

# Governance for Caribbean Living Marine Resources: Seeking a Path

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## ABSTRACT

The need for governance at geographical scales that match the major biogeophysical processes in the oceans demands regional approaches that usually encompass the waters of many countries. The geopolitical complexity of the Gulf and Caribbean region is such that regional governance appears to be more challenging here than in most other regions. Furthermore, the slate is far from clean as many organizations at regional and sub-regional levels are already engaged in most aspects of marine resource management, sometimes in collaboration, sometimes in competition and often in relative isolation. Likewise, at national and local levels there is a host of government and non-governmental organizations with diverse aspirations and perspectives. The challenge then is to develop a regional approach that: recognizes the existence of this diversity and works with it, that facilitates involvement at all levels, and that allows for different rates of uptake in different parts of the system. Development of the Caribbean Large Marine Ecosystem Project (LME) has forced regional partners to reflect on the Caribbean situation. It has led to the formulation of the LME Governance Framework. This framework, which departs somewhat from the conventional LME approach, appears to have the potential to meet the above challenge. It defines the relative roles of scientists, decision-makers and implementers at various levels and provides a basis for incremental implementation. There is still much need for operational development and buy-in. The question is, 'who will be in charge of the whole thing? Does anyone have to be?'

KEY WORDS: Governance, Caribbean, network, LME, fisheries

## Gobernabilidad de los Recursos Marinos Vivos del Caribe: Buscando un Camino

La necesidad de gobernabilidad a niveles geográficos que corresponda con los mayores procesos biogeofísicos dentro de los océanos demanda enfoques regionales que usualmente engloba las aguas de varios países. La complejidad geopolítica de la región del Caribe es tal que gobernabilidad a nivel regional parece ser aquí un reto mucho mayor que en la mayoría de las otras regiones. Mas aun, la barra esta lejos de estar clara ya que muchas de las organizaciones a niveles regionales y subregionales ya se encuentran comprometidos en diversos aspectos de manejo de recursos marinos, algunas veces en colaboración, otras compitiendo y muy seguido en relativo aislamiento. Igualmente, a niveles nacionales y locales existe una gama de organizaciones gubernamentales y no gubernamentales con diferentes aspiraciones y perspectivas. El reto entonces es desarrollar un enfoque regional que: reconozca la existencia de esta diversidad y trabaje con ella; que facilite el involucramiento en todos los niveles; y que permita diferentes grados de comprensión en distintas partes del sistema. El desarrollo del Proyecto del Gran Ecosistema Marino (GEM) del Caribe ha forzado a los socios regionales reflexionar sobre la situación del Caribe. Ha llevado a la formulación del Marco de Gobernabilidad del GEM. Este marco, que se aparta en parte del enfoque convencional del GEM, aparenta tener el potencial para alcanzar los retos arriba descritos. Define los roles relativos de científicos, tomadores de decisiones e implementadores en varios niveles y provee una base para una implementación incremental. Aun se hace necesario un desarrollo operacional y asimilación. La pregunta es, 'quien se hará responsable de todo? Alguien debe serlo?'

PALABRAS CLAVES: Gobernabilidad, Caribe, redes, GEM, pesca

## INTRODUCTION

We were asked by the organizers to share our ideas on where the GCFI region should be headed with regard to putting fisheries on a sustainable footing. The ideas that we would like to share are inseparable from the process of developing the Caribbean Large Marine Ecosystem (CLME) Project that has been taking place over the past 10 years, and which intensified in the past 18 months culminating in the acceptance of the proposal for funding by The Global Environment Facility (GEF). In that process many people have made inputs, and it is the context of that project that we hope to test some of these ideas over the next nine years. Consequently, we will present them in that context. We will look at:

- i) Aspects of regional governance in the Gulf and Caribbean,
- ii) Overall objective of the CLME Project,
- iii) Conceptual basis for the CLME Project, and
- iv) Project components

What GCFI can do to help achieve these objectives?

We will not dwell on the status of living marine resources (LMR) in the region, fisheries and coral reefs, these are better known to you than any other group, nor will we dwell on the threats and issues that we face, these are also well known to you. Our focus will be on some ideas about how we might address these problems.

The Gulf and Caribbean Region, also referred to as the Wider Caribbean extends from Brazil to Cape Hatteras and includes four LMEs (Figure 1). The Gulf of Mexico has its own LME project and the Southeastern Continental Shelf LME is entirely within US jurisdiction. The CLME Project addresses the other two LMEs: the Caribbean and North Brazil Current.



Figure 1. The Large Marine Ecosystems of the Wider Caribbean

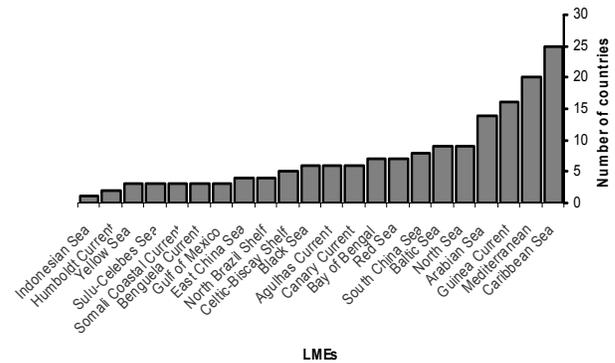


Figure 2. The numbers of countries in selected LMEs

**GEOPOLITICAL COMPLEXITY OF THE CARIBBEAN REGION**

The Wider Caribbean is the most geographically and politically highly diverse and complex region in the world, for example:

- i) Geopolitical – 45 state entities,
- ii) Cultural – ethnicity, language,
- iii) Size – smallest to largest, and
- iv) Development – poorest to most wealthy

The Caribbean is the LME with the highest number of countries, only three others have more than 10 (Figure 2). If we include the territories of France, The Netherlands, United States and United Kingdom as separate states in terms of sea space and LMR governance then we have almost double the number of the next largest LME. Figure 3 provides a glimpse of what this means in terms of the numbers of maritime boundaries we have to deal with (Figure 3). Another aspect is the number of small island developing states (SIDS) of which there are 16 in the CLME area, with only two each in the Mediterranean Sea, Arabian Sea and Guinea Current LMEs, the next highest in this regard.

What exactly this means with regard to governance is not entirely clear and is something that we need to better understand. This requires research that goes well beyond the realm of marine science. At this time there is a great deal of work going on with regard to implications of complexity for governance, and we have some ideas to draw upon from this work; however, we have to interpret it and apply it in the Caribbean context. What this diversity and complexity has translated into on the ground is a complex array of institutions that must be factored into any future arrangements. Figure 4 shows the array of overlapping and nested organizations within the Caribbean with responsibility in various aspects of fisheries. Expanding this to all aspects of the marine environment and sciences results in even greater complexity.

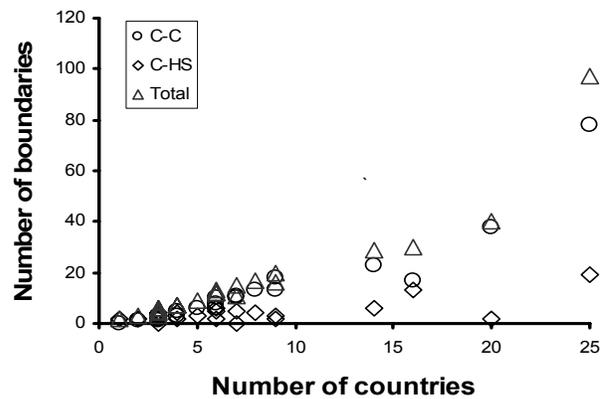
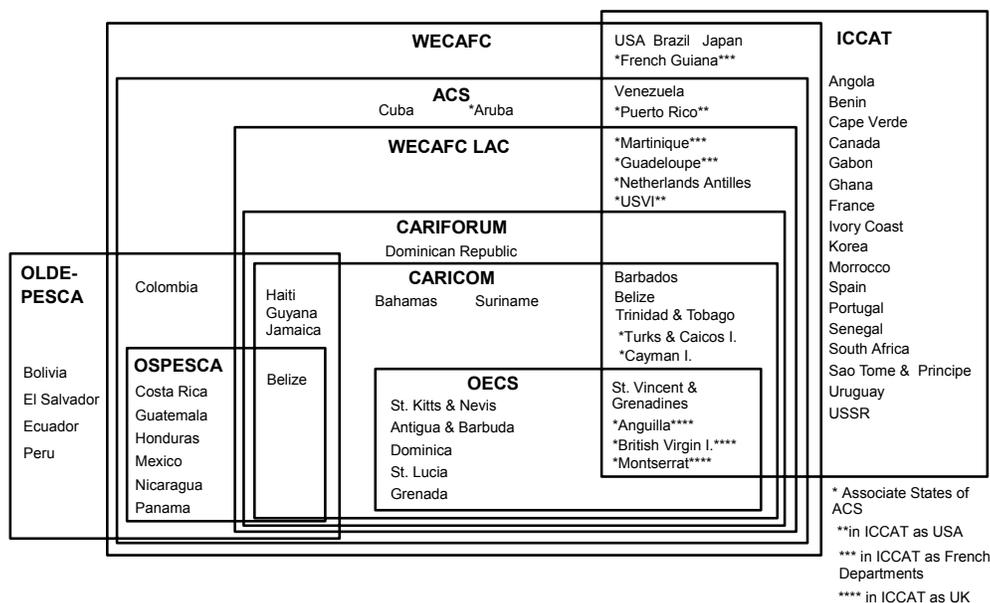


Figure 3. The numbers of international boundaries (C-C = country to country, C-HS = country to high seas)

**THE LARGE MARINE ECOSYSTEM GOVERNANCE FRAMEWORK**

The major thrust of the CLME Project is to improve governance of LMR. Consequently, the project differs from most other LME projects and we have had some difficulty adapting the so-called LME approach to the situation in the Caribbean. The typical LME approach is based on five modules that may be useful in designing assessment and monitoring, but we did not find that it offered much insight into how to design interventions that would bring about change in governance. As a result, we set about to develop a framework that accommodates the reality of the situation in the Caribbean, namely multiple geographic scale, multiple institutional levels and a need for a diversity of approaches that meet specific place-based-management needs, rather than a panacea or a ‘one size fits all’ approach.



**Figure 4.** The membership of regional and international organisations with responsibility for fisheries management and development in the wider Caribbean (WECAFC = FAO West Central Atlantic Fishery Commission, ACS = Association of Caribbean States, CARICOM = Caribbean Community and Common Market, OECS = Organisation of Eastern Caribbean States, LAC = Lesser Antilles Committee, OLDEPESCA = Latin American Organization for Fishery Development, OSPESCA = Organización del Sector Pesquero y Acuícola del Istmo Centroamericano, ICCAT = International Commission for the Conservation of Atlantic Tunas).

The framework that we developed is based on linked policy cycles at multiple levels, from local to international (Fanning *et al.* 2007). The cycles have a common structure but may vary in nature at various levels and from location to location at any given level (Figures 5 and 6). However, they must be complete in order for there to be effective governance at the level or location in question. Cycles must also be linked vertically with two-way flows if they are to be effectively connected with the remainder of the framework (Figure 7). Incompleteness and disconnectedness are two common dysfunctions in Caribbean living marine resource governance. It is also key for vertical linkages to be established among the decision-making stages of the various cycles. Linkages at other stages such as the technical ones, of which GCFI is a leading example, are important but not sufficient. Finally, lateral linkages are also important as they serve to promote shared learning.

Using this framework, the long-term governance goal for the wider Caribbean is **‘fully-functional policy cycles at all appropriate levels with the appropriate vertical and lateral linkages’**. The long-term goal can be approached incrementally with targeted interventions specifically aimed at:

- i) Establishing or completing policy cycles, and
- ii) Building or enhancing linkages.

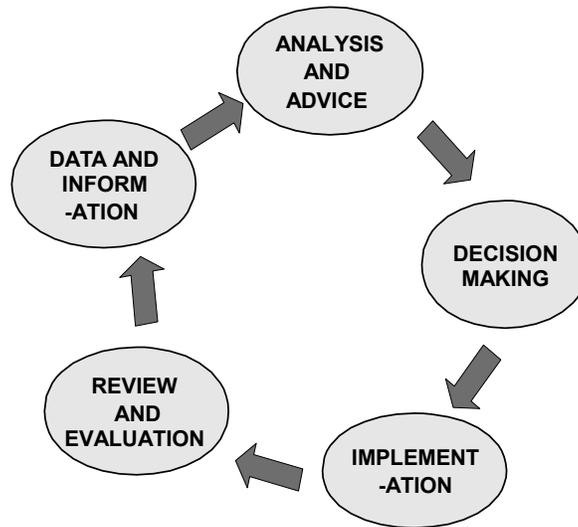
The LME governance framework can accommodate:

- i) Diversity of policy cycle arrangements and linkages (e.g. Figure 6),
- ii) The diversity of EBM approaches that currently exist,
- iii) Existing organizations but will require that they review and adjust their modes of operation.

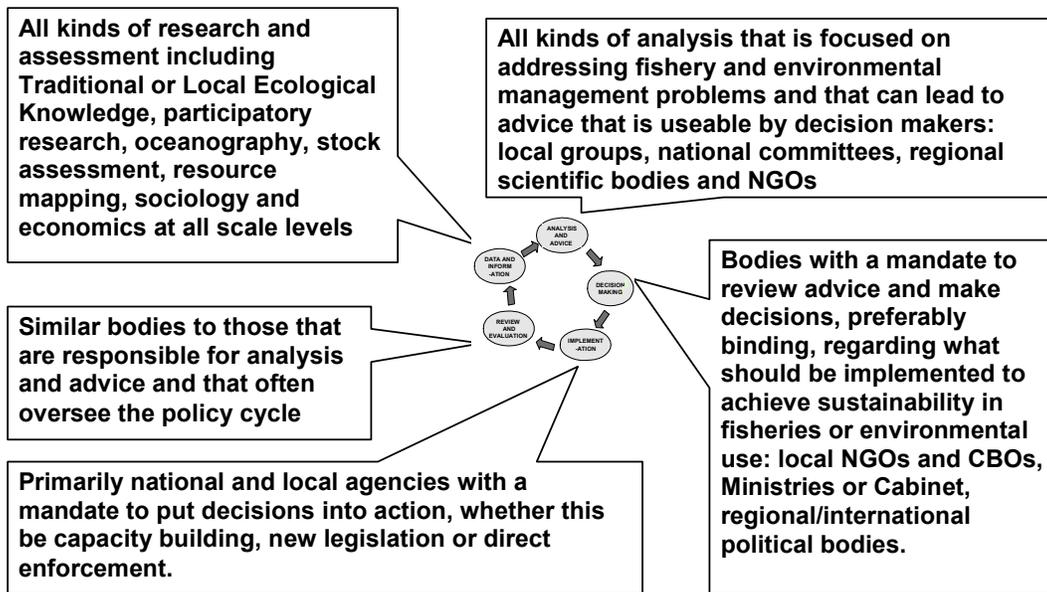
To further clarify how the LME Framework may apply in the Caribbean region, we will look briefly at possible fisheries arrangements (Chakalall *et al.* 2007). These may range as follows:

- i) An all-inclusive RFMO,
- ii) A single RFMO with departments, and
- iii) A coordinated Network.

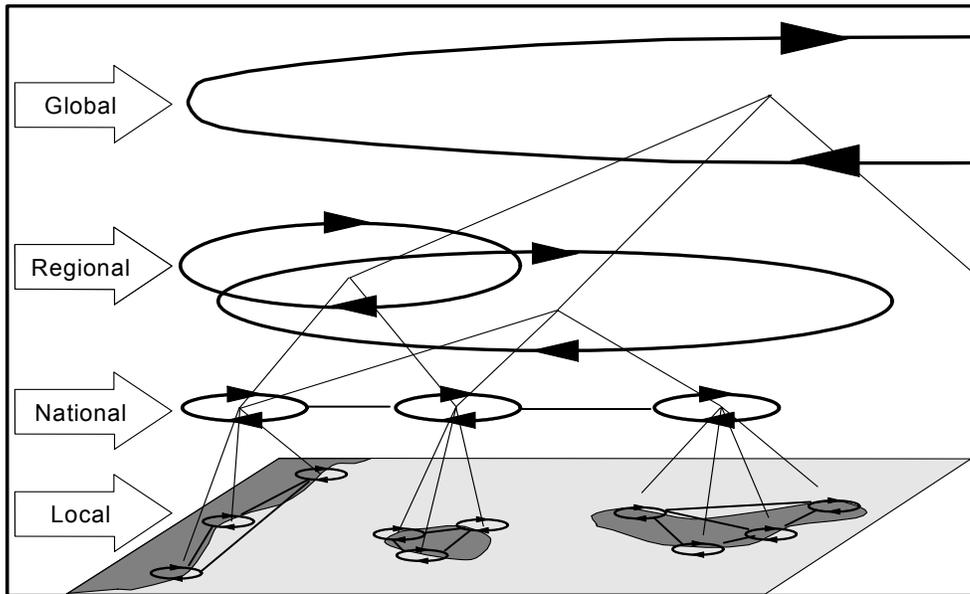
The latter two of these are depicted in Figure 8. The appropriateness and feasibility of these options needs to be researched and assessed. There are many unresolved questions. For example, what would be the roles of existing organizations, and in the case of the network, who is in control? We suggest that the all-inclusive RFMO option is unlikely to be successful at this stage and may not even be the right one in the long-term. The other two, which are shown in Figure 8, may provide more feasible starting points. Certainly, we can start by beginning to build a coordinated network and seeing where it goes (Parsons 2007). Learning as we go must be a part of this process.



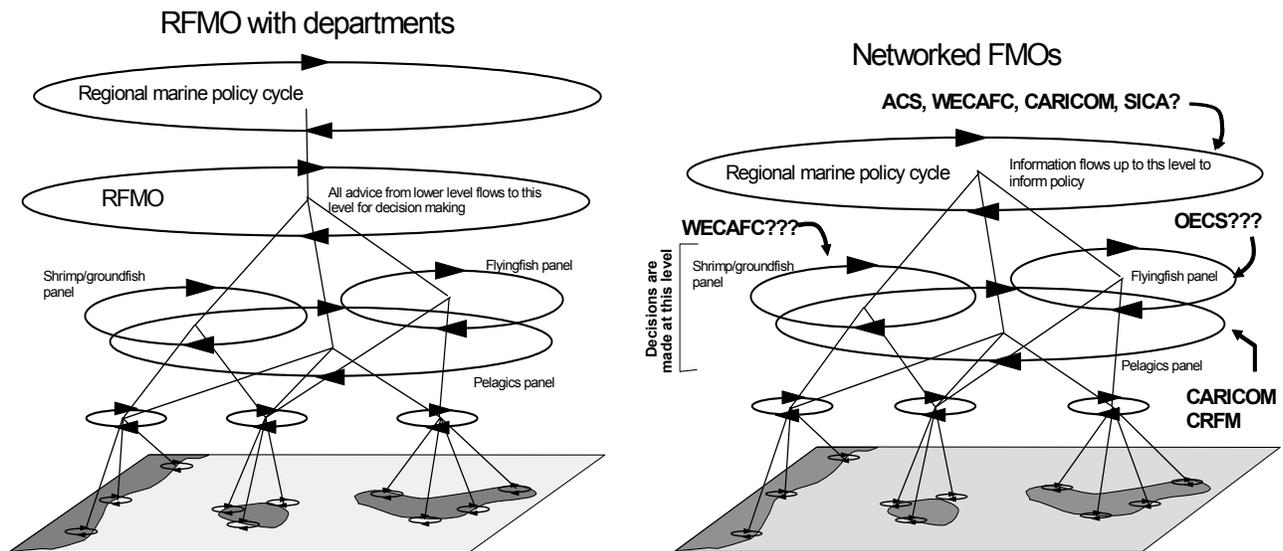
**Figure 5.** The generic policy cycle used for the proposed LME governance framework.



**Figure 6.** The diversity of stakeholders that may be involved in the policy cycle depending on cycle stage and scale level.



**Figure 7.** The multi-scale component of the proposed governance framework with vertical and horizontal linkages among the different policy cycles. The multi-level linkages do not necessarily imply a controlling function.



**Figure 8.** Two options for application of the LME Governance Framework in the Wider Caribbean.

**THE STRUCTURE OF THE CLME PROJECT**

The above line of thinking has underlain the development of the CLME Project which is designed as a set of Framework building interventions targeting different parts of the Framework. It aims to strengthen the targeted parts of the Framework and to produce tangible results with respect to LMR Governance. It also aims to explore the Framework approach and to provide guidance on how it may be improved, redesigned and made more effective – a learning component. The activities that will be carried out in the CLME Project are summarized in a single diagram (Figure 9). The main aim of each activity is shown as well as the area of the network that it focuses on. Further details are provided in Table 1.

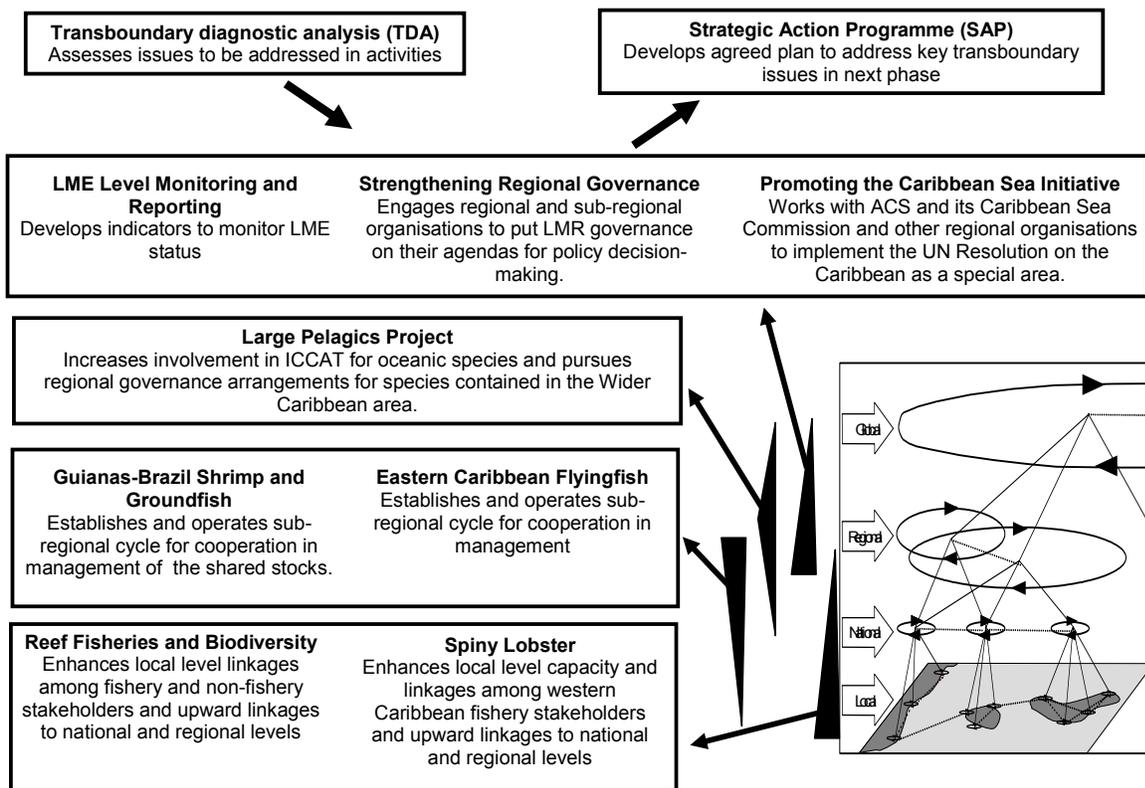
The overall aim is to produce at the end of four years a Strategic Action Programme (SAP) that is understood and agreed by all countries. If the Framework concept stands up to closer scrutiny, the SAP would aim to continue building the framework.

There will also be several activities that make a start on implementation of the LME governance framework at the regional level:

- i) Promote regional ocean governance,
- ii) Advance Caribbean Sea Initiative,
- iii) Pursue regional management of large pelagics, and
- iv) LME level monitoring and reporting

Finally, there will be resource specific pilot projects and, activities aimed at building specific sub-areas of the Framework.

**The CLME Project – Approach:**  
Building a multi-level policy-cycle based governance framework



**Figure 9.** The structure of the Caribbean Large Marine Ecosystem Project aimed at framework building at several levels.

**Table 1.** Details of CLME Project activities

<b>Promote regional ocean governance</b>
<p><b>Purpose</b> Get the CARSEA and CLME concepts and framework onto the agendas of regional and subregional organizations. Make policy inputs needed for organisations to adapt to and facilitate framework Increase public awareness of the importance of ocean governance</p> <p><b>Partners</b> Cropper Foundation, CERMES, ECLAC, UNEP, CRFM, ???</p> <p><b>Targets</b> CARICOM, OECS, SICA, ACS</p>
<b>Advance the 'Caribbean Sea Initiative'</b>
<p><b>Purpose</b> To support to the ACS Caribbean Sea Commission and other regional arrangements in establishing full policy cycles for living marine resources. Preparation of inputs to their review and decision making processes Support for sessions that focus on LMR issues</p> <p><b>Partners</b> CERMES, Cropper Foundation, ECLAC, UNEP, CRFM, ???</p> <p><b>Targets</b> CARICOM, OECS, SICA, ACS</p>
<b>LME level monitoring and reporting</b>
<p><b>Purpose</b> System for monitoring and reporting at the LME level (one of the major outputs of the CLME Project) Context must be appropriate level policy cycles, otherwise the outputs will have no client for uptake</p> <p><b>Activities</b> Identification of categories and suites of indicators Identification of sources of information for indicators, Specification and establishment of process Application of process</p>
<b>Regional management of large pelagics</b>
<p><b>Purpose</b> Get Caribbean countries involved in ICCAT Establishing a policy cycle for management of regional large pelagics Identify appropriate competent organisation Assess one or two key species Obtain and implement decisions</p> <p><b>Partners</b> CRFM, CERMES, ???</p>
<b>Fishery specific projects</b>
<p><b>Fisheries</b> Eastern Caribbean flyingfish - CRFM Guianas/Brazil shrimp and groundfish - WECAFC Western Caribbean lobster - OSPESCA Reef fisheries and biodiversity – UNEP</p> <p><b>Purpose</b> To demonstrate policy cycles and linkages at multiple levels</p>

### THE ROLE OF GCFI

To conclude, we reflect on the role of GCFI in building the network approach that we propose. Most who frequent GCFI are in the 'data and information' to 'analysis and advice' stages of policy cycles at several levels. At the individual level, you may want to ask yourself a number of questions relating to your place and role in the network.

- i) What policy cycle are you in?
- ii) Is it complete and functional?
- iii) How well linked are you to the other stages?
- iv) Is your cycle well linked into the framework?
- v) Where are the links strong or weak?

At the organizational level of GCFI, one would hope to see an increase in the amount of attention to research and activities related to framework building and strengthening. We would see more papers on governance related matters and greater participation by the people who are working in these areas, providing opportunities for linkages and networking. Research will be needed to feed information demands, and also to study its structure and function. GCFI is uniquely placed to play a key role in this respect and continue to expand its horizons to address these new needs.

To conclude, we see the strengthening of the LME Governance Framework in the Caribbean as the most

reasonable direction for the immediate future. It reflects to a large extent how governance has been developing in the region and builds on that (McConney *et al.* 2007). It is consistent with and uses emerging ideas on governance of complex man-in-nature systems. It can accommodate full participation and should enhance resilience of the entire system and all its parts. It can even be said to be in tune with emerging world views on the role of people in governance, making room for the heart and spirit to coexist with reason and technology as we rescue what is left of the planet. This approach appears to resonate with many who have to work in it, and we hope it resonates with you also.

For documents and other CLME information go to: <http://www.cavehill.uwi.edu/cermes/>

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