the national level. This is in contrast to the view externally/internationally for countries to recognize the importance of their contribution to a regional approach.

Given the diverse and highly participatory nature of the discussion, a summary of the key needs offered by participants is recaptured in the following bulleted points:

- Need top level science-policy interface to address demands at multiple levels – two way flow of information: top down and bottom-up
- The existence of two separate sub-regions has caused problems with understanding the state of the entire Bay and needs to be better linked.
• Need for a regional level organization that provides/demands needed science information for regional decision making
• Need for mechanisms to require/use information that is available in the region but currently not readily accessible/available
• Need protocols for sharing national level data to be used regionally – legal requirement for countries to provide data?
• Need for nationally consistent data to be provided so should come through the national focal point rather than just the representative attending regional meeting
• Need to recognize and address the fact that national capacity for pulling together all relevant national data is generally limited
• Need for long term monitoring data so data collection needs to be institutionalized for consistency and have a common methodology across the countries.
• To collect such long-term data, need to include academic data sources as in many regions, there are more academic data than institutional data available
• Need to have champions within the region to advance regional level data and analysis and advice
• Need to have an inventory of providers of data and information in the region so as to be aware of what is available and by whom.

6.4 Presentation on applying the LME Governance Framework in the CLME

There was a brief presentation on how the LME Governance Framework had been applied in the CLME (Appendix 6.3)(Fanning et al., 2013). The main point made is that different decision-making functions might take place at different levels in the framework. Day-to-day management action decisions may be taken at local to national levels, development of strategies and plans may take place at the sub-regional to regional levels within issue specific bodies, and policy decisions may take place at the regional level within bodies with a broad ocean governance mandate. The example of tuna fisheries in the CLME was used to illustrate the point.

6.5 Conclusion

The need for addressing the science-policy gap in enhancing regional level ocean governance was clearly acknowledged in this session. While this necessity is not unique to the BOBLME, the challenges and solutions offered focused on the unique context inherent in the Bay of Bengal.

The preliminary scoping survey of the science-policy interface and the discussion identified the relevance of this issue to enhancing ocean governance in the BOBLME. It provides directions for tactical and strategic action within the context of the BOBLME project but future work in this area must be taken up by stakeholders at many levels and implemented on several different scales. The main point by participants is that change is necessary. Taking no action to improve the science-policy interface is not a viable option if the goals and targets for sustainable development that the region and its nation-states have subscribed to are to be achieved.
7  Session 7: Planning post-workshop activities

As a prelude to planning post-workshop activities, participants were reminded that one of the objectives of the workshop was to advise the BOBLME Project on future directions in governance assessment that would be useful in guiding project activities and in advancing transboundary marine EBM in the Bay of Bengal region.

The consultants also reminded participants that, as indicated at the beginning of the workshop, the aim was to identify post-workshop activities in two categories (1) medium-term, or work to be completed by the end of January 2015, and (2) long-term, work to be addressed during the next phase of the project and beyond. They indicated that they had compiled their perception of future directions from the workshop, and proposed that these be reviewed and revised by the workshop in plenary to form one of the key workshop outputs.

A discussion ensued around what exactly the aim of the workshop outputs was and how they would be used by the BOBLME Project. The consultants shared their understanding that the aim was to generate the foundational information needed to develop a regional approach to governance and guide improvements/interventions. A key question in this discussion was whether the workshop outputs would result in revision of the BOBLME Strategic Action Programme (SAP), now in the last stages of completion, or whether they would be taken up in the Project Document (ProDoc) for the next stage of the project. The view was that the SAP already included improved transboundary governance as a strategic direction, including the development of a ‘consortium’ to advance regional governance. Therefore, it was thought that the level of detail in the outputs of the workshop would more likely be used as a basis for developing activities in the ProDoc. It was anticipated that future activities identified in the Workshop could play an important role in providing the information and understanding needed for developing the consortium.

While agreeing with the main thrust of the discussion on the relationship of the workshop outputs with the SAP and Project Document, some participants noted that although the SAP was in an advanced stage of development, it was not yet finalized and that interventions from countries might yet lead to revisions. For example, they might ask for further clarification on the ‘consortium’ approach and what activities would be undertaken to develop it. Workshop outputs might also inform any responses needed. It was also noted that in the CLME Project the term ‘mechanism’ was used for a guiding regional arrangement and left open, to be developed in the next phase.

Regarding the scope of the work to be done, it was queried as to whether to focus more on natural resources or social and economic systems. The consultants shared the view that whether addressing social concerns or ecosystem concerns, good governance arrangements are required, emphasising that in this case the focus is on transboundary arrangements. It was also noted that while the focus of the future governance work to be identified in this workshop is to support the BOBLME Project, its scope is wider than the Project, inasmuch as the long-term aim is to establish a sustainable regional ocean governance capacity in the region. Regarding the scope of the arrangement it was thought that it should be a general framework that can take up the full range of ocean issues, but with the
initial focus on building the living marine resource and environmental aspects first, then expanding to include other sectors, such as shipping and energy.

The time-frame for the work being considered was also queried. It was recalled that an overall objective of this workshop was to begin a discussion about what activities are required to put governance on a long-term track. Experienced participants recalled that the development of the BOBLME Project had been ongoing for almost 20 years, having been first discussed in a 1995 Bay of Bengal Program meeting in Jakarta. There was concern that the slow progress might make it difficult to maintain momentum.

A participant queried as to whether it might be too early to talk about regional governance. National capacity may be too low for there to be meaningful progress at the regional level until national capacity is improved. The discussion explored the question of the relative roles of national and regional levels and the interplay between these. It was noted that while national capacity was critical for the success of regional level governance, regional arrangements can also promote and support national capacity building through regional programmes and sharing of expertise among countries. It was also recognised that there are roles for regional organisations in translating national positions and information upward to the global level as well as global information downward to the national level. These interfaces are two-way processes and were thought to be increasingly important in a globalised world. In that regard too, regional arrangements must be structured with global arrangements in mind and their relationships to these considered.

A participant noted the importance of developing a common understanding of the governance arrangements at the national level in each country. This common understanding would underlie the way that the countries relate to regional arrangements. It may also relate to the extent to which countries perceive, and can take up the benefits that may accrue from investing in regional arrangements, whether this may be in terms of sharing expertise and resources to address common problems or even go as far as coordinated/collective representation in global fora.

Participants then raised the question of the extent to which countries were willing to empower regional organisations to undertake governance. A participant responded that in addressing this issue, principles are important as they will guide how to proceed. Countries have already agreed to principles of cooperation when signing international agreements and this discussion is about how to apply those principles. It was noted that the understanding and observance of principles was integral to developing governance arrangements.

7.1 Future governance assessment and improvement work in BOBLME

The workshop then proceeded to review and revise the proposed future work. The final product is presented below. Participants proposed the following chapeau to the future work.

“There is a need to cast the net wider when dealing with governance assessment and include other players such as private sector/associations, law makers/politicians”

7.1.1 Principles

a) Explicit attention should be given to understanding principles as perceived by stakeholders in various settings, as this is foundational to good governance –long-term

7.1.2 Assessment of governance arrangements for substantive issues

a) Refine the assessment of governance arrangements/structure (as per the TWAP/BOBLME governance assessment - medium term
b) Develop an approach to performance assessment of the regional arrangements in the BOB region - medium term  
c) Conduct performance assessment of regional arrangements – long term  

Guidance for regional governance integration/harmonisation  
d) Analyse mandates and activities of regional organisations in the BOB – long term  
e) Analyse interactions among regional organisations (network analysis) – long term

7.1.3 National regional interface  
a) Conduct additional interviews of government departments and national NGOs\(^7\) – medium-term  
b) Conduct assessments of the extent to which there is integration for ocean governance at the national level – long-term

7.1.4 Science policy interface  
a) Conduct additional interviews of government departments, national NGOs, research institutions, academia, private sector/associations, law makers/politicians\(^8\) – medium/long-term  
b) Conduct assessments of the functionality of science policy interfaces in regional governance processes in the BOB region – long-term

7.1.5 Engage other research partners  
a) Seek to engage think tanks and other disciplines that have not conventionally engaged with BOBLME such as social, political, economics, legal, etc. in the governance assessment

7.1.6 Engage other sectors that impact BOB marine environment  
a) Seek to engage other sectors that have not conventionally been involved in BOBLME but have impact on its work, e.g. ports, shipping, ship-breaking, sand mining, industry, oil and gas, forestry, agriculture, navy and coast guard, tourism  
b) Seek to engage the media to raise public awareness of the issues being dealt with by BOBLME

7.2 Workshop outputs

The consultants outlined the expected outputs of the workshop and short-term follow-on activities.

1. Meeting report that presents the inputs to and immediate outputs of the workshop  
2. A report on the revised TWAP BOBLME assessment including the full range of regional organisations involved at the various policy cycle stages  
3. A report on the national-regional interface based on the questionnaires completed at the workshop and those agreed to be completed by participants by mid-December.  
4. A report on the science-policy interface based on the questionnaires completed at the workshop and those agreed to be completed by participants by mid-December.  
5. An information brief outlining the focus of, and the key messages coming from the workshop.

\(^7\) Send questionnaires to meeting participants after customisation for NGOs  
\(^8\) Send questionnaires to meeting participants
Some time was spent discussing the objectives and outline of the brief. The latter is shown in Appendix 7.1.

8 Workshop conclusions

Conclusions were drawn at the end of each session and these are summarized here. The discussion and preliminary scoping in Session 2 revealed that the structural governance issues that had been the focus of governance assessment in the TDA and intervention planning in the SAP of the CLME Project were also of concern in the BOBLME.

Participants were of the view that as the stakeholders of the BOBLME proceed towards principled ocean governance, the process should include opportunities to reflect explicitly on the substantial principles that are most relevant to the issues of concern to them. This would provide a basis for developing the details of how these principles should be elaborated to meet their needs. As with most other endeavours, there is much that can be learned from what others have done, but the final product must be tailored to the context of the BOBLME region, where it will be used.

It was agreed that the policy processes associated with the various substantive issues (fisheries, habitats, pollution, biodiversity) as discussed in Session 4 are an important aspect of governance assessment and that it would be useful to examine their structure and functionality in greater detail than had been possible in the TWAP study. This could proceed in two stages; (1) short-term (2-3 months) improvement of the TWAP assessment with input from regional organisations and (2) a longer term assessment that would include the overall regional arrangements and the performance of the organisations in the region.

With regard to the overall arrangements for ocean governance in the BOBLME considered in Session 4, participants were of the view that analyses of mandates, actual activities and networking among organisations in the BOBLME similar to the ones carried out for the CLME would be useful. These analyses would contribute to an understanding of the relationships among organisations in the BOB and whether there were gaps or overlaps. The results of these analyses could underpin the development of a ‘consortium’. It was recognised that this would be a long-term activity extending through the next phase of the BOBLME Project.

The need for national level, multi-stakeholder mechanisms for integration of ocean affairs and engagement in regional and global initiatives was identified in Session 5. Addressing this need is highly consistent with emerging ecosystem approaches to ocean governance, both globally and in other large marine ecosystems such as the CLME (Fanning et al. 2011). There are, however, many questions remaining regarding how best to structure these national mechanisms. Should they focus on marine affairs and ocean governance only, or should they be broad, encompassing all aspects of sustainable development? Given the differences in size and capacity among countries, different approaches are likely to be appropriate for different states.

The need for addressing the science-policy gap in enhancing regional level ocean governance was clearly acknowledged in Session 6. While this necessity is not unique to the BOBLME, the challenges
and solutions offered focused on the unique context inherent in the Bay of Bengal. The preliminary scoping of the science-policy interface conducted in this meeting confirmed the relevance of this issue to enhancing ocean governance in the BOBLME. It provides directions for tactical and strategic action within the context of the BOBLME project but future work in this area must be taken up by stakeholders at many levels and implemented on several different scales.

Several activities were identified in Session 7 as being desirable to take the assessment of transboundary governance in the BOBLME forward. These were formulated under the chapeau “There is a need to cast the net wider when dealing with governance assessment and include other players such as private sector/associations, law makers/politicians”. The activities include short-term analyses, to be completed in the months following the workshop and those that would be longer-term to be taken up in the next phase of the BOBLME Project. These were outlined in Session 7 and pertained broadly to the topics of the sessions: elaboration of principles; assessment of governance arrangements for substantive issues; national regional interfaces; science policy interfaces. They also included the need to engage other research partners and other sectors that impact the BOB marine environment.

9 Closing

In closing, participants were asked if they had to summarise the workshop in a word, what it would be. They volunteered:

- “All’s well that ends well”
- Interesting
- Enlightening
- Smart and critical
- Demanding
- Exhausting
- Multifarious
- Overwhelming

The organizers thanked participants for their full and enthusiastic participation which had led to rich and valuable inputs throughout. They also thanked Sucharat Tong On of FAO for all the support she had provided to them and participants prior to, and during the workshop. Finally, on behalf of the organizers, Robin Mahon indicated that they had thoroughly enjoyed the meeting and working with the participants, indicated that they wished only that there had been more time to become better acquainted.

Participants were asked to rate their experience of the Workshop anonymously using a questionnaire and add any comments they would like to make. Responses were on a scale of 1-4 where 1 = ‘strongly disagree’ and 4 = ‘strongly agree’. The results are presented in Appendix 9.1. There were 22 respondents. Most respondents rated the workshop highly and with a preponderance of positive scores and comments. Some areas that received a mixture of positive and negative responses were: the usefulness of dot voting on principles (Q3 b), the clarity of the TWAP preliminary BOBLME assessment (Q4 a) and the National-Regional Interfaces questionnaire (Q5a). Overall, participants were of the view that the workshop objectives were achieved, but there was some disagreement regarding how well the relevance of the CLME approach to the BOBLME had been determined. All participants indicated an interest in continuing to be involved in future work on regional ocean governance.
10 References


BOBLME. 2012a. Transboundary Diagnostic Analysis (TDA) for the Bay of Bengal Large Marine Ecosystem (BOBLME) - Volume 1.

BOBLME. 2012b. Transboundary Diagnostic Analysis (TDA) for the Bay of Bengal Large Marine Ecosystem (BOBLME) - Volume 2.


### Appendix 1.1: List of participants

<table>
<thead>
<tr>
<th>Full name</th>
<th>Country</th>
<th>Position</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Full name</td>
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<td>Certified Professional Facilitator</td>
<td>People Dynamics Associates</td>
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</tbody>
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Appendix 1.2: Workshop programme

BAY OF BENGAL LME GOVERNANCE ASSESSMENT WORKSHOP

October 28-30, Bangkok, Thailand

Meeting Objectives:
Begin a structured discussion in BOBLME on regional governance, identify key areas of concern and carry out preliminary assessments

- Share the overall approach to regional ocean governance in the Caribbean LME Project
- Determine which aspects of the CLME approach are relevant for BOBLME
- Explore which aspects can be dealt with at the workshop (even in a preliminary way), what aspects can be covered in post-workshop activities by end of January, and what activities may need to be taken up in the next phase

Preliminary Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda item</th>
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<tr>
<td><strong>DAY 1 - TUESDAY</strong></td>
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<tr>
<td>9:00-10:10</td>
<td><strong>Session 1: Opening</strong></td>
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<td>Welcome and opening</td>
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<td></td>
<td>Introductions</td>
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<td>Update on BOBLME</td>
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<td>Objectives of workshop</td>
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<td>Meeting guidelines</td>
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<td>Overview of workshop</td>
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<tr>
<td>10:10-10:30</td>
<td>Introduction to governance concepts and assessment</td>
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<td>10:30-10:45</td>
<td>Break</td>
</tr>
<tr>
<td>10:45-12:30</td>
<td><strong>Session 2: The big picture</strong></td>
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<td></td>
<td>Introduction to the LME governance framework – experience of the CLME</td>
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<td>Discussion of applicability to BOBLME</td>
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<td>12:30-13:30</td>
<td>Lunch</td>
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<tr>
<td>13:30-14:00</td>
<td><strong>Session 3: Principles</strong></td>
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<td>Principles – introduction</td>
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<td>Principles – dot prioritisation activity</td>
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<td>14:00-14:30</td>
<td>Review proposed activities for the workshop</td>
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<tr>
<td>14:30-15:00</td>
<td>Principles results - discussion</td>
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<td>15:00-15:15</td>
<td>Break</td>
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<tr>
<td>15:15-15:45</td>
<td><strong>Session 4: Transboundary governance arrangements in BOBLME</strong></td>
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<tr>
<td></td>
<td>Transboundary governance arrangements assessed by TWAP</td>
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<td>15:45-16:15</td>
<td>Transboundary governance arrangements - brainstorm</td>
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<tr>
<td>16:15-17:00</td>
<td>Transboundary governance arrangements – group work</td>
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<tr>
<td><strong>DAY 2 - WEDNESDAY</strong></td>
<td></td>
</tr>
<tr>
<td>9:00-10:30</td>
<td><strong>Session 4: continues</strong></td>
</tr>
<tr>
<td></td>
<td>Transboundary governance arrangements - discussion and areas of focus</td>
</tr>
<tr>
<td></td>
<td>Transboundary governance arrangements - networking among regional organisations.</td>
</tr>
</tbody>
</table>

43
<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda item</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-10:45</td>
<td>Break</td>
</tr>
<tr>
<td>10:45-11:15</td>
<td><strong>Session 5: National-regional interfaces</strong></td>
</tr>
<tr>
<td>11:15-12:30</td>
<td>National-regional interfaces - Methodology</td>
</tr>
<tr>
<td>11:15-12:30</td>
<td>Assess national regional interfaces - Group work</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30-14:00</td>
<td>Assess national regional interfaces - Groups by pairs of countries</td>
</tr>
<tr>
<td>14:00-15:00</td>
<td>Assess national regional interfaces - feedback</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Break</td>
</tr>
<tr>
<td>15:15-16:00</td>
<td><strong>Session 6: Science-policy interfaces</strong></td>
</tr>
<tr>
<td>16:00-17:00</td>
<td>Science-policy interface needs - group work</td>
</tr>
</tbody>
</table>

**DAY 3 - THURSDAY**

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda item</th>
</tr>
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<tbody>
<tr>
<td>9:00-10:30</td>
<td><strong>Session 6: continued</strong></td>
</tr>
<tr>
<td></td>
<td>Science-policy interface needs - group work</td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Break</td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Assess science-policy interface needs - feedback</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30-15:00</td>
<td><strong>Session 7: Planning post-workshop activities</strong></td>
</tr>
<tr>
<td></td>
<td>Review of activities</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Break</td>
</tr>
<tr>
<td>15:15-16:45</td>
<td>Action planning for the intersessional work</td>
</tr>
<tr>
<td></td>
<td>Reporting back of activities by teams and consideration of synergies and</td>
</tr>
<tr>
<td></td>
<td>interactions between teams and consultants</td>
</tr>
<tr>
<td></td>
<td>Next steps</td>
</tr>
<tr>
<td>16:45</td>
<td>Closing reflections</td>
</tr>
</tbody>
</table>
Appendix 1.3: Presentation on GEF International Waters Programme, Governance Indicator Framework
Appendix 1.3
Presentation on GEF International Waters Programme, Governance Indicator Framework

Bay of Bengal LME Project: Governance Assessment Workshop
October 28-30, Bangkok, Thailand

First – what are we talking about?

- Governance is perceived broadly as:
  “…the whole of public as well as private interactions 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.”
  Kooiman et al 2005

- An expanded perspective was taken on the GEF IW Indicators

Assessing governance effectiveness in IW systems

Good governance

- Architecture is an essential first step
- What is now?
- Original indicators
- Social justice path adds emphasis on equity aspect of human well-being
- Ultimate shift of emphasis from conservation to human well-being

Effective governance

- Arrangements architecture in place?
- Governance processes operational?
- Stakeholders appropriately engaged?
- Ecosystem stressors reduced?
- Ecosystems improved/protected?
- Socially just outcomes achieved?
- Human well-being improved/ensured?

GOVERNANCE EFFECTIVENESS IN IW SYSTEMS

GOVERNANCE ASSESSMENT SEQUENCE
Appendix 2.1: Presentation on CLME project governance approach
Context for Caribbean ocean governance

The Wider Caribbean is the most geographically and politically diverse and complex region in the world

- Geopolitical
  - 44 states
  - 100 maritime boundaries
- Cultural diversity
- Size
  - smallest to largest
  - 16 SIDS
- Development
  - poorest to most wealthy

High dependence of livelihoods on coastal and marine goods and services

- Many coastal inhabitants and development
- Marine-based tourism
- Mainly rural small-scale fisheries

Many marine resource impacts

**Coral reef biodiversity**
- Coral reefs in decline
- Reef biodiversity under threat
- Critical coastal habitat in decline
- CMPAs inadequate

**Fisheries**
- Most coastal resources overexploited
- Few instances of management
- Little involvement in ocean-wide large pelagics
- Regional large pelagics unmanaged

CARIBBEAN SEA LANDINGS: FAO
Ship-based and land-based marine pollution -

Ship-based: Caribbean Sea is one of the busiest shipping regions in the world (International Maritime Organization (IMO)).

Land-based: run-off carries pollutants of all sorts.

Caribbean ocean governance issues

Organisational complexity - overlapping and nested fisheries related organisations

Caribbean sea governance issues are multi-level and transboundary.

There are 30+ regional organisations with relevance to living marine resources.

Problems related to large scale and complexity in the Wider Caribbean

- Lots of technical work done
- Little impact on governance
- Many local efforts at management
- Uncoordinated and disconnected at regional level
- Duplication of effort
A regional ocean governance framework for the CLME Region

- Develop conceptual framework
- Relate concept to reality
- Assess key aspects of the framework
- Develop a regional ocean governance framework

DATA AND INFORMATION

- All kinds of research and assessment including Traditional or Local Ecological knowledge, participatory research, oceanography, stock assessment, resource mapping, sociology and economics at all scales

ANALYSIS AND ADVICE

- All kinds of analysis that is focused on addressing fishery and environmental management problems and that can lead to advice that is usable by decision makers: local groups, national committees, regional scientific bodies and NGOs

REVIEW AND EVALUATION

- Bodies with a mandate to review advice and make decisions, preferably binding, regarding what should be implemented to achieve sustainability in fisheries or environmental use: local NGOs and CBOs, Ministries or Cabinet, regional/international political fora.

IMPLEMENTATION

- Primarily national and local agencies with a mandate to put decisions into action, whether this be capacity building, new legislation or direct enforcement.

DECISION MAKING

- Similar bodies to those that are responsible for analysis and advice and that often oversee the policy cycle

A networking approach that makes the best use of existing organisations?

- approached through a governance framework using the conventional policy cycle -- Like this one.
Important characteristics of a Regional Governance Framework

- Consists of linked, nested ‘governance arrangements’.
- Must have a clear arrangement for each actual or potential issue.
- Each arrangements must have:
  - A complete policy process that can (1) take up data and information, (2) generate advice, (3) make decisions, (4) implement and (5) review and adapt.
  - Capacity for (1) Policy advice and decision-making, (2) Management planning and decision-making, (3) Day-to-day action for implementation.
- Arrangements must be:
  - Integrated (linked) for efficiency and to achieve EBM.
  - Nested as appropriate to achieve subsidiarity.
- Similar issues may be covered by similar arrangements and overseen by a common organization for efficiency.
- Entire framework will involve multiple organizations at several geographical and institutional scale levels.
- Several arrangements may share a common process at the level of policy development and decision-making.

The conceptual LME governance framework

A multi-level policy-cycle based governance framework

Policy cycles must be:
- Complete
- Linked vertically
- Linked laterally
- Diversity of policy processes as appropriate

Proposal for a Regional Governance Framework

“Increasingly, the debate turns toward what we describe as the overarching architecture of global environmental governance, that is, the entire interlocking web of widely shared principles, institutions, and practices that shape decisions by stakeholders at all levels.”

Bierman and Pattberg 2012 (see notes)
The CLME Project – Structure:
Building a multi-level policy-cycle based governance framework

- **Transboundary diagnostic analysis (TDA)**
  - Assesses issues to be addressed in activities.

- **Strategic Action Programme (SAP)**
  - Develops agreed plan to address key transboundary issues in next phase.

- **LME Level Monitoring and Reporting**
  - Develops indicators to monitor LME status.

- **Strengthening Regional Governance**
  - Engages regional and sub-regional organisations to put LMR governance on their agendas for policy decision-making.

- **Promoting the Caribbean Sea Initiative**
  - Works with ACS and its Caribbean Sea Commission and other regional organisations to implement the UN Resolution on the Caribbean as a special area.

- **Large Pelagics Project**
  - Increases involvement in ICCAT for oceanic species and pursues regional governance arrangements for species contained in the Wider Caribbean area.

- **Guianas-Brazil Shrimp and Groundfish**
  - Establishes and operates sub-regional cycle for cooperation in management of shared stocks.

- **Eastern Caribbean Flyingfish**
  - Establishes and operates sub-regional cycle for cooperation in management.

- **Reef Fisheries and Biodiversity**
  - Enhances local level linkages among fishery and non-fishery stakeholders and upward linkages to national and regional levels.

- **Spiny Lobster**
  - Enhances local level capacity and linkages among western Caribbean fishery stakeholders and upward linkages to national and regional levels.

**Resources and sub-issues must be added as the framework is developed.**

- Nesting implies integration and coordination but not necessarily control.

**Using the framework for framework building interventions**

- **Long-term goal –** Fully-functional policy cycles at all appropriate levels with the appropriate vertical and lateral linkages.

- **Interventions can be specifically targeted at:**
  - Establishing or completing policy cycles
  - Building or enhancing linkages
Framework building interventions

The operationalisation of a regional ocean governance policy coordination mechanism that would coordinate the entire framework is recommended for inclusion in the SAP.

Progress towards this can be achieved by:

- Establishing the Secretariat of the CSC,
- Developing the CSC as a regional science-policy interface for oceans governance with focus on living marine resources,
- Establishing a data and information capacity for the CSC as described by the Expert Consultation and initiated by the CLME Project,

Framework building interventions

The promotion of a regional sub-arrangement for pollution led by the UNEP CEP is recommended for inclusion in the SAP. Progress towards this can be achieved by:

Progress towards this can be achieved by:

- Explicit recognition and endorsement of the role of UNEP as lead in this arrangement by state parties
- Plans for specific activities aimed at developing this role and institutionalization of a policy process for developing these plans and tracking their implementation.

Framework building interventions

The promotion of a regional sub-arrangement to address unsustainable use of coral reef fisheries ecosystems led by WECAFC and the UNEP CEP is recommended for inclusion in the SAP.

Progress towards this can be achieved by:

- Explicit recognition and endorsement of the role as partners in this arrangement by state parties
- Plans for specific activities aimed at developing this role and institutionalizing a policy process for developing these plans and tracking their implementation
- Developing a regional EAF/EBM management plan for reef fisheries ecosystems with regional, subregional and pilot national components including:
  - Linkages with the regional sub-arrangements for other fisheries ecosystems, pollution and habitat destruction
  - Identifying key transboundary areas that require governance attention and supporting pilot governance assessment and enhancement
  - A network of relevant agencies and other actors
Appendix 2.2: Presentation on issues to be addressed in this workshop
Appendix 2.2: Issues to be addressed in this workshop – substantive and structural

Key Substantive Transboundary Issues
- Over-exploitation of fishery resources
- Land-based and marine-based sources of pollution
- Habitat degradation and biodiversity loss
- Other?

Key Structural Issues
- Roles and mandates of organizations
- Interactions among organizations
- National-Regional interfaces
- Science-policy interfaces

Substantive Issues
- Over-exploitation of fishery resources
- Land-based and marine-based sources of pollution
- Habitat degradation and biodiversity loss
- Other (tourism, piracy, climate change, disasters)?

Structural Issues
- Roles and mandates of organizations
- Interactions among organizations
- National-Regional interfaces
- Science-policy interfaces
Appendix 3.1: Presentation on principles
Appendix 3.1: Presentation on principles

**Governance**

“Governance is the process of decision-making and the process by which decisions are implemented (or not implemented).”* (UN-Economic and Social Commission for Asia and the Pacific)

“Governance is the whole of public as well as private interactions 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.”* (Kooiman et al, 2005)

### Decision-Making Guided by Principles

- Principles derived from our fundamental values and beliefs about how humans should behave.
- They attempt to express these values in a way that can guide our decisions and actions
  - **Substantial principles**, based on deep beliefs that guide our vision for the future and thus the way that we approach governance;
  - **Procedural principles** that guide the way we interact, make decisions and do business on a daily basis.

### Some substantial principles

<table>
<thead>
<tr>
<th><strong>Sustainability</strong></th>
<th>Preservation of opportunities and options of future generations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficiency</strong></td>
<td>The avoidance of waste of any commodity that is of value, whether material or immaterial</td>
</tr>
<tr>
<td><strong>Rationality</strong></td>
<td>What is to be done or being done should make logical sense</td>
</tr>
<tr>
<td><strong>Inclusiveness</strong></td>
<td>The need to involve those who are affected</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>Fairness and justice in the way that benefits are allocated</td>
</tr>
<tr>
<td><strong>Precaution</strong></td>
<td>Acknowledgement of uncertainty and risk and the consequent exercise of care to avoid undesirable outcomes</td>
</tr>
</tbody>
</table>
Some Procedural Principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent</td>
<td>Everyone sees how decisions are made and who makes them</td>
</tr>
<tr>
<td>Accountable</td>
<td>Decision makers are answerable to those they represent</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>All interests are considered in defining the problem or opportunity before management decisions are taken</td>
</tr>
<tr>
<td>Inclusive</td>
<td>All those who have a legitimate interest are involved</td>
</tr>
<tr>
<td>Representative</td>
<td>Decision makers are representative of all interest groups</td>
</tr>
<tr>
<td>Informed</td>
<td>All interest groups understand the process and have adequate and timely access to relevant information</td>
</tr>
<tr>
<td>Empowered</td>
<td>All interest groups are capable of actively participating in decision-making in a non-dominated environment</td>
</tr>
</tbody>
</table>

Principled Ocean Governance

In many agreements and in the literature we can find a vast variety of principles formulated in various ways

- WSSD/JPOA; UNCED Rio Declaration/Agenda 21
- FAO Code of Conduct for Responsible Fisheries
- Convention on Biological Diversity, FCCC
- FAO Ecosystem Approach to Fisheries
- US Commission on Ocean Policy
- Costanza's principles for ocean sustainability
- CARICOM CRFM; OECS St. Georges Declaration
- Canada’s Oceans Act
- BOBLME SAP
- Other national, regional & international policies

Evolution of Ocean Governance Principles

Some Key Ocean Governance Principles
A Principles Assessment for the Guianas-Brazil Continental Shelf Fisheries Ecosystem


Major transboundary living marine resource issues in the Guianas-Brazil Continental Shelf Ecosystem

- Fisheries for shrimp and groundfish,
- Land-based pollution (mainly from large rivers),
- Coastal habitat destruction (wetlands/mangroves),
- Piracy

Principles Selected for the CLME

<table>
<thead>
<tr>
<th>Principle</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>The persons/agencies responsible for the governance processes can be held responsible for their action/inaction</td>
</tr>
<tr>
<td>Adaptability</td>
<td>The process has ways of learning from its experiences and changing what it does</td>
</tr>
<tr>
<td>Appropriateness</td>
<td>Under normal conditions, this process seems like the right one for what it is trying to achieve</td>
</tr>
<tr>
<td>Capability</td>
<td>The human and financial resources needed for the process meet its responsibility are available</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>This process should succeed in leading to sustainable use of ecosystem resources and/or control harmful practices</td>
</tr>
<tr>
<td>Efficiency</td>
<td>This process makes good use of the money, time and human resources available and does not waste them</td>
</tr>
<tr>
<td>Equity</td>
<td>Benefits and burdens that arise from this process are shared fairly, but not necessarily equally, among stakeholders</td>
</tr>
<tr>
<td>Inclusiveness</td>
<td>All those who will be affected by this process also have a say in how it works and are not excluded for any reason.</td>
</tr>
<tr>
<td>Integration</td>
<td>This process is well connected and coordinated with other related processes</td>
</tr>
<tr>
<td>Legitimacy</td>
<td>The majority of people affected by this process see it as correct and support it, including the authority of leaders</td>
</tr>
<tr>
<td>Representativeness</td>
<td>The people involved in this process are accepted by all as being able to speak on behalf of the groups they represent</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>When circumstances change this process can respond to the changes in what most think is a reasonable period of time</td>
</tr>
<tr>
<td>Transparency</td>
<td>The way that this process works and its outcomes are clearly known to stakeholders through</td>
</tr>
</tbody>
</table>

Respondents and Methodology

- Representatives from fisher organizations and the fishing industry
- Heads of fisheries departments
- Technical Officers in fisheries departments

- Discuss statements explaining principles
- Provide response score based on presence of principles in fisheries arrangement

- Score
  - disagree strongly = 1,
  - disagree =2,
  - agree = 3,
  - agree strongly = 4
- 0 indicated not able to answer
Some closing comments on Principles Session

- Decisions guided by principle have become accepted as necessary for "good" governance.
- Principles are not all equal.
- Some principles are complementary, e.g., transparency and accountability.
- Some are encompassing of others, e.g., SD and precautionary approach.
- Some are conflicting, e.g., efficiency and integration.
- Yet others that appear to complementary may in fact be conflicting, e.g., democratic (based on majority vote) and equity vs. consensus and the "tyranny of the minority".
- Agreeing on a set of principles to guide decision-making is not a simple endeavour.
- Assistance in selection may come from the goal we are trying to achieve BUT: our deep core individual values are generally constant and therein lies the problem.
- Success of governance may very likely be dependent on paying more attention to anticipating the consequences of the suite of principle we agree to use to guide decision-making, thereby minimizing unintended outcomes or at least being prepared for them.
Appendix 3.2: Presentation on prioritisation of principles
Appendix 3.2: Presentation on prioritisation of principles

- We have a list of 22 principles on the wall
- Three groups, NGOs, IGOs, country representatives
- Each have five dots to place on the principles you consider most important
- Can put all five on one or any combination
- Will tally and show you after break
- Then compare to CLME and discuss
- First have a table discussion
  - Clarification
  - Anything missing

Bay of Bengal LME Project: Governance Assessment Workshop
October 28-30, Bangkok, Thailand

<table>
<thead>
<tr>
<th>Criteria/ principles of good governance</th>
<th>Statement of conditions that meet the criteria (indicate agreement/disagreement by ticking the appropriate box)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>Decision makers and members of the public should be accountable for the actions they take that affect ocean and coastal resources.</td>
</tr>
<tr>
<td>Adaptiveness</td>
<td>Management programs should be designed to meet clear goals and provide new information to continually improve the scientific basis for future management.</td>
</tr>
<tr>
<td>Balanced use</td>
<td>Management should seek the appropriate balance between, and integration of, conservation and use of biological diversity.</td>
</tr>
<tr>
<td>Compliance</td>
<td>Ensure compliance with and enforcement of conservation and management measures.</td>
</tr>
<tr>
<td>Conservation</td>
<td>Management should conserve aquatic ecosystems and protect critical fisheries habitats.</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Cooperate at subregional, regional and global levels to ensure effective conservation and protection of living aquatic resources throughout their range of distribution.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>The avoidance of waste of any commodity that is of value, whether material or immaterial.</td>
</tr>
<tr>
<td>Empowerment</td>
<td>All interest groups (women and men) are capable of actively participating in decision-making in a non-dominated environment.</td>
</tr>
<tr>
<td>Equity</td>
<td>Fairness and justice in the way that benefits are allocated.</td>
</tr>
<tr>
<td>Full cost allocation</td>
<td>All of the internal and external costs and benefits, including social and ecological, of decisions concerning the use of environmental resources should be identified and allocated.</td>
</tr>
<tr>
<td>Integration</td>
<td>Ocean policies should be based on the recognition that the oceans, land, and atmosphere are inextricably intertwined.</td>
</tr>
</tbody>
</table>

Principles – Prioritization of Principles

- We have a list of 22 principles on the wall
- Three groups, NGOs, IGOs, country representatives
- Each have five dots to place on the principles you consider most important
- Can put all five on one or any combination
- Will tally and show you after break
- Then compare to CLME and discuss
- First have a table discussion
  - Clarification
  - Anything missing
Possible activities for this workshop and beyond

A. In workshop
   1. Overall LME based on TWAP
   2. National regional interface
   3. Science policy interface
B. Between workshop and end of January
C. Work to be done in next phase of project

Principles – Discussion of Prioritization

Table discussion
• Initial impressions
• Surprises and/or insights
• Should evaluation of principles be incorporated into future work on the substantive issues in the BOBLME?
Appendix 4.1: Presentation on TWAP BOBLME governance arrangement assessment
Appendix 4.1:
Presentation on TWAP BOBLME governance arrangements assessment

Bay of Bengal LME Project: Governance Assessment Workshop
October 28-30, Bangkok, Thailand

TWAP BOBLME Governance Arrangements Assessment

Two parts:
• The assessment methodology
• The results for the BOBLME

Assessment methodology

Governance assessment

- Basis for governance action is actual or potential issues
- IW issues are transboundary
- Each issue must have an arrangement
- Must be linkages among arrangements within a system
Arrangements must have certain characteristics to be considered functional

- Policy cycle must be complete and include mechanisms for:
  - Uptake of data and information
  - Generation of advice/review of implementation
  - Decision-making
  - Implementation

- Must have functionality in three modes
  - Articulation of principles, visions and goals
  - Institutional mode (agreed ways of doing things reflected in plans and organisations) and
  - Operational mode.

- Modes may operate at different institutional and/or geographical scale levels – then vertical linkages are needed.

---

**The assessment steps**

1. **ID system**
   - ID key issues
     - Issue 1
     - Issue 2
     - Issue …n

2. **Assess arrangement for each issue**
   - Arrangement 1
   - Arrangement 2
   - Arrangement …n

3. **Score for each arrangement**
   - Score 1
   - Score 2
   - Score …n

4. **Average score for system**

---

**Process for assessing governance architecture for transboundary water systems**

- Assess clustering or linkages among arrangements
- Average score for system

---

**Identify system**

LME area taken up by the EEZ of each country and the High Seas

<table>
<thead>
<tr>
<th>Country</th>
<th>Original LME</th>
<th>BOBLME Project</th>
<th>Percent of area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>2.1</td>
<td>2.5</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>India</td>
<td>24.1</td>
<td>21.1</td>
<td>India</td>
</tr>
<tr>
<td>Indonesia</td>
<td>7.9</td>
<td>11.6</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.9</td>
<td>1.3</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Maldives</td>
<td>0.0</td>
<td>14.6</td>
<td>Maldives</td>
</tr>
<tr>
<td>Myanmar</td>
<td>14.1</td>
<td>8.2</td>
<td>Myanmar</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>10.8</td>
<td>8.5</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.1</td>
<td>3.0</td>
<td>Thailand</td>
</tr>
<tr>
<td>High Seas</td>
<td>25.9</td>
<td>31.5</td>
<td>High Seas</td>
</tr>
</tbody>
</table>

Area km²: 3,647,858, 6,253,373

The figures shown in this table are based on the equidistant EEZ boundaries from marineregions.org and are for discussion purposes only. They do not reflect any position on maritime boundary delimitation.
Identify issues

**Areas of concern identified in the TDA (2012):**
- Overexploitation of marine living resources
- Degradation of mangroves, coral reefs and seagrass
- Pollution and water quality

**Issues requiring separate governance arrangements:**
- Fisheries
  - Small pelagic resources
  - Demersal finfish fisheries (including reefs?)
- Tuna resources
- Habitat degradation and modification
  - Mangroves, coral reefs and seagrass
  - Degradation and modification of seabed habitat and seamounts
- Pollution
  - LBS
  - MBS?

**Scoring criteria**

**Advisory mechanism (policy and management)**
- 0 = No transboundary science policy mechanism, e.g. COP self advises
- 1 = Science-policy interface mechanism unclear - irregular, unsupported by formal documentation
- 2 = Science-policy interface not specified in the agreement, but identifiable as a regular process
- 3 = Science-policy interface clearly specified in the agreement

**Decision-making (policy and management):**
- 0 = No decision-making mechanism
- 1 = Decisions are recommendations to countries
- 2 = Decisions are binding with the possibility for countries to opt out of complying
- 3 = Decisions are binding

Identify arrangements - fisheries

**Bay of Bengal LME – Transboundary arrangement for fisheries - small pelagic resources, demersal finfish and invertebrates (BOBP-IGO)**

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy analysis and formulation</td>
<td>BOBP-IGO Technical Advisory Committee</td>
<td>BOBP-IGO</td>
<td>Only four of the eight countries are members.</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>BOBP-IGO Governing Council</td>
<td>BOBP-IGO</td>
<td>Holds sessions annually, plus special sessions and approves the work program and budget of the organization.</td>
</tr>
<tr>
<td>Planning and strategy development</td>
<td>BOBP-IGO Technical Advisory Committee</td>
<td>BOBP-IGO</td>
<td>It appears that most decisions are programmatic rather than management.</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>BOBP-IGO Scientific Council</td>
<td>BOBP-IGO</td>
<td>BOB-IGO calls for National Plans of Action developed with assistance from the BOB-IGO.</td>
</tr>
<tr>
<td>Implementation</td>
<td>Countries</td>
<td>Assistance from</td>
<td>Regional Plan of Action for transboundary species?</td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>BOBP-IGO Technical Advisory Committee</td>
<td>BOBP-IGO</td>
<td>Habitat modification - degradation and modification of seabed habitat and seamounts is primarily a fisheries issue that can be dealt with under this arrangement.</td>
</tr>
<tr>
<td>Data and information</td>
<td>National/BOBP-IGO</td>
<td>APFIC</td>
<td>Lobster is covered by this arrangement.</td>
</tr>
</tbody>
</table>

**Implementation**

- 0 = Countries alone
- 1 = Countries supported by secretariat
- 2 = Countries and regional/global level support
- 3 = Implemented through a coordinated regional/global mechanism

**Review**

- 0 = No review mechanism
- 1 = Countries review and self-report
- 2 = Agreed review of implementation at regime level
- 3 = Agreed compliance mechanism with repercussions

**Data and information**

- 0 = No DI mechanism
- 1 = Countries provide DI which is used as is
- 2 = DI centrally coordinated, reviewed and shared
- 3 = DI centrally managed and shared

**Scoring criteria**

- Scoring criteria for advisory mechanism: 0 = No transboundary science policy mechanism, e.g. COP self advises, 1 = Science-policy interface mechanism unclear - irregular, unsupported by formal documentation, 2 = Science-policy interface not specified in the agreement, but identifiable as a regular process, 3 = Science-policy interface clearly specified in the agreement.
- Scoring criteria for decision-making: 0 = No decision-making mechanism, 1 = Decisions are recommendations to countries, 2 = Decisions are binding with the possibility for countries to opt out of complying, 3 = Decisions are binding.
Identify arrangements – tuna fisheries

<table>
<thead>
<tr>
<th>Policy cycle</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy analysis and advice</td>
<td>IOTC Scientific Committee</td>
<td></td>
<td>BOBP-IGO is a partner in the World Bank NGO-ABNJ Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BOBLME collaborates with IOTC primarily on capacity development / awareness / communication</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>IOTC Commission</td>
<td></td>
<td>Bangladesh and Malaysia are non-members of IOTC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IOTC also considers neritic tunas in the region</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There are probably trophic interactions between the oceanic tunas (large scale distribution) and small pelagics in the LME that require linkages in management</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>IOTC Scientific Committee, sub-commissions, and working parties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>IOTC Commission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementing organisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>IOTC Scientific Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data and information</td>
<td>IOTC Secretariat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall total and % completeness >> 14/21 = 67%

Identify arrangements – pollution and biodiversity

<table>
<thead>
<tr>
<th>Policy cycle</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy analysis and advice</td>
<td>COBSEA Secretariat</td>
<td></td>
<td>PEMSEA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SACEP is a formally constituted regional body. While, a Regional Seas Convention for the area has not yet been adopted, the South Asian Seas Action Plan (SASAP) was adopted in March 1996 - SASAP is the SASAP secretariat. SASAP only covers countries on the western side of the BOB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Three countries on the eastern side of the BOB are covered by the COBSEA Regional Seas Initiative, but COBSEA is more focussed in the South China Sea LME area</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SAARC's focus is mainly on ICZM (Maldives Unit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The scores are the average of SACEP and COBSEA</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>COBSEA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>COBSEA Secretariat, CPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>CPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementing organisation</td>
<td>CPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>COBSEA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data and information</td>
<td>CPs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall total and % completeness >> 8/21 = 38%

Identify arrangements - summary

<table>
<thead>
<tr>
<th>Category</th>
<th>LME</th>
<th>Number of countries</th>
<th>Collective importance</th>
<th>Domain</th>
<th>Stage</th>
<th>Progress</th>
<th>Priority for intervention</th>
<th>Completeness index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisheries - small pelagic resources, demersal finfish and invertebrates</td>
<td>BOBP-IGO</td>
<td>15</td>
<td>BOBP-IGO. The fisheries arrangements are clearly defined but are largely oriented to cooperation not management. Relationships between BOBP-IGO, APFIC and SEAFDEC, the major bodies, are not clear. Only APFIC has strong membership.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisheries - small pelagic resources, demersal finfish and invertebrates</td>
<td>BOB-ABNJ</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisheries - tuna</td>
<td>APFIC</td>
<td>15</td>
<td>APFIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollution – LBS</td>
<td>SACEP, COBSEA</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollution – MBS</td>
<td>SACEP, COBSEA</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity – habitat degradation</td>
<td>SACEP, COBSEA</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity – specific (sea turtles)</td>
<td>CMS, IOSEA</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity – specific (dugong)</td>
<td>CMS, IOSEA</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Integration

- Integration based on overlap in responsible organisations across the arrangements for the seven issues is 0.1 out of a possible 1
- There does not appear to be any agency that is formally mandated to provide transboundary integration for the issues dealt with above
Engagement

Country membership in arrangements relevant to the Bay of Bengal LME

<table>
<thead>
<tr>
<th>Arrangement</th>
<th>Signed</th>
<th>Not signed</th>
<th>Not eligible</th>
<th>% engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOB-IGO</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>IOTC</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>APFIC</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>SACEP</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>COBSEA</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>SAARC</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>ASEAN</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>POMCA</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>IOSEA</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>BIMSTEC</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Overlap with agreements

Spatial overlap of transboundary agreements with the Bay of Bengal LME

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Percent of agreement in LME</th>
<th>Percent of LME in agreement</th>
<th>Fit of agreement to LME</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOTC</td>
<td>10</td>
<td>100</td>
<td>Agr larger</td>
</tr>
<tr>
<td>APFIC</td>
<td>23</td>
<td>49</td>
<td>Offset</td>
</tr>
<tr>
<td>BOBP-IGO</td>
<td>100</td>
<td>36</td>
<td>LME larger</td>
</tr>
<tr>
<td>FFA</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>Offset</td>
</tr>
<tr>
<td>SEAFOC</td>
<td>20</td>
<td>65</td>
<td>Offset</td>
</tr>
<tr>
<td>WCPFC</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>Offset</td>
</tr>
<tr>
<td>SOFA</td>
<td>2</td>
<td>&lt;1</td>
<td>Offset</td>
</tr>
<tr>
<td>SWIOFC</td>
<td>4</td>
<td>3</td>
<td>Offset</td>
</tr>
<tr>
<td>Dugong MOU</td>
<td>10</td>
<td>100</td>
<td>Agr larger</td>
</tr>
<tr>
<td>IOSEA</td>
<td>7</td>
<td>100</td>
<td>Agr larger</td>
</tr>
<tr>
<td>CORSEA</td>
<td>8</td>
<td>16</td>
<td>Offset</td>
</tr>
<tr>
<td>SACEP</td>
<td>70</td>
<td>55</td>
<td>Offset</td>
</tr>
</tbody>
</table>

Completeness
Identifying stakeholders and roles

Process
1. Tables grouped by issue
   - Fisheries
   - Pollution
   - Habitat and biodiversity
   - ?
2. ID transboundary stakeholders at policy cycle stages
3. Put them up on the sticky wall
4. Review results
   - Is there a complete policy cycle for each issue?
   - Is there integration at each policy cycle stage?
   - Is there, overall integration?
   - What are the structural areas for examination in greater depth?
     - Linkages among regional organisations,
     - Science-policy interfaces
     - Integration mechanism
Appendix 4.2: TWAP Assessment of transboundary governance architecture of Bay of Bengal LME

Robin Mahon, Lucia Fanning, Kimberley Baldwin and Selicia Douglas

This document has been extracted from the GEF Transboundary Waters Assessment Programme Report of Governance Assessment of Large Marine Ecosystems (Fanning et al in press). It reflects the status of the assessment as done for that project. One aim of this workshop is to improve this assessment by obtaining inputs from stakeholders in the BOB region.

The system to be governed

The system is defined as the Bay of Bengal LME. This includes the marine waters under the jurisdiction of Bangladesh, India, Indonesia, Malaysia, Myanmar, Sri Lanka and Thailand. While the Maldives is considered to be a part of this LME from the perspective of the GEF Bay of Bengal LME Project, its waters do not overlap the LME as originally defined (Table 1). Therefore if the LME is an ecological unit and the aim is to manage it as such, the Maldives does not actually have a stake in the ecosystem. There may nonetheless good reasons to include it from a functional cooperation perspective.

Table 1. Percentage of LME area taken up by the EEZ of each country and the High Seas for the original LME (3 647 858 km$^2$) and for the extended BOBLME Project area (6 253 373 km$^2$)

<table>
<thead>
<tr>
<th>Country</th>
<th>Original LME</th>
<th>BOBLME Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>2.1</td>
<td>1.3</td>
</tr>
<tr>
<td>India</td>
<td>34.1</td>
<td>21.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>7.9</td>
<td>11.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Maldives</td>
<td>0.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Myanmar</td>
<td>14.1</td>
<td>8.2</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>10.8</td>
<td>8.5</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.2</td>
<td>1.9</td>
</tr>
<tr>
<td>High Seas</td>
<td>25.9</td>
<td>31.6</td>
</tr>
</tbody>
</table>

The figures shown in this table are based on the equidistant EEZ boundaries from marineregions.org and are for discussion purposes only. They do not reflect any position on maritime boundary delimitation.

An overview of the LME from the perspective of the five LME modules is provided by Sherman and Hempel (2009 Chapter VII-10) so no review is provided here. This assessment is also informed by the BOBLME TDA (2012a, 2012b) and the GEF institutional review (GEF 2011)

Governance arrangements

Issues to be governed

1 A similar issue arises in the East: why is only part of the Sumatra East coast included, while the Indonesian Fisheries Management Area 571 includes the entire coast line. Also where actually is the southeastern boundary? Port Klang? One fathom bank?
The following areas of concern were identified in the TDA (2012):

- Overexploitation of marine living resources
- Degradation of mangroves, coral reefs and seagrass
- Pollution and water quality

In terms of issues requiring separate governance arrangements the above areas of concern have been broken out into the following issues:

- Fisheries
  - small pelagic resources
  - demersal finfish fisheries (including reefs?)
  - tuna resources
- Habitat degradation and modification
  - mangroves, coral reefs and seagrass
  - degradation and modification of seabed habitat and seamounts
- Pollution
  - LBS.

From a transboundary governance perspective it is desirable to combine the above issues under as few governance arrangements as possible. However, the extent to which this can be done (from a governance process perspective) will depend on the degree to which the issues share a responsible agency. For example, while the decline and vulnerability of sharks or sea turtles may be primarily a biodiversity issue, they may be caused largely by fishing and can therefore be addressed within the fisheries arrangement. Similarly, the issue of lost and discarded fishing gear was noted under pollution, but is probably best dealt with as a fishery issue.

**Identify arrangements for each issue**

The key transboundary bodies and instruments that have been identified and that may be expected to comprise the arrangements are listed below. Their overlap with the BOB LME is shown in table 2.

- Agreement on the Institutionalization of the Bay of Bengal Programme as an Inter-Governmental Organisation (BOBP-IGO)²
- Agreement for the establishment of the Indian Ocean Tuna Commission (IOTC)
- Asia Pacific Fisheries Commission – FAO (APFIC)
- South East Asian Fisheries Development Center (SEAFDEC)
- Convention on the Conservation and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC)
- Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Working Committee on Fisheries³

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² The Agreement on the Institutionalization of the Bay of Bengal Programme as an Inter-Governmental Organisation was signed in April 2003 in Chennai, India (with the Maldives signing in May 2003. The Agreement evolved from the FAO Bay of Bengal Programme (1979 to 2000). [http://www.bobpigo.org](http://www.bobpigo.org). Its objective is to support the development and management of sustainable coastal fisheries

³ [http://www.bobpigo.org](http://www.bobpigo.org)
- Network of Aquaculture Centers in Asia-Pacific (NACA)
- South Asia Cooperative Environment Programme (SACEP), South Asian Seas Action Plan (SASAP)
- South Asian Association for Regional Cooperation (SAARC), Convention on Co-operation on Environment (2010)
- ASEAN, ASWG Fisheries and Coastal and Marine Environment
- Coordinating Body on the Seas of East Asia (COBSEA)
- Indian Ocean- South East Asian (IOSEA) Marine Turtle Memorandum of Understanding
- Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MOU)
- East African Action Plan, 1981

The extent to which the geographical area of coverage of these bodies and instruments overlaps the Bay of Bengal LME is shown in Table 2.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Original LME</th>
<th>Expanded LME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent of</td>
<td>Percent of</td>
</tr>
<tr>
<td></td>
<td>agreement</td>
<td>LME in</td>
</tr>
<tr>
<td></td>
<td>in LME</td>
<td>agreement</td>
</tr>
<tr>
<td>IOTC</td>
<td>6</td>
<td>99</td>
</tr>
<tr>
<td>APFIC</td>
<td>23</td>
<td>84</td>
</tr>
<tr>
<td>BOBP-IGO</td>
<td>100</td>
<td>61</td>
</tr>
<tr>
<td>FFA</td>
<td>&lt;1</td>
<td>1</td>
</tr>
<tr>
<td>SEAFDEC</td>
<td>13</td>
<td>71</td>
</tr>
<tr>
<td>WCPFC</td>
<td>&lt;1</td>
<td>1</td>
</tr>
<tr>
<td>SIOFA</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SWIOFC</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dugong MOU</td>
<td>?</td>
<td>100</td>
</tr>
<tr>
<td>IOSEA</td>
<td>?</td>
<td>100</td>
</tr>
<tr>
<td>COBSEA</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>SACEP</td>
<td>D</td>
<td>70</td>
</tr>
</tbody>
</table>

The extent of country membership in these bodies and instruments for the Bay of Bengal LME is shown in Table 3.

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4 SACEP is a cooperation agreement. There is no Regional Seas convention yet.
5 Convention not yet in force
6 UNEP Regional Seas Programme
7 A = Exact match between agreement and LME; B = LME larger than and includes arrangement; C = Arrangement larger than and includes LME; D = Arrangement and LME offset.
Table 3. Country membership in arrangements relevant to the Bay of Bengal LME

<table>
<thead>
<tr>
<th>Countries</th>
<th>BOB-IGO</th>
<th>IOTC</th>
<th>APPIC</th>
<th>SACEP (^8)</th>
<th>COBSEA</th>
<th>SAARC</th>
<th>SEAFDEC</th>
<th>ASEAN</th>
<th>PEMSEA</th>
<th>IOSEA</th>
<th>Dugong MOU</th>
<th>BIMSTEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>B</td>
<td>N</td>
<td>B</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>India</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Indonesia</td>
<td>B</td>
<td>B</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>N</td>
<td>B</td>
<td>B</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td>Maldives</td>
<td>B</td>
<td>B</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Myanmar</td>
<td>N</td>
<td>N</td>
<td>B</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Thailand</td>
<td>B</td>
<td>B</td>
<td>N</td>
<td>C</td>
<td>N</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>% engagement</td>
<td>50</td>
<td>86</td>
<td>88</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>63</td>
<td>100</td>
</tr>
</tbody>
</table>

B = a binding commitment to the agreement by ratification, accession, acceptance or adoption
C = agreement to cooperate by signing
N = country not eligible to join this agreement. Some agreements can be ratified and have potential to be all Bs, others can only be signed

Assessment of issues

The arrangements for the issues identified above are summarized in Table 4a-g. An overall summary is presented in Table 5.

\(^8\)Includes Afghanistan, Iran, Bhutan, Nepal
Table 4a: Bay of Bengal LME – Transboundary arrangement for fisheries - small pelagic resources, demersal finfish and invertebrates (BOBP-IGO)

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy analysis and</td>
<td>BOBP IGO Technical Advisory Committee</td>
<td>• BOBLME Project&lt;br&gt;• BIMSTEC, APFIC, SEAFDEC</td>
<td>• Only four of the eight countries are members.&lt;br&gt;• Holds sessions annually (plus special sessions and approves the work program and budget of the organization&lt;br&gt;• It appears that most decisions are programmatic rather than management&lt;br&gt;• BOB IGO calls for National Plans of Action developed with assistance from the BOB IGO.&lt;br&gt;Regional Plan of Action for transboundary species?&lt;br&gt;• Habitat modification - degradation and modification of seabed habitat and seamounts is primarily a fisheries issue that can be dealt with under this arrangement&lt;br&gt;• Lobster is covered by this arrangement</td>
</tr>
<tr>
<td>decision-making</td>
<td>Sub-LME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning analysis</td>
<td>Technical Advisory Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and advice</td>
<td>Sub-LME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>BOBP IGO Governing Council</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>Countries Assistance from APFIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>BOBP IGO Technical Advisory Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data and information</td>
<td>National/BOBP IGO APFIC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy decision-making</td>
<td>BOBP IGO Governing Council</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning analysis and</td>
<td>Technical Advisory Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>decision-making</td>
<td>Sub-LME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>Countries Assistance from APFIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>BOBP IGO Technical Advisory Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data and information</td>
<td>National/BOBP IGO APFIC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Overall total and % completeness | 11/21 = 52% |

Table notes:
**Policy cycle stage**: This column lists the governance functions that are considered to be necessary at two levels (a) the policy setting level and (2) the policy implementation level.

**Responsible organisation or body**: Organisation or organisations responsible for the function should be listed here

**Levels**: These are the institutional scale level or levels at which the function is performed. These include local, national, sub regional (Sub-LME), regional (LME), extra-regional (Supra-LME).

**Completeness**: Rate on a scale of 0 – 3 based on the criteria in Appendix 1.

**Observations**: This provides the opportunity for brief comments that may help the user interpret the information provided, but is not intended to be a substitute for annotation.

**Overall total and % completeness**: Assume each step is equally important and receives equal weighting. Total possible score is 21.
<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy analysis and advice</td>
<td>APFIC Secretariat</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>APFIC Commission</td>
<td>Supra-LME</td>
<td>1</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>APFIC Secretariat, SEAFDEC, World Fish Centre via RPOA</td>
<td>Supra-LME</td>
<td>1</td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>Commission</td>
<td>Supra-LME</td>
<td>1</td>
</tr>
<tr>
<td>Implementation</td>
<td>CPs</td>
<td>National</td>
<td>0</td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>Secretariat; CPs</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Data and information</td>
<td>CPs; Secretariat</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
</tbody>
</table>

Overall total and % completeness >> 9/21 = 43%
<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Names</td>
<td>Scale level(s)</td>
<td>Score</td>
</tr>
</tbody>
</table>
| Policy analysis and advice | IOTC Scientific Committee, sub-commissions, and working parties | Supra-LME | 3 | - BOBP-IGO is a partner in the World bank FAO ABNJ Project  
- BOBLME collaborates with IOTC primarily on capacity development / awareness / communication  
- Bangladesh and Myanmar are not members of IOTC  
- IOTC also considers neritic tunas in the region  
- There are probably trophic interactions between the oceanic tunas (large scale distribution) and small pelagics in the LME that require linkages in management |
| Policy decision-making | IOTC Commission                  | Supra-LME               | 1 | |
| Planning analysis and advice | IOTC Scientific Committee, sub-commissions, and working parties | Supra-LME | 3 | |
| Planning decision-making | IOTC Commission                  | Supra-LME               | 2 | |
| Implementation      | Countries                        | National                | 1 | |
| Review and evaluation | IOTC Scientific Committee        | Supra-LME               | 2 | |
| Data and information | IOTC Secretariat                 | Supra-LME               | 2 | |
| Overall total and % completeness >> | 14/21 = 67%                     |                         |             |
### Table 4d: Bay of Bengal LME – Transboundary arrangement for (a) pollution – LBS and MBS and (b) biodiversity - habitat degradation (reefs, mangroves and seagrasses)

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Names</strong></td>
<td><strong>Scale level(s)</strong></td>
<td><strong>Score</strong></td>
</tr>
<tr>
<td>Policy analysis and advice</td>
<td>SACEP Consultative Committee supported by 6 Subject Area Centres of Excellence</td>
<td>Sub- LME</td>
<td>3</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>SACEP Governing Council</td>
<td>Sub- LME</td>
<td>1</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>Consultative Committee supported by 6 Subject Area Centres of Excellence</td>
<td>Sub- LME</td>
<td>3</td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>CPs</td>
<td>Sub- LME National</td>
<td>1</td>
</tr>
<tr>
<td>Implementation</td>
<td>CPs, Secretariat</td>
<td>Sub- LME</td>
<td>2</td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>Governing Council</td>
<td>Sub- LME</td>
<td>0</td>
</tr>
<tr>
<td>Data and information</td>
<td>CPs, Secretariat</td>
<td>Sub- LME</td>
<td>2</td>
</tr>
</tbody>
</table>

| Overall total and % completeness >> | 12/21 = 57% |

- SACEP is a formally constituted regional body. While, a Regional Seas Convention for the area has not yet been adopted, the South Asian Seas Action Plan (SASAP) was adopted in March 1995. SACEP is the SASAP secretariat. SASAP only covers countries on the western side of the BOB.
- Three countries on the eastern side of the BOB are covered by the COBSEA Regional Seas initiative, but COBSEA is more focussed in the South China Sea LME area.
Table 4e: Bay of Bengal LME – Transboundary arrangement for (a) pollution – LBS and MBS and (b) biodiversity - habitat degradation (reefs, mangroves and seagrasses)

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
</table>
| Policy analysis and advice | COBSEA Secretariat | 1 | PEMSEA  
• SACEP is a formally constituted regional body. While, a Regional Seas Convention for the area has not yet been adopted, the South Asian Seas Action Plan (SASAP) was adopted in March 1995. SACEP is the SASAP secretariat. SASAP only covers countries on the western side of the BOB.  
• Three countries on the eastern side of the BOB are covered by the COBSEA Regional Seas initiative, but COBSEA is more focussed in the South China Sea LME area  
• SAARC’s focus is mainly on ICZM (Maldives Unit)  
• The scores are the average of SACEP and COBSEA |
| Policy decision-making | COBSEA | 1 | |
| Planning analysis and advice | COBSEA Secretariat, CPs | 1 | |
| Planning decision-making | CPs | 1 | |
| Implementation | CPs | 2 | |
| Review and evaluation | COBSEA | 0 | |
| Data and information | CPs | 2 | |
| Overall total and % completeness >> | 8/21 = 38% | | |
Table 4f: Bay of Bengal LME – Transboundary arrangement for biodiversity - specific (sea turtles)

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Names</td>
<td>Scale level(s)</td>
<td>Score</td>
</tr>
<tr>
<td>Policy analysis and advice</td>
<td>IOSEA – sea turtle MOU CPs Secretariat Advisory Committee</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>IOSEA – sea turtle MOU Meeting of Parties</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>IOSEA – sea turtle MOU CPs Secretariat Advisory Committee</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>IOSEA – sea turtle MOU Meeting of Parties</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Implementation</td>
<td>IOSEA – sea turtle MOU CPs</td>
<td>National</td>
<td>0</td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>IOSEA – sea turtle MOU Secretariat</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Data and information</td>
<td>IOSEA – sea turtle MOU CPs</td>
<td>National</td>
<td>1</td>
</tr>
</tbody>
</table>

Overall total and % completeness >> 11/21 = 52%

- This is an MOU under CMS
Table 4g: Bay of Bengal LME – Transboundary arrangement for biodiversity - specific (dugong)

<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Responsible organisation or body</th>
<th>Other key organisations</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Names</td>
<td>Scale level(s)</td>
<td>Score</td>
</tr>
<tr>
<td>Policy analysis and advice</td>
<td>CPs</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>CPs</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>CPs</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>CPs</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Implementation</td>
<td>CPs</td>
<td>Supra-LME National</td>
<td>0</td>
</tr>
<tr>
<td>Review and evaluation</td>
<td>Secretariat</td>
<td>Supra-LME</td>
<td>2</td>
</tr>
<tr>
<td>Data and information</td>
<td>CPs</td>
<td>National</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Bay of Bengal LME governance architecture - System summary

<table>
<thead>
<tr>
<th>Trans-boundary issue</th>
<th>Number of countries involved</th>
<th>Collective importance for countries involved</th>
<th>Completeness of governance arrangement % (category)</th>
<th>Priority for intervention to improve governance</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisheries - small pelagic resources, demersal finfish and invertebrates</td>
<td>7</td>
<td></td>
<td>52</td>
<td>BOBP-IGO. The fisheries arrangements are clearly defined but are largely oriented to cooperation not management. Relationships between BOB-IGO, APFIC and SEAFDEC, the major bodies, are not clear. Only APFIC has strong membership.</td>
<td></td>
</tr>
<tr>
<td>Fisheries - small pelagic resources, demersal finfish and invertebrates</td>
<td>7</td>
<td></td>
<td>43</td>
<td>APFIC</td>
<td></td>
</tr>
<tr>
<td>Fisheries - tuna</td>
<td>7</td>
<td></td>
<td>67</td>
<td>Well defined arrangement but not binding. Few BOBLME countries are members.</td>
<td></td>
</tr>
<tr>
<td>Pollution – LBS</td>
<td>7</td>
<td></td>
<td>57</td>
<td>These arrangements for environmental governance are weak and largely oriented towards cooperation. Membership in the strongest arrangement is only half the countries (western BOBOLME)</td>
<td></td>
</tr>
<tr>
<td>Pollution – MBS</td>
<td>7</td>
<td></td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollution – LBS</td>
<td>7</td>
<td></td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollution – MBS</td>
<td>7</td>
<td></td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity – habitat degradation</td>
<td>7</td>
<td></td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity – habitat degradation</td>
<td>7</td>
<td></td>
<td>38</td>
<td>These applicable arrangements are as follows: • Pollution LBS &amp; MBS – SACEP, COBSEA • Biodiversity (habitat degradation) – SACEP, COBSEA</td>
<td></td>
</tr>
<tr>
<td>Biodiversity – specific (sea turtles)</td>
<td>7</td>
<td></td>
<td>52</td>
<td>CMS IOSEA turtle MOU</td>
<td></td>
</tr>
<tr>
<td>Biodiversity – specific (dugong)</td>
<td>7</td>
<td></td>
<td>52</td>
<td>CMS MOU</td>
<td></td>
</tr>
</tbody>
</table>

Table notes:
This table provides an overview of all the arrangements in the system and their status.

Issues: There is the question of how far down in detail these should go. This can be a matter of choice, and part of the flexibility of the system, but it should ideally be to the level where the transboundary issue requires a separate
arrangement for management. To use a fishery example, individual species or groups of species may each require their own assessment and measures, but may all be handled in one institutional arrangement. However, for geopolitical reasons, some species or groups of species may require separate processes and should be treated as separate issues needing separate arrangements. Ideally, these issues should be identified and quantified in a TDA. If not, experts knowledgeable about the system may have to identify them.

Number of countries involved: Indicates how many of the total number of countries are involved in the particular issue.

Collective importance for countries involved: This should be based on the TDA but may have to be based on expert judgement, or other sources of regional information. It is to be scored from 0-3.

Completeness of governance arrangement% (category): The percentage given in this column is derived from the completeness scores allocated in the arrangement specific Table. This score will then be reallocated into a category where none = 3, low = 2, medium = 1 and high = 0) for input into the Priority for intervention column. The reason for reversing the score is that the higher the completeness, the less the need for intervention.

Priority for intervention to improve governance: This priority would be calculated as the product of the ’collective priority for countries involved for the issue and completeness category. It can range from 0-9.

Observations: This provides the opportunity for brief comments that may help the user interpret the information provided on the summary page, but is not intended to be a substitute for annotation.

System architecture completeness: Average for issues.

The individual integration scores to be entered in Table 7 can range from zero where each of the two arrangements has a totally separate set of responsible bodies to one where both arrangements share the same responsible bodies at that stage. It is generally expected that responsibility at any stage will lie with one primary agency; however there may be situations where there is more than one agency. In such cases, it must be decided whether to give a score between 0 and 1 based on the number of agencies that are shared or simply to give a 1 if any agency is shared. For transboundary systems, when responsibility for the policy cycle stage is at the national level, the score will be 0. Even where the responsible agency is the counterpart in each country (e.g. the Ministry of Environment) this cannot be considered to be a common agency.

The coastal fisheries arrangement (Table 4a) is clearly defined but is largely oriented to cooperation not management. BOBP-IGO which appears to be the lead organisation for fisheries only has membership of four countries. Only APFIC has strong membership. It appears that all BOBLME countries could be members in these organisations and SEAFDEC. Therefore it appears that the potential is there to develop transboundary arrangements for fisheries that cover the issues and the BOBLME area well. Relationships between BOB-IGO, APFIC and SEAFDEC, the major bodies in this arrangement, are not clear from their documentation.

The IOTC represents a well-defined policy process for highly migratory fish species (Table 4b). It overlaps the Bay of Bengal LME entirely and all but two countries are members. The low scores in decision-making are because decisions are not binding, and in implementation because it is purely at the national level.

The arrangements for environmental governance (habitats, LBS) are weak from a governance perspective as they are largely oriented towards cooperation (Tables 4c, d). Coverage of the Bay of Bengal by the relevant organisations appears to be split into eastern and western groupings. Membership in the strongest arrangement, the western grouping is only half the countries. The Eastern grouping (COBSEA) is more focused in the South East Asia area. Myanmar is not a member of either
grouping, but is in the COBSEA area. Roles and relationships among various organisations involved in these issues are not clear. This is likely to make it difficult for the many non-governmental organisations with an interest in these issues to engage in governance processes.

Assess transboundary integration of arrangements within systems

The assessment of transboundary integration is based on the extent to which issue specific arrangements in the LME share a responsible body at various policy cycle stages. This was determined directly by extracting the information from the arrangement summaries (Tables 4a-g) and summarizing it in Table 6 to facilitate comparison. The integration scores for each pair of issues at each policy cycle stage are then determined and entered into Table 7, from which average scores per issue pair or per policy cycle stage can be calculated.

---

1 The individual integration scores to be entered in Table 7 can range from zero where each of the two arrangements has a totally separate set of responsible bodies to one where both arrangements share the same responsible bodies at that stage. It is generally expected that responsibility at any stage will lie with one primary agency; however there may be situations where there is more than one agency. In such cases, it must be decided whether to give a score between 0 and 1 based on the number of agencies that are shared or simply to give a 1 if any agency is shared. For transboundary systems, when responsibility for the policy cycle stage is at the national level, the score will be 0. Even where the responsible agency is the counterpart in each country (e.g. the Ministry of Environment) this cannot be considered to be a common agency.
<table>
<thead>
<tr>
<th>Policy cycle stage</th>
<th>Fisheries - small pelagic resources, demersal finfish and invertebrates</th>
<th>Fisheries - small pelagic resources, demersal finfish and invertebrates</th>
<th>Fisheries - tuna</th>
<th>Pollution – LBS and MBS Biodiversity - habitat degradation</th>
<th>Pollution – LBS and MBS Biodiversity - habitat degradation</th>
<th>Biodiversity - specific (sea turtles)</th>
<th>Biodiversity - specific (dugongs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy analysis and advice</td>
<td>BOB IGO Technical Advisory Committee</td>
<td>APFIC Secretariat</td>
<td>IOTC Scientific Committee, sub-commissions, and working parties</td>
<td>SACEP Consultative Committee + 6 Subject Area Centres of Excellence</td>
<td>COBSEA Secretariat</td>
<td>IOSEA – sea turtle MOU CPs Secretariat Advisory Committee</td>
<td>MOU CPs</td>
</tr>
<tr>
<td>Policy decision-making</td>
<td>BOB IGO Governing Council</td>
<td>APFIC Commission</td>
<td>IOTC Commission</td>
<td>SACEP Governing Council</td>
<td>COBSEA</td>
<td>IOSEA – sea turtle MOU Meeting of Parties</td>
<td>MOU CPs</td>
</tr>
<tr>
<td>Planning analysis and advice</td>
<td>Technical Advisory Committee</td>
<td>APFIC Secretariat, SEAFDEC, World Fish Centre via RPOA</td>
<td>IOTC Scientific Committee, sub-commissions, and working parties</td>
<td>Consultative Committee supported by 6 Subject Area Centres of Excellence</td>
<td>COBSEA Secretariat, CPs</td>
<td>IOSEA – sea turtle MOU CPs Secretariat Advisory Committee</td>
<td>MOU CPs</td>
</tr>
<tr>
<td>Planning decision-making</td>
<td>BOB IGO Governing Council</td>
<td>Commission</td>
<td>IOTC Commission</td>
<td>CPs</td>
<td>CPs</td>
<td>IOSEA – sea turtle MOU Meeting of Parties</td>
<td>MOU CPs</td>
</tr>
<tr>
<td>Implementation</td>
<td>Countries Assistance from APFIC</td>
<td>CPs</td>
<td>CPs, Secretariat</td>
<td>CPs</td>
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Table 7. Assessment of integration among arrangements. Each policy cycle stage is given a score of 0 or 1 for each combination of arrangements depending on whether there is a common agency or not.

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<tr>
<th>Common agency between arrangements</th>
<th>Policy analysis and advice</th>
<th>Policy decision-making</th>
<th>Planning analysis and advice</th>
<th>Planning decision-making</th>
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Table 7 provides insight into the stages at which integration is highest, as well as the arrangements which might be clustered. In this system, integration across the arrangements for the seven issues is 0.1 out of a possible 1.

**Conclusions**

In this LME, there does not appear to be any agency that is formally mandated to provide transboundary integration for the issues dealt with above. The BOBLME Project may be filling this role in an unofficial capacity. It also supports integration by facilitating and catalyzing cooperative activities and capacity development.

The Level One governance architecture assessment focuses on identifying an overall scoring for the LME based on three governance indicators:

(i) the average level of completeness of all formal arrangements in place for addressing key transboundary issues. Completeness indicator ranges from 0-100%.

(ii) the level of integration across different arrangements addressing the key transboundary issues. Integration indicator ranges from 0-1.

(iii) the average level of engagement by countries in the LME for each of the agreements in place for addressing key transboundary issues. Engagement indicator ranges from 0-100%.

In order to link the assessed scores for the three indicators to a perceived level of risk, a five-point score was developed as provided below:

<table>
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<tr>
<th>Risk Rank</th>
<th>Completeness Range</th>
<th>Integration Range</th>
<th>Engagement Range</th>
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<tr>
<td>Very Low</td>
<td>80-100%</td>
<td>0.8-1.0</td>
<td>80-100%</td>
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<td>Low</td>
<td>60-80%</td>
<td>0.6-0.8</td>
<td>60-80%</td>
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</table>
For the Bay of Bengal LME, the following overall scores for the assessment of governance architecture and corresponding ranking of risk were:

<table>
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<tr>
<th>Bay of Bengal LME</th>
<th>Completeness</th>
<th>Integration</th>
<th>Engagement</th>
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<td></td>
<td>50%</td>
<td>0.1</td>
<td>87%</td>
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</table>

Acknowledgements

Thanks to Dr Rudi Hermes for reviewing the assessment and providing many useful suggestions.

References

BOBLME.2012a. Transboundary Diagnostic Analysis (TDA) for the Bay of Bengal Large MarineEcosystem (BOBLME) - Volume 1.

BOBLME.2012b. Transboundary Diagnostic Analysis (TDA) for the Bay of Bengal Large MarineEcosystem (BOBLME) - Volume 2.


Annex 1: Scoring criteria

Advisory mechanism (policy and management)
0 = No transboundary science policy mechanism, e.g. COP self advises
1 = Science-policy interface mechanism unclear - irregular, unsupported by formal documentation
2 = Science-policy interface not specified in the agreement, but identifiable as a regular process
3 = Science-policy interface clearly specified in the agreement\(^\text{ii}\)

Decision-making (policy and management):
0 = No decision-making mechanism
1 = Decisions are recommendations to countries
2 = Decisions are binding with the possibility for countries to opt out of complying
3 = Decisions are binding

Implementation:
0 = Countries alone
1 = Countries supported by secretariat
2 = Countries and regional/global level support
3 = Implemented through a coordinated regional/global mechanism

Review:
0 = No review mechanism
1 = Countries review and self-report
2 = Agreed review of implementation at regime level
3 = Agreed compliance mechanism with repercussions

Data and information:
0 = No DI mechanism
1 = Countries provide DI which is used as is
2 = DI centrally coordinated, reviewed and shared
3 = DI centrally managed and shared

\(^\text{ii}\) This can be internal or external
Appendix 4.3: Presentation on CLME network analysis
Appendix 4.3: Presentation on CLME network analysis

CLME Networking

Interactions are key...
Interactions among organisations in the Wider Caribbean Region were explored with a questionnaire
- Organisations were asked which other organisations they interacted with
  - What issues
  - What policy cycle stage
- Used to examine networks for each issue
  - Data and information networks
  - Advisory and decision making networks

CLME Networking

Networks were examined for gaps and for key actors

BOBLME network analysis?

- Based on formal interactions
- Is this an activity that should be pursued in greater depth?
Appendix 5.1: Presentation on national-regional interfaces
Appendix 5.1: Presentation on national-regional interfaces

The framework as a tool for assessment and intervention

Focused on:
- Visioning and principles at the level of the whole system.
- The gaps, overlaps and networking among regional organizations;
- Architecture of specific arrangements and associated policy processes;
- The national-regional interface;

What interests us

Regional organisations and projects all hold meetings at which genuinely national representation is expected, but
- (How) is genuine national representation generated?
- Who are the players and what are the processes?
- How resilient are national representation routines?
- How do patterns of preparation and feedback vary?
- What can we learn from research to guide improvements?
Methods

**Preliminary assessment:** Telephone survey solicited 3 expert opinions per country (39 countries) on national delegates' preparatory and feedback communication regarding meetings of intergovernmental agencies and/or regional projects dealing with marine matters.

**Detailed case studies:** Belize, BVI, Dominican Republic, Guatemala, Grenada, St. Lucia, Jamaica, Colombia visits.

Face-to-face interviews with a selection of government, NGOs and private sector agencies.

Questions regarding preparation and feedback relevant to the two most recent meetings of the UNEP IGM and the CLME project or other relevant regional meeting of a similar stature.
Preliminary assessment of communication arrangements

Phase 2 – 8 study sites

Case studies
- Prior Knowledge
- Receipt of Invitation
- Decision to attend
- Selection of representation
- Preparation
- Attendance
- Reporting and follow-up
- Perception of good governance
Some findings...

- Sectoral/fragmented approach reduces effectiveness
- Ad hoc (in)formal committees hold infrequent meetings
- Multi-stakeholder arrangements recognized as promising
- Inadequate civil society/private sector representation
- Narrow forum agendas restrict input into marine meetings
- Post-meeting feedback and communication is irregular
- Weak NGOs and CBOs make communication challenging
- Inappropriate representative = ineffective representation
- Informal relations/social networks key for communication
- Patterns of interaction are typically dynamic and complex

Exploring national-regional interfaces in BoBLME
Appendix 5.2: National-regional interface questionnaire – Government

Bay of Bengal LME Country Survey on National-Regional Interfaces

Government Departments

Introductory script (read out loud to respondent)

Good morning/afternoon. As a preliminary exercise to understand the level and nature of communication between national and regional level organizations in the Bay of Bengal, the Bay of Bengal LME Project would appreciate your response to the following short questionnaire. The study asks questions about arrangements for communicating before and after meetings of intergovernmental agencies and/or regional projects dealing with marine matters. The interview may take about 30 minutes. Interview data will be kept confidential, and results will not be identified with specific individuals. You will be provided with all of the research findings. Benefits of the study to you may be the opportunity to (1) enhance decision-making processes in which you are involved and (2) to improve marine governance in the Bay of Bengal LME.

Respondent identity

Respondent ID# ___/___/interview number (Researcher to complete)

Part A: Preliminary Communications Data

1) In which category is your agency or organization?
   a) Foreign affairs
   b) Environment
   c) Fisheries/coastal
   d) Other _______________________________________________________

2) How do you communicate within your organization about external meetings such as this one?
   a) Formal
   b) Informal
   c) None used
      i) If there is no process used at all now,
         (1) Why not?
            ____________________________________________________________
         (2) Do you see the need for one? [ ] Yes [ ] No
      ii) Was there one in the past,
         (1) Past – was in place when?____________________________________
         Or, is there one planned
         (2) Planned – starting when?____________________________________

3) Can you provide more information on the past/planned process?
4) When does (did/will) internal communication usually take place?
   a) Pre-meeting preparation
   b) Post-meeting feedback
   c) Both pre- and post-meeting

5) How would you describe the quality of documentation on the process?
   a) Good (well documented, easily available)
   b) Some (partly documented, not easily found)
   c) None (people know, but nothing in writing)

6) Do/did/will you communicate with any other organizations about these meetings? At what level?
   a) regional and international
      i) Examples____________________________________________________________
   b) national governmental
      i) Examples___________________________________________________________
   c) national and local civil society, private sector
      i) Examples___________________________________________________________
   d) all of the above
      i) Examples ...*Write in examples next to the appropriate level above*

7) How would you describe the main means of sharing information with these organizations?
   a) personal direct (e.g. face-to-face meeting)
   b) personal indirect (e.g. phone, fax, email)
   c) impersonal (reading documents, web site)

8) Typically, how frequent is (was/will be) do you communicate with them, to these meetings?
   a) Regular (for all or most meetings)
   b) Occasional (for some meetings)
   c) Seldom (for very few meetings)

9) How would you describe the quality of documentation on the process?
   a) Good (well documented, easily available)
   b) Some (partly documented, not easily found)
   c) None (people know, but nothing in writing)
   d) Not a process, it was ad hoc on meeting related issues

INTERVIEW GUIDE *(Government/para-statal)*

Prior knowledge of meeting
1) Is the [NAMED MEETING] of interest to your organization and/or state?
2) Can you identify another regional marine related meeting that may be of Interest?
3) Why are they of interest? How is it decided when or what meeting to attend/is of interest?
4) Are these meetings planned for and/or on calendar for attendance?
5) Are these meetings budgeted for?
Receipt of Invitation

6) To who usually are the invitations for these meetings addressed?
7) Is your organization responsible/point of contact/focal point for these meetings? Who is? If you are do you share the invitation or inform other organizations about the meeting? If so who?

Decision to attend

8) Is the meeting a priority? Why?
9) What criteria are used to determine a decision to attend? (budget, capacity, funding, networking, benefits, etc)
10) What's the main purpose for attending?
11) Have you attended at least the last two meetings in the past?

Selection of Rep

12) How are representatives selected?
13) What level of expertise, knowledge or what other factor determines selection of representation?
14) What is usual size and composition of delegation to these meetings?
15) What level of decision making does the rep or delegation has?

Preparation

16) Are you or any other agency responsible for ensuring representatives were adequately prepared for these meetings?
17) Was there any established formal or informal guideline(s) to follow in pre-meeting preparation? No/Why Yes/describe
18) Who/what other agencies/stakeholders if any participated in the preparation process?
19) When, where and how did this happen?
20) How is this process linked to any previous meetings?

Attendance

22) What was the level of contributions at last meeting attended?
23) Were you allowed authority for executing instructions/making decisions etc?
24) Did you at any time need to refer back to anyone not at the meeting for further consultation/instructions during the meeting?
25) Was there opportunity for networking? How were you engaged and with whom?
26) Did collect relevant meeting documents/reports?
27) Do you take personal notes and/or dependent upon host for proceedings etc?

Reporting

28) Are you expected to prepare and present a report? To whom?
29) What type of report is requested?
30) Urgency of the report?
31) Were documents or self generated notes useful in preparing report?
32) Where are these documents? Can you provide copies?
33) What were the basic content of the report?
34) Can you provide a copy?
35) What actions are taken after reporting?
36) Is there any use for this report in the future? Please explain
37) Is the report disseminated? If yes in what way, to whom, where and why?
38) Is communication pathways relevant to respective audience considered?

Follow-up

39) Any guideline for follow-up process?
40) Is it linked to reporting?
41) Who is responsible?
42) What monitoring and evaluation methodology is used to measure the follow-up process?
43) When and how do preparations for the next meeting take place?

General questions on good governance

- Are you satisfied with the process discussed above? - Transparency, effectiveness, efficiency etc.
- Any improvements?
- What is the impact or outcome to the state or Goal? refer back to their purpose and interest in the meeting.
Appendix 5:3: National-regional interface questionnaire – NGO

Bay of Bengal Country Survey on National-Regional Interfaces

Non-governmental stakeholders

Introductory script (read out loud to respondent)

Good morning/afternoon. As a preliminary exercise to understand the level and nature of communication between national and regional level organizations in the Bay of Bengal, the Bay of Bengal LME Project would appreciate your response to the following short questionnaire. The study asks questions about arrangements for communicating before and after meetings of intergovernmental agencies and/or regional projects dealing with marine matters. The interview may take about 30 minutes. Interview data will be kept confidential, and results will not be identified with specific individuals. You will be provided with all of the research findings. Benefits of the study to you may be the opportunity to (1) enhance decision-making processes in which you are involved and (2) to improve marine governance in the Bay of Bengal LME.

Respondent identity

Respondent ID# __/__/ interview number (Researcher to complete)

Part A: Preliminary Communications Data

10) In which category is your agency or organization?
   a) Foreign affairs
   b) Environment
   c) Fisheries/coastal
   d) Other _______________________________________________________

11) How do you communicate within your organization about external meetings such as this one?
   a) Formal
   b) Informal
   c) None used
      i) If there is no process used at all now,
         (1) Why not?
         __________________________________________________________________
         (2) Do you see the need for one?  [ ] Yes  [ ] No
      ii) Was there one in the past,
          (1) Past – was in place when?__________________________________________
          Or, is there one planned
12) Can you provide more information on the past/planned process?
   (1) Yes – please continue to the next question.
   (2) No – please proceed to Part B below

13) When does (did/will) internal communication **usually** take place?
   a) Pre-meeting preparation
   b) Post-meeting feedback
   c) Both pre- and post-meeting

14) How would you describe the quality of documentation on the process?
   a) Good (well documented, easily available)
   b) Some (partly documented, not easily found)
   c) None (people know, but nothing in writing)

15) Do/did/will you communicate with any other organizations about these meetings? At what level?
   a) regional and international
      i) Examples____________________________________________________________
   b) national governmental
      i) Examples____________________________________________________________
   c) national and local civil society, private sector
      i) Examples____________________________________________________________
   d) all of the above
      i) Examples **Write in examples next to the appropriate level above**

16) How would you describe the **main** means of sharing information with these organizations?
   a) personal direct (e.g. face-to-face meeting)
   b) personal indirect (e.g. phone, fax, email)
   c) impersonal (reading documents, web site)

17) Typically, how frequent is (was/will be) do you communicate with them, to these meetings?
   a) Regular(for all or most meetings)
   b) Occasional (for some meetings)
   c) Seldom (for very few meetings)

18) How would you describe the quality of documentation on the process?
   a) Good (well documented, easily available)
   b) Some (partly documented, not easily found)
   c) None (people know, but nothing in writing)
   d) Not a process, it was ad hoc on meeting related issues
Interview GUIDE Civil society/Private Sector

Prior knowledge of meetings

1. Are you aware of any of the following regional marine related meetings? [NAMED MEETING]?
2. Were you aware of any existing national communication process that takes place prior to these meetings?
3. Who are responsible/leads the national level communication process?
4. Are these meetings of interest to you/organization? Why? How?

Receipt of Invitation

5. Was any information regarding these meetings communicated/shared with you by the responsible organization?
6. Were you invited to participate in a pre-meeting preparation process?
7. From whom? What process/meeting? When?
8. What was the purpose of the meeting

Decision to attend

9. Was the meeting a priority for you/organization and how important to your work or the state in your opinion?
10. What criteria guided/determined your participation? (issue, mandate, other)
11. Did you attend any previous such process/meetings? Which meeting and when did you participate?

Selection of Rep

12. Who represented your organization at these meetings?
13. Do you have a selection process? Do you consult with your membership? Who?
14. What level of influence does your organization have within the process? Explain
15. Who else do you consider important or should be part of the process? Why?

Preparation

16. How did you participate?
17. What was the extent of your participation/your contributions?
19. Do you collect documentation from these meetings
20. What documentation (helps with ground truth whether government disseminates reports docs etc to stakeholders)

Follow-up

21. Was there any follow-up with you after the delegates or rep returned from the meeting?
22. Were you informed of the outcome(s) of the meeting?
23. Who? What did they inform you about? How was this done? When?
24. Were reports or other documentation provided to you and by whom? What docs?
25. Can you provide any of these? If you didn’t receive, did you seek information? From Whom? When? How?
26. Were you successful?
27. Did you monitor and evaluate the implementation of recommendations etc?

General good governance questions

28. What’s your opinion of the process we discussed?
29. Benefit/importance of having such a process?
30. Is it a useful/effective process?
31. Do you consider the process transparent?
32. How can it be improved?
33. Who should be responsible? Why?
Appendix 5.4: Presentation on national-regional interfaces – Interview and reporting activity
Appendix 5.4: Presentation on national-regional interfaces – Interview and reporting activity

Two parts
• Process
• Feedback

Process

- Break into seven groups comprising representatives from one of the BOBLME member countries (to be interviewed) and one or two IGOs/NGOs (to be the interviewer)
- Conduct the interviews using the questionnaires provided. Please record responses directly on the questionnaire

Country summary for feedback and discussion

- Based on the response to the questionnaire and collective experience of the representatives for each country, document on a flip chart answers to the following questions:
  1. Were you able to respond to the questionnaire at a depth you consider adequate or would you have to solicit input from others not at this workshop?
  2. What are your impressions regarding the presence of a regional-national mechanism in place in your country?
  3. Is there a process in place to prepare for regional-level meetings?
  4. Is there a process in place to report after attending regional-level meetings?
  5. Does the mechanism include stakeholders other than those in government agencies?
Appendix 6.1: Presentation on science-policy interfaces
Appendix 6.1: Presentation on science-policy interfaces

Science policy interfaces

“...the cross-cutting issue “Broken Bridges: Reconnecting Science and Policy” is the fourth most pressing one confronting the world today in efforts to achieve sustainable development.”

UNEP Foresight Process on Emerging Environmental Issues for the 21st century (UNEP 2012)

The framework as a tool for assessment and intervention

Interview investigation of science-policy interfaces in the Wider Caribbean Region

- Targeted decision makers and senior policy advisors
- Fisheries
- Environment
- Foreign Affairs
- Tourism
- 11 questions
- 20 countries and 4 regional organisations were surveyed, 73 interviews, 103 respondents
Interview investigation of science-policy interfaces in the Wider Caribbean Region

Introduction

Scenario

Questions

1. Describe a situation when marine science information was very useful in a regional policy meeting? What was it that made the science information so useful?

2. What are the main purposes for which you or delegations most often use regional marine science information in regional marine policy meetings? In what contexts do people demand it?

3. In terms of providing regional marine science information for policy, which regional organizations stand out as the most credible sources of information that is useful for decision-making? Why?

4. What, if anything, constrains the use of regional marine science information by you or delegations?

5. Some say national authorities (environment, tourism, fisheries etc.) do not or cannot readily share data and information to collaboratively develop regional marine science information. Comment?

6. What, if anything, are the differences between regional and international policy meetings in terms of demand for and use of regional marine science information? If there are differences, why is this?

8. What is the nature of marine science information that you have used to participate effectively?

Marine natural and social science info for regional policy meetings. (If information used is not listed, insert it in blank spaces below)

Marine industry contribution to GDP regionally / economic value
Marine industry employment / regional labor statistics
Marine boundaries / extent of exclusive Economic Zones
Marine organisation mandates / areas of agreed jurisdiction
Fisheries / catch statistics (e.g. landings, gear and fleets, seafood trade)
Ecosystem health (e.g. status of habitats, biodiversity, pollution)
Tourism (e.g. costs, earnings, visitors, environmental impacts)
Disaster risk reduction (e.g. impact costs, risk types, probability)

Frequency of use
1. no meetings
2. few meetings
3. some meetings
4. most meetings
5. all meetings

9. Looking ahead to the next five years, of the various types of regional marine science information that we have discussed, and any others that come to mind, what would be your top three (3) in terms of future overall value for decision-making at regional level? Rank (1-3)

10. Is any other aspect of getting marine science information into regional policy important to take into account in designing useful Wider Caribbean marine science-policy interfaces?

11. Is there anything that you would like to ask or recommend concerning the regional governance framework and the role of marine science information in governance in the Wider Caribbean?

THANK YOU FOR YOUR TIME AND INFORMATION
Key recommendations for science-policy interfaces in the Wider Caribbean Region

- Regional information systems using best practices re science and IT
- Sensitize key actors re the science-policy interfaces of the major policy processes
- Target general public re awareness on use of marine science
- Mechanisms for greater input from the general public (via civil society organisations)
- Scientific information from regional databases more available
- Investigate science-policy interface to determine strategic interventions for success
- Regional information system as a strategic direction in SAP
- Analysis of brokers in the science-policy interface at all stages of policy cycles and how they exercise power or influence
- Regional network analyses relating to the science-policy interface

Information formatting

<table>
<thead>
<tr>
<th>Information Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often required for reference and by older policymakers</td>
<td>Highly variable, no clear preference within or among sectors or countries</td>
</tr>
<tr>
<td>Disliked by many except science and financially trained people</td>
<td>Becoming more popular as easy to interpret if well designed</td>
</tr>
<tr>
<td>Uncommon, but getting popular for presentation</td>
<td>Often complex and difficult to interpret, but trends are key</td>
</tr>
<tr>
<td>Becoming more popular for some types of info, but still limited use</td>
<td></td>
</tr>
</tbody>
</table>

Responses to - any other considerations?

- Policy-makers must first buy into science
- Need culture of evidence-based policy
- Need public awareness of marine science
- Capacity-building by regional universities
- Easier access to information is the key
- Info must match scales of policy-making

Interview process

- Participants will interview each other
- After, we will have quick feedback on key questions
- Workshop interview results will be analysed and shared later
- Are more interviews needed?
Appendix 6.2: Policy-science interface interview guide - BOBLME

Fisheries, Pollution, Tourism, Biodiversity, Tourism, Other ___________________________ (Please circle one)

Decision-maker, senior advisor, mid-level advisor, junior advisor, NGO, IGO, other _________ (Please circle one)

Introduction

The Bay of Bengal Large Marine Ecosystem (BOBLME) Project is assisting eight countries in the Bay of Bengal to improve the management of their shared living marine resources through an ecosystem approach. To do this there needs to be regional level (not just national) science-policy interfacing for ocean governance. Hence there is the need for information to track the status and long-term trends in BOBLME fisheries, habitat degradation, pollution, etc. This would provide policy advisers and decision-makers with the science information needed to make the best informed marine resource governance decisions. To better understand how information is generated and used we will ask you to share your experience of using marine science information in regional policy-making meetings. You will not be identified with any particular data or statement in the report without your permission. Is there anything else that you would like to know for background?

Scenario

We would like you to share your knowledge based on the experiences of your country’s delegates who attend marine-oriented regional forums. Think of how they make use of marine science (natural and social) information on the Bay of Bengal (especially living marine resources and human use of resources) to form opinions, offer advice and make decisions at a regional level. This could be at regional meetings on fisheries, biodiversity and conservation, sustainable development, climate change, environment or tourism. Our focus is only on regional Bay of Bengal meetings aimed at reaching collective decisions on Bay of Bengal marine matters. These meetings may later contribute to global negotiations and policy decision-making, e.g. in the UN system. For example, think of your country delegation at a BOBIGO meeting, a SACEP meeting or meetings to prepare regional perspectives for upcoming SIDS or CBD sessions. Organizations that are involved in the region are IOTC, APFIC, COBSEA, SEAFDEC, PEMSEA, etc.

Questions

1. As in the scenario, can you describe a situation when marine science information was very useful in a regional policy meeting? What was it that made the science information so useful in that case?
2. What are the main purposes for which you or delegations most often use regional marine science information in regional marine policy meetings? In what types of contexts do people demand it?

3. In terms of providing regional marine science information for policy, which regional organizations stand out as the most credible sources of information that is useful for decision-making? Why?

4. What, if anything, constrains the use of regional marine science information by you or delegations?

5. Some say national authorities (environment, tourism, fisheries etc.) do not or cannot readily share data and information to collaboratively develop regional marine science information. Comment?
6. What, if anything, are the differences between regional and global policy meetings in terms of demand for and use of regional marine science information? If there are differences, why is this?

7. What is the nature of marine science information that you have used to participate effectively? For different types of information we are interested in frequency, format and importance in practice.

<table>
<thead>
<tr>
<th>Marine natural and social science info for regional policy meetings. [if information used is not listed, insert it in blank spaces below]</th>
<th>Frequency of use</th>
<th>Preferred format</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. no meetings</td>
<td>1. text/bullets</td>
</tr>
<tr>
<td></td>
<td>2. few meetings</td>
<td>2. table/matrix</td>
</tr>
<tr>
<td></td>
<td>3. some meetings</td>
<td>3. chart/graph</td>
</tr>
<tr>
<td></td>
<td>4. most meetings</td>
<td>4. mapped/GIS</td>
</tr>
<tr>
<td></td>
<td>5. all meetings</td>
<td>5. graphics/photos</td>
</tr>
</tbody>
</table>

a. Marine industry contribution to GDP regionally / economic value

b. Marine industry employment / regional labour statistics

c. Marine organisation mandates / areas of agreed jurisdiction

d. Climate change impacts (e.g. ecological, economic social)

e. Fisheries statistics (e.g. landings, gear and fleets, seafood trade)

f. Ecosystem health (e.g. status of habitats, biodiversity, pollution)

g. Tourism (e.g. costs, earnings, visitors, environmental impacts)

h. Disaster risk reduction (e.g. impact costs, risk types, probability)

i.

j.

k.
8. Looking ahead to the next five years, of the various types of regional marine science information that we have discussed, and any others that come to mind, what would be your top three (3) in terms of future overall value for decision-making at regional level?  

<table>
<thead>
<tr>
<th>Rank (1-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Is any other aspect of getting marine science information into regional policy important to take into account in designing useful Bay of Bengal marine science-policy interfaces?

10. Is there anything that you would like to recommend concerning the regional governance framework and the role of marine science information in governance in the Bay of Bengal?

THANK YOU FOR YOUR TIME AND INFORMATION
Appendix 6.3:
Presentation on practical application of the LME Governance Framework in the Caribbean

Building the LME Governance Framework in the Wider Caribbean Region in “Learning by doing” mode

Long-term goal
Fully-functional policy cycles at all appropriate levels with the appropriate vertical and lateral linkages.

Framework building
Can be approached incrementally with interventions specifically targeted at:
- Establishing or completing policy cycles
- Building or enhancing linkages

Bay of Bengal LME Project: Governance Assessment Workshop
October 28-30, Bangkok, Thailand

Identified targeted interventions for implementation

- Need for Caribbean countries to improve their input into the ICCAT policy cycle
  - providing the necessary data and information and analysis to demonstrate need for a more equitable allocation of the resources.
- Need for recognition by ICCAT that a competent regional fisheries management organization is available in the region
  - to assume the management of the regional coastal pelagics
- Need to establish complete policy cycles and linkages laterally and vertically at the local to national levels
  - Requirement for data and information at these levels as input into the RFMO
  - Understanding the significance of the fishery to each participating country, from both a recreational and capture fishery perspective
- Need to establish a regional level policy cycle
  - Mandate to make decisions that ensure the sustainability of the ecosystem goods and services for multiple marine sectors, including all aspects of fisheries.

Some conclusions

- Eastern Caribbean Tuna Fishery - extra-regional governance constraints should be included as part of the policy cycle for decision-making.
- Transboundary ocean governance involving multiple levels and subframeworks is an essential component in the Caribbean LME.
Appendix 7.1: Outline of the BOBLME governance workshop information brief

Background
  Key messages

Issues
  Principles ...

Recommendations
  What we need to pay attention to ...

Actions
  Policy makers
  Senior civil/public servants
  IGOs
  Civil society
Appendix 9.1: Workshop evaluation

Participants were asked to rate their experience of each of the following elements of the Workshop and add any comments they would like to make. Responses were on a scale of 1-4 where 1 is ‘strongly disagree’ and 4 is ‘strongly agree’. The following table shows the results as a percentage of total responses. There were 22 respondents.

<table>
<thead>
<tr>
<th>Q1. The Opening Session adequately set the context for the meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td>• A good opening session to introduce the BOBLME work and the objectives of the workshop.</td>
</tr>
<tr>
<td>• Adequate introduction and briefing to ‘set the scene’ for the workshop flow and context.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q2. The Big Picture Session—Introduction to LME Governance Framework and CLME approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Was clear and well presented</td>
</tr>
<tr>
<td>b. The table discussion regarding relevance to BOBLME were engaging and useful to me</td>
</tr>
</tbody>
</table>

| Comments:                                                                                           |
| • Governance is the key to good implementation.                                                   |
| • The presentations were clear and discussions scoped greater details regarding the subject of focus. |

<table>
<thead>
<tr>
<th>Q3. Principles Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The information was clear and well presented</td>
</tr>
</tbody>
</table>
b. The dot voting was engaging and useful to my work

Comments:
• Principles should be followed based on priority and depending on mandate.
• Session very informative with clear, illustrative examples on the subject discussed.

Q4. Transboundary Governance Arrangements in BOBLME Session
a. The TWAP preliminary BOBLME assessment was clear and well presented

b. The ranking of issues was a useful exercise

c. The policy cycle exercise was relevant and useful

Comments:
• That is a good way to find out whether the programme is working.

Q5. National-Regional Interfaces Session
a. The questionnaire interviews were clear and informative
b. The plenary country feedback session was interesting

Comments:

• That was a very difficult interface to tackle as national implementation does not keep up to the regional goals.

6. Science Policy Interfaces Session
a. The assessment approach was clear and well presented

b. The interviews were clear and relevant

Comments:

• Need to follow in all countries.

Q7. Planning Post-Workshop Activities Session
a. The proposed post-workshop activities are comprehensive and important for BOB governance

Comments:

• Good governance is needed for BOBLME success.

Q8. The workshop objectives were achieved
a. Sharing the approach to governance in the Caribbean LME Project
**b. Determining aspects of the CLME approach that are relevant for BOBLME**

**c. Exploring future medium and long-term needs for governance assessment**

<table>
<thead>
<tr>
<th>Percent</th>
<th>Strongly Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

**Comments:**
- The CLME experience was a good learning exercise.

**Q9. Is the subject area of this workshop one that you would like to continue to be involved in? Yes or no?**

All yes

**Q9. What did you like best about this workshop?**
- Good facilitation, good colleagues, ‘governance’ is not really my subject area but it is very important and it was useful to hear about the CLME perspective and the approaches
- The workshop was conducted in a very open and clear manner. The presentations were appropriate and comprehensive
- The subject of ‘governance’ is not one that could be easily addressed especially considering the areas/topics covered which were more than one i.e. fisheries, pollution, etc. This workshop addressed it very well! Well done
- Engagement of participants and good facilitation. Case of CLME was useful to grasp issues.
- I really enjoyed the group work session
- Interactive, active participation (2)
- Activities, discussion session (2)
- Sharing information and additional knowledge.
- Caribbean sessions
- The output of CLME in detail
- Concepts and comparing structure with CLME
- Governance of the fishing industry
- The big picture session.
- Principles session and sharing information and experience.
- National regional interfaces session.
- National regional interfaces session and principles session.
- Sticky board and governance, institution identification.
- Sticking to the objective

**Q10. What did you like least about this workshop?**
- Should be more interactive
- Too little representation from environmental sector.
- All relevant stakeholders were not present.
- Should not be limited to only the Caribbean.
- Planning post workshop activities (2).
- National regional interfaces session.
- Too much elaboration in some presentations.
- Need to be more stimulating and inspiring exchange to keep energy up.
- Nothing (2)

**Q11. Any general remarks or suggestions you would like to make?**
- Good overall (3)
- It’s enough.
- Keep continuing the good job.
- Thanks for the good workshop!
- It was a useful three days.
- Compare the LME Governance with other ecosystem governance i.e. forest, mangroves.
- This workshop is very important for the younger generation. Therefore it is necessary to conduct other workshops. Our future in fisheries is in the young generation’s hands.
- Fantastic workshop especially for the young generation.
- Overall, very good! Made us realise the gravity of the tasks ahead to make governance work in this region.
- I have learned international experience.
- We have learned good practice from CLME.
- To have subsequent workshops/capacity building on the subject.
Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand are working together through the Bay of Bengal Large Marine Ecosystem (BOBLME) Project to lay the foundations for a coordinated programme of action designed to better the lives of the coastal populations through improved regional management of the Bay of Bengal environment and its fisheries.

The Food and Agriculture Organization (FAO) is the implementing agency for the BOBLME Project.

The Project is funded principally by the Global Environment Facility (GEF), Norway, the Swedish International Development Cooperation Agency, the FAO, and the National Oceanic and Atmospheric Administration of the USA.

For more information, please visit www.boblme.org