

Institutional Arrangements for Ocean Governance in the Caribbean, including the Ecosystem Approach:

Monday: 2:00-3:00 and 3:30-4:30

Lucia M. Fanning

Marine Affairs Program, Dalhousie University

and

Robin Mahon

Centre for Resource Management and Environmental Studies (CERMES)

University of the West Indies, Barbados

IOI Training Module: Law of the Sea and Principled Ocean Governance

Solutions Centre, UWI, Cave Hill

May 17 - 21, 2010

Session topics

- Perspectives on Governance
- LME complexity and the Caribbean
- What is EBM? The Barbados EBM conference and findings
- LME Governance Framework

Topic 1

Perspectives on Governance

Some definitions of governance

“The steering mechanisms a society uses to ensure its persistence” (Council of Rome)

“The ability to get things done without necessarily having the legal competence to command that they be done”
(Czempiel)

“The relationship between the governing system (human) and the system to be governed (human & natural)
(Jentoft)

Governance is broader than management and encompasses it

Governance is broader than government but includes it

Governance

The public and private interactions undertaken to address challenges and create opportunities within society. Governance thus includes the development and application of the principles, rules, norms, and enabling institutions that guide public and private interactions.

Armitage et al 2008

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

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

Some Procedural Principles

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

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
- OECS St. Georges Declaration
- Cartagena Convention
- Other national, regional & international policies

Towards Principled Oceans Governance

Australian and Canadian
approaches and challenges

Edited by Donald R. Rothwell and
David L. VanderZwaag

 Routledge
Taylor & Francis Group

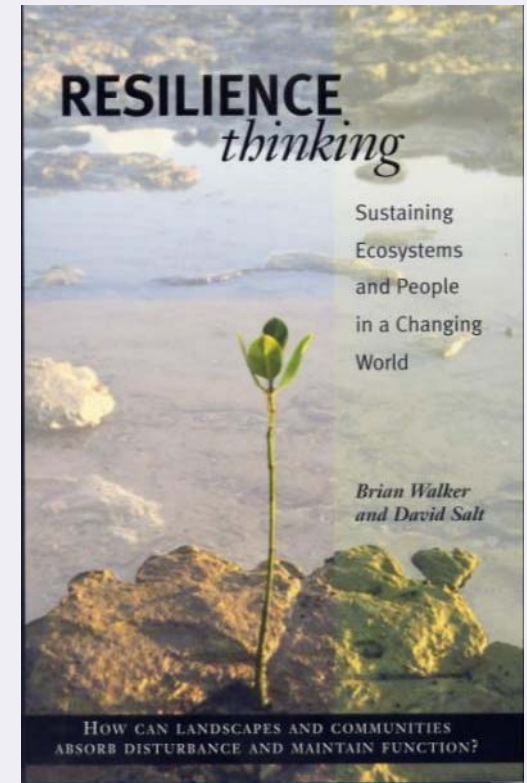
Why do we need these principles to be guiding decision-making?

- Coastal development
- Pollution
- Over-exploitation
- Fractured governance



Governance trends

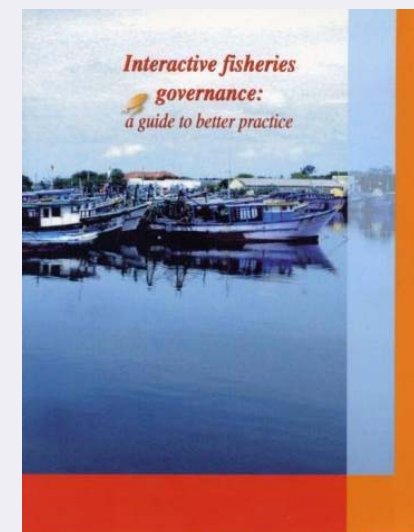
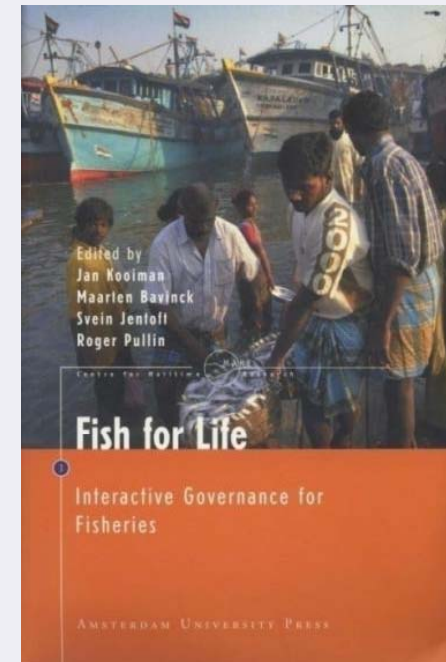
- Conventional top-down, command and control, e.g. RFMOs
- People-centered alternatives
 - Broader range of stakeholders and interactions
 - Emphasis on shared principles/visions
 - Perception of Social Ecological Systems (SESs)
- Recognition of complexity and interactions
 - Externalities and unpredictability
 - Resilience through adaptive governance arrangements (capacity to detect/ respond to change)
 - Social capital/social networks - relationship to governance
 - Enabling of self-organisation - 'capacity building' for SESs with low capacity and low resources.



Governance - IGA

Three interrelated orders of human activity:

- **Problem solving** or day-to-day management
- The **institutional framework** for problem solving
- Overarching **meta-governance**, which is about the principles and values that underlie the institutional frameworks.



Discussion

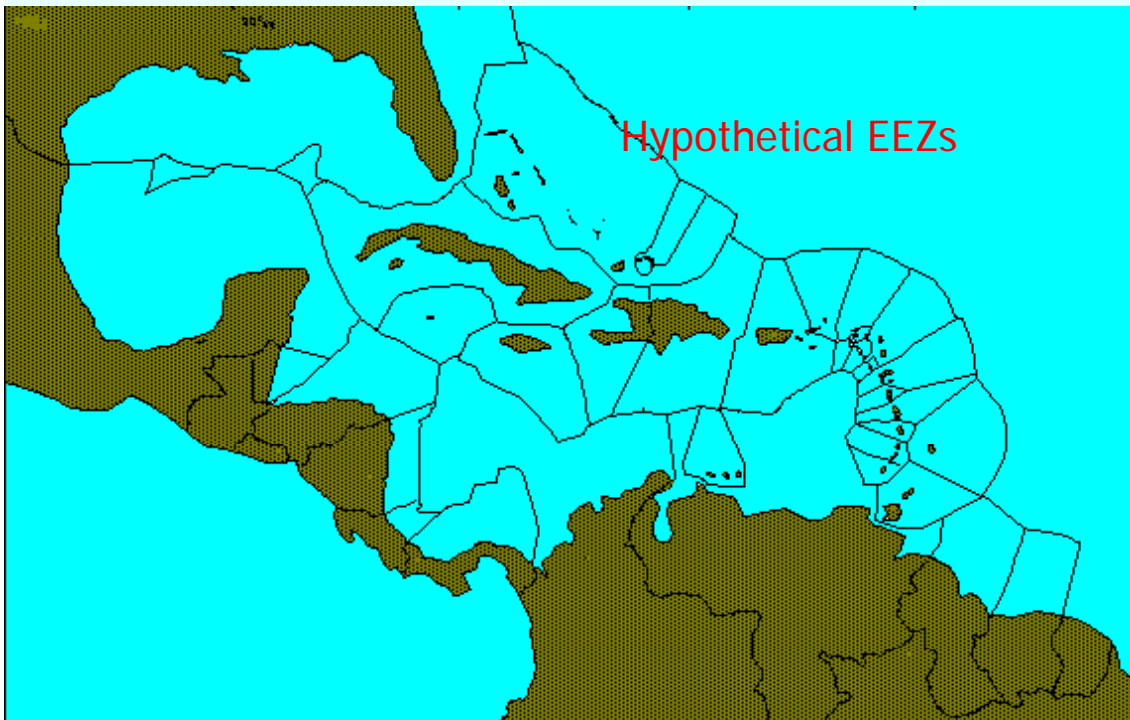
How does this perspective on governance match with your understanding?

Topic 2

LME complexity and the Caribbean

The CLME Project – Context

The Wider Caribbean Region is geographically and politically highly diverse and complex

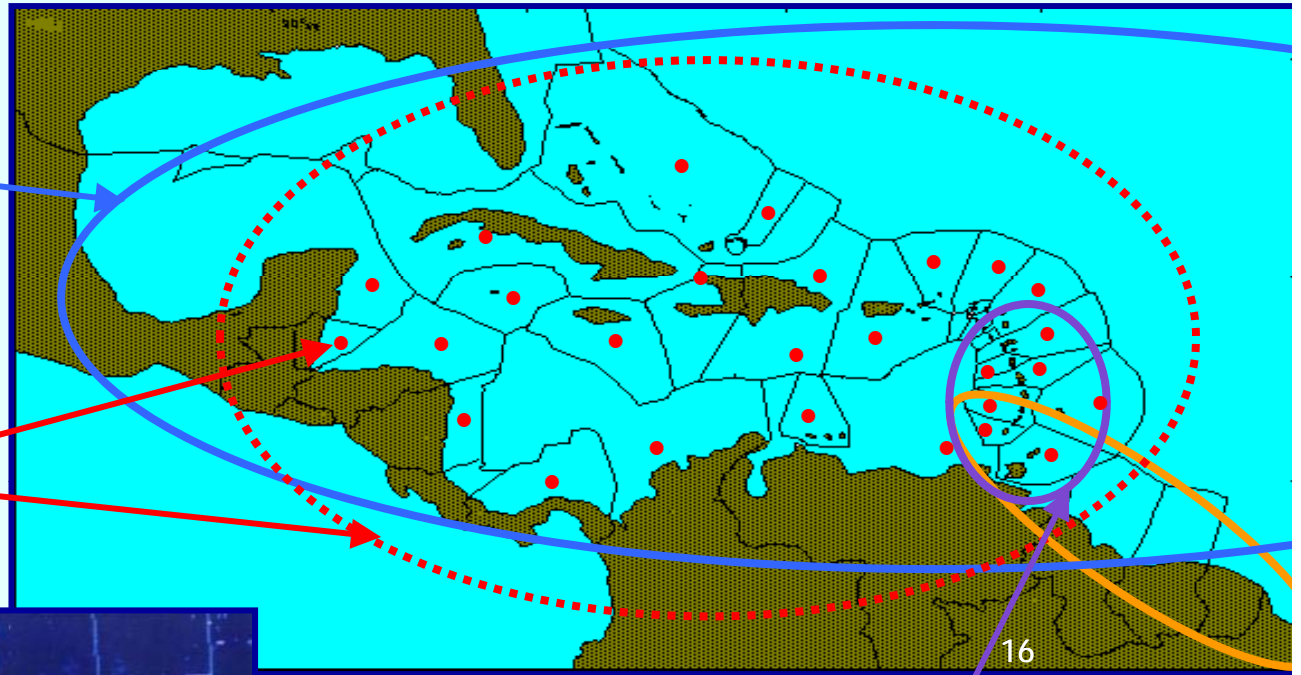


- **Geopolitical**
 - 26 countries
 - 45 state entities
- **Cultural**
 - ethnicity, language
- **Size**
 - smallest to largest
- **Development**
 - poorest to most wealthy

Natural resource scale

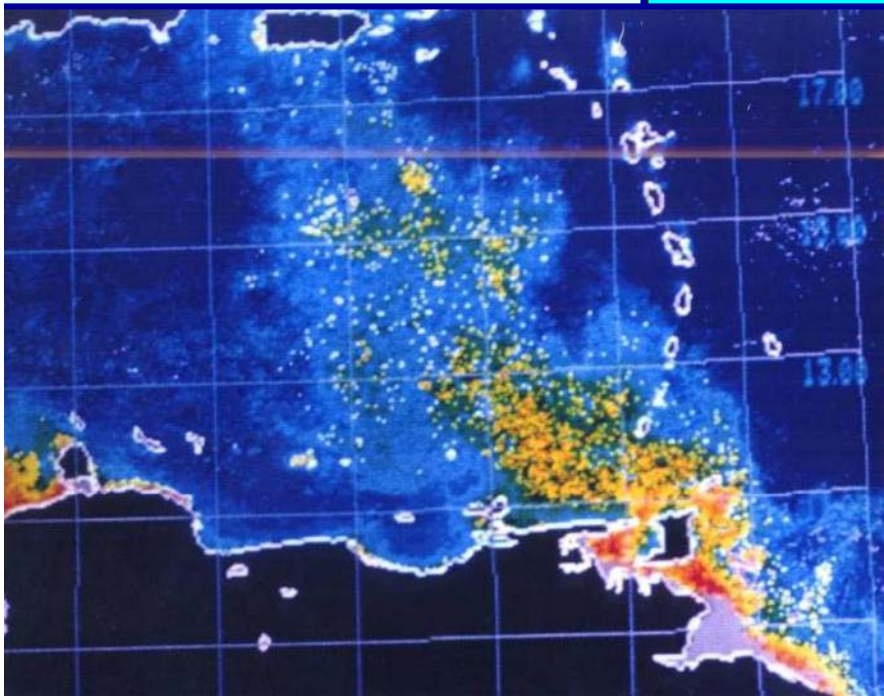
Large pelagics

Reef fishes



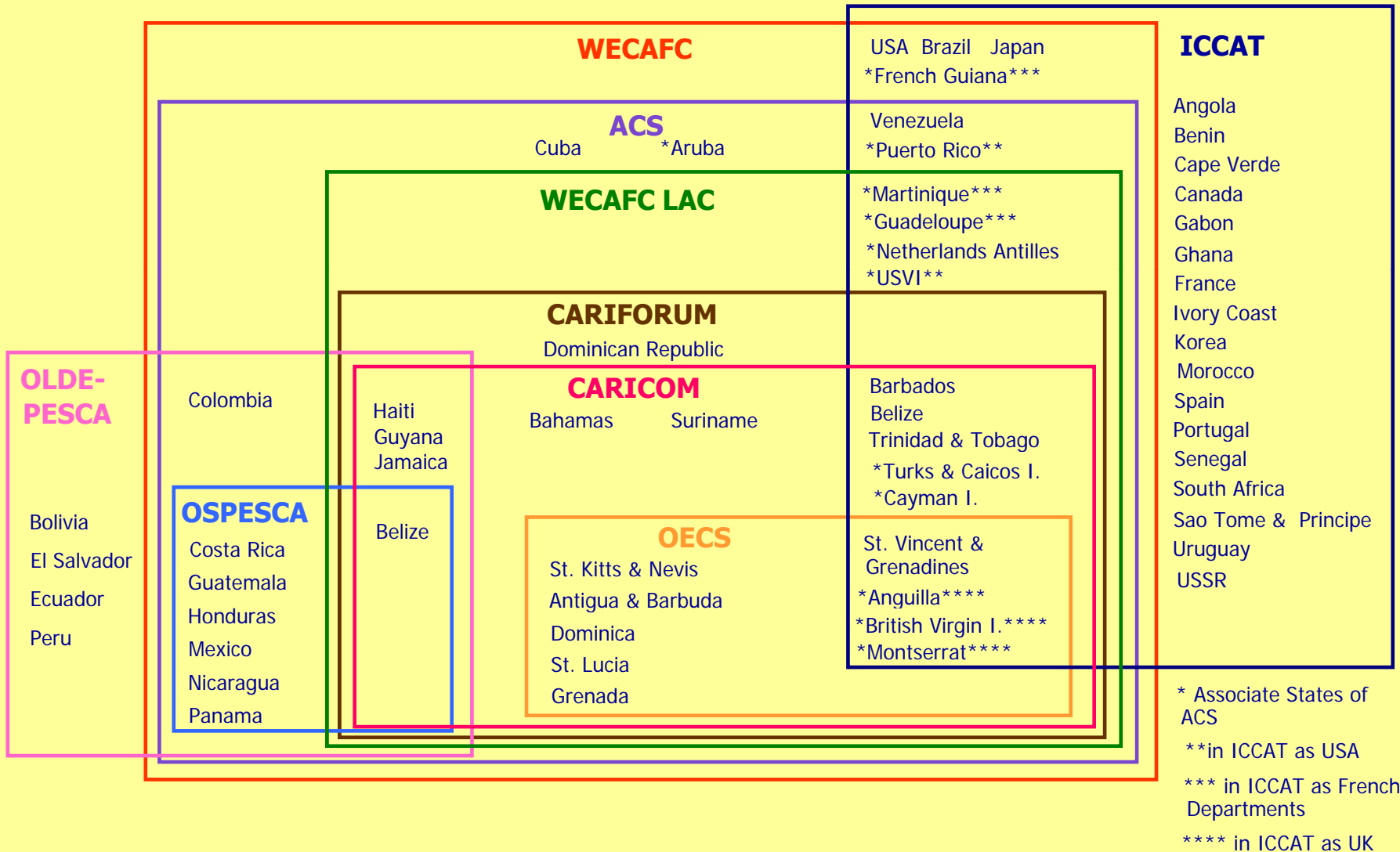
Flyingfish

Shrimps



Institutional Scale

Overlapping and nested fisheries related organisations



Issues of large scale and complexity in the Wider Caribbean

- Lots of technical work has been done
- Has little impact on governance
- Many local efforts at management
- Uncoordinated and disconnected at regional level
- Duplication of effort

Governance diversity in LMEs

Questions about LME governance

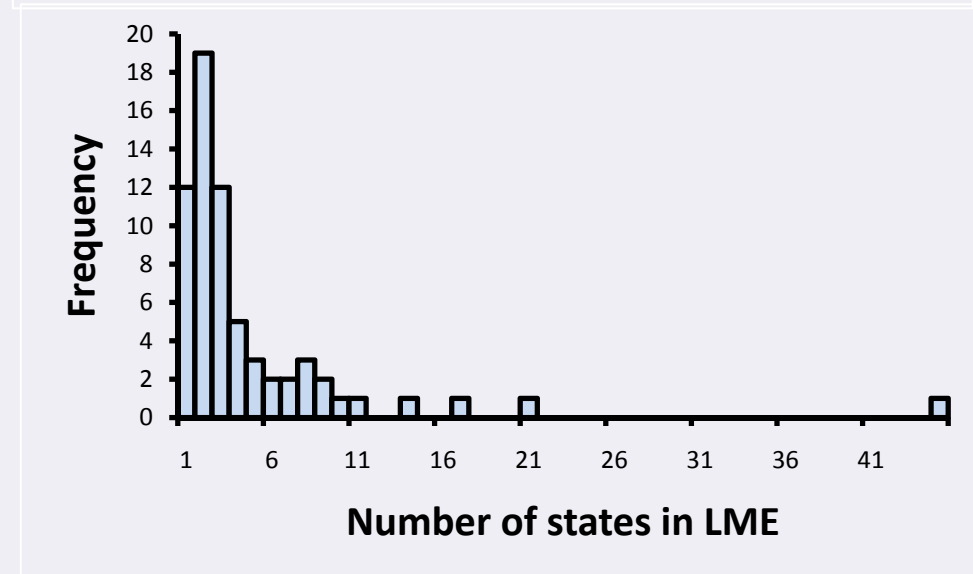
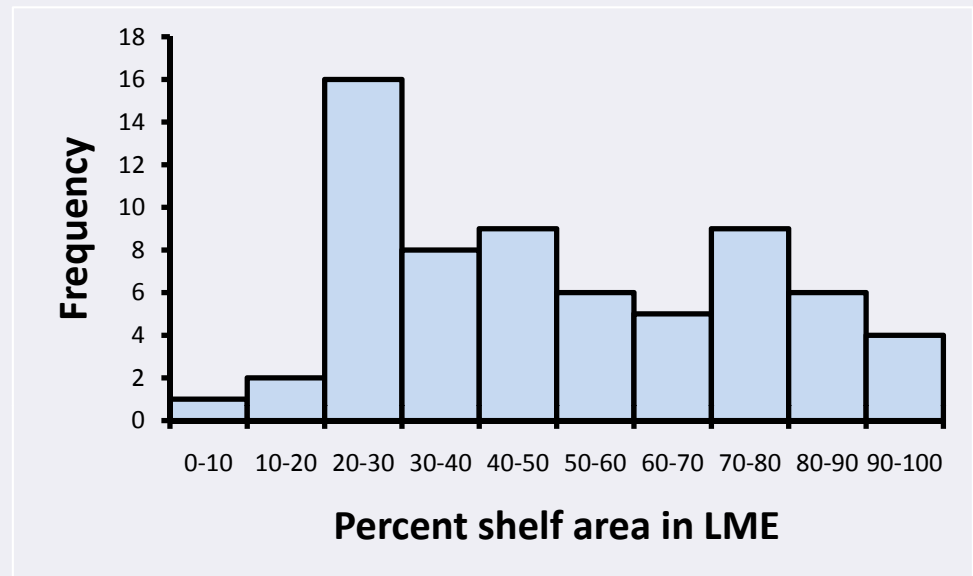
- Are LMEs sufficiently diverse and heterogeneous that substantially different approaches may be needed in different LMEs?
- Might there be groups of LMEs within which one might take similar approaches to governance
- Where does the Caribbean fit in

Undertook an analysis of all LMEs based on ≈ 40 governance related variables

Governance related variables

■ Geopolitical variables

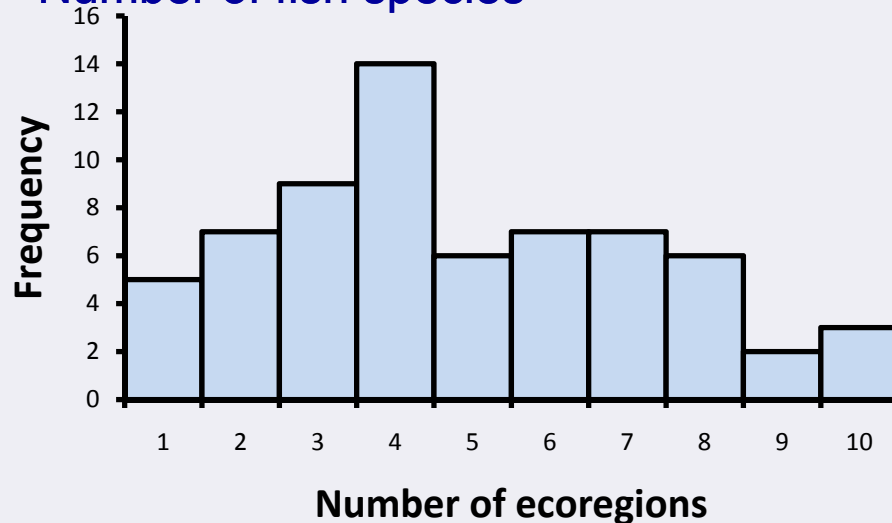
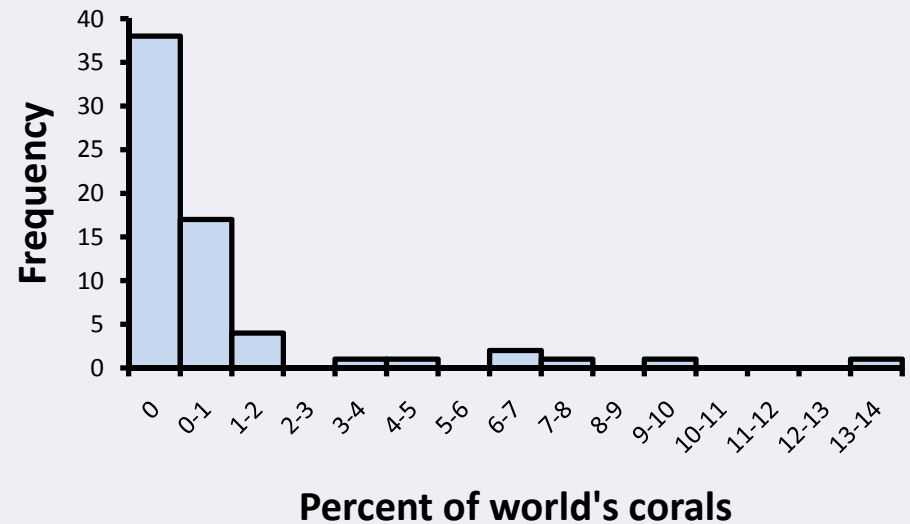
- LME area
- Area of High Seas
- Area of shelf
- Number of states
- Number of official languages
- Country-country maritime boundaries
- Country to High Seas maritime boundaries
- Number of SIDS
- Total population of countries in LME



Governance related variables

■ Oceanographic/ecological variables

- Number of ecoregions
- Proportion of worlds seamounts
- Proportion of worlds coral reefs
- Primary production
- River discharge
- Number of fish species



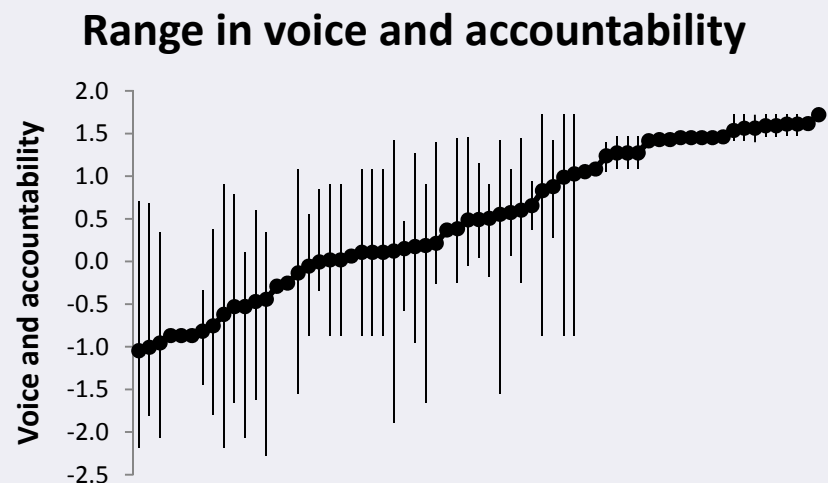
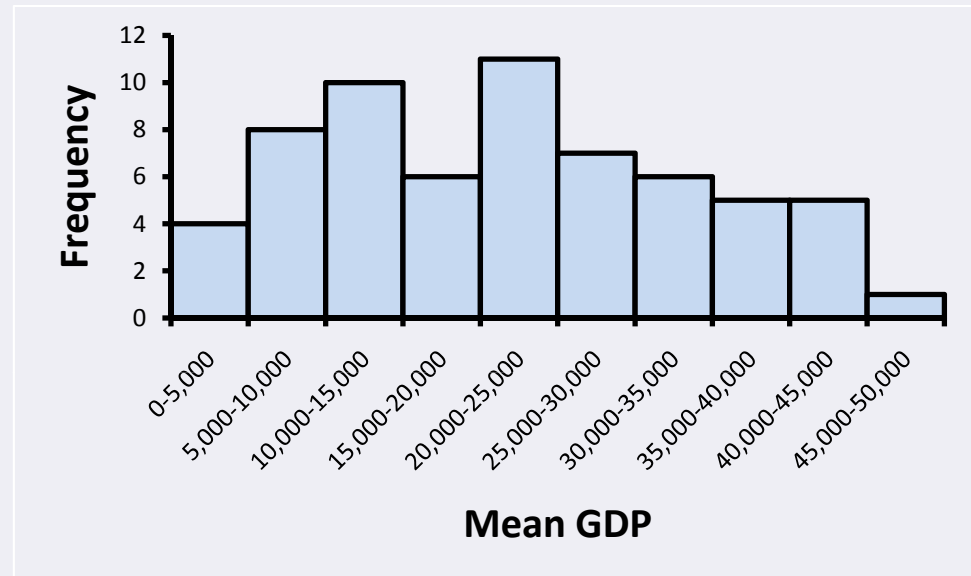
Governance related variables

■ Means of World Bank national governance indicators

- Voice and Accountability
- Political Stability and Absence of Violence
- Government Effectiveness
- Regulatory Quality
- Rule of Law Control of Corruption

■ GDP

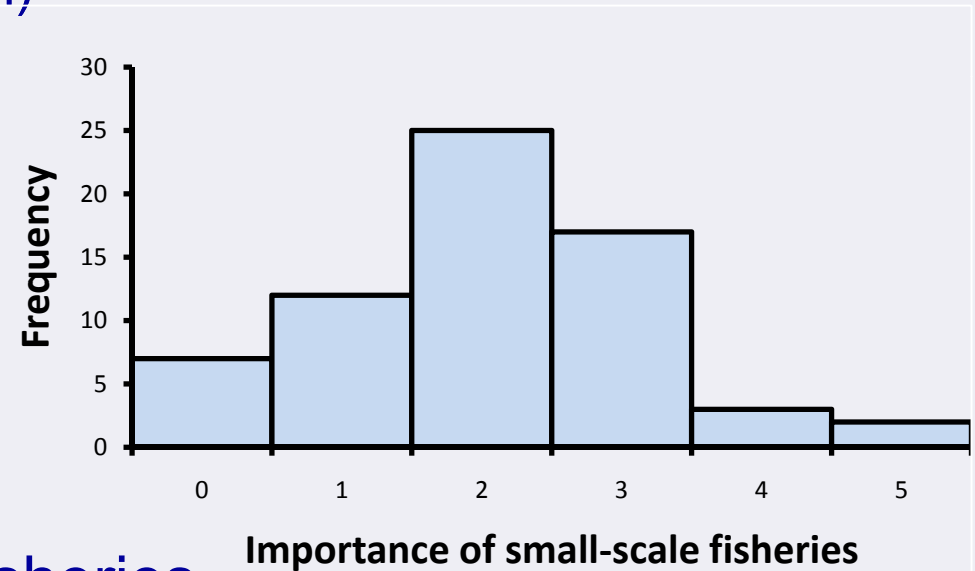
■ Means and ranges are important



Governance related variables

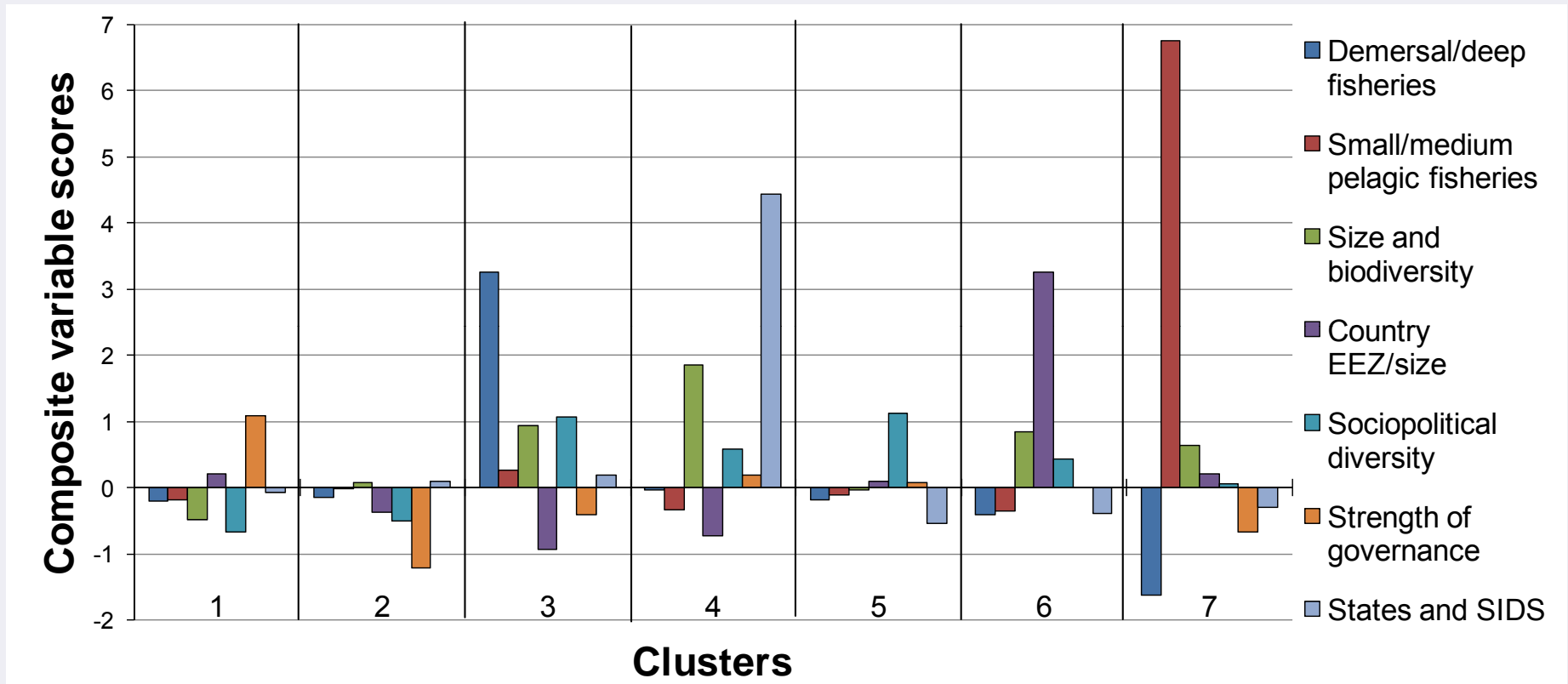
■ Fishery landings (12 Sea Around Us Project categories)

- Pelagics (small, medium, large)
- Bathypelagics (medium and large)
- Demersals (small and medium)
- Large bathydemersals
- Shrimps
- Cephalopods
- Lobster
- Crabs
- Total landings

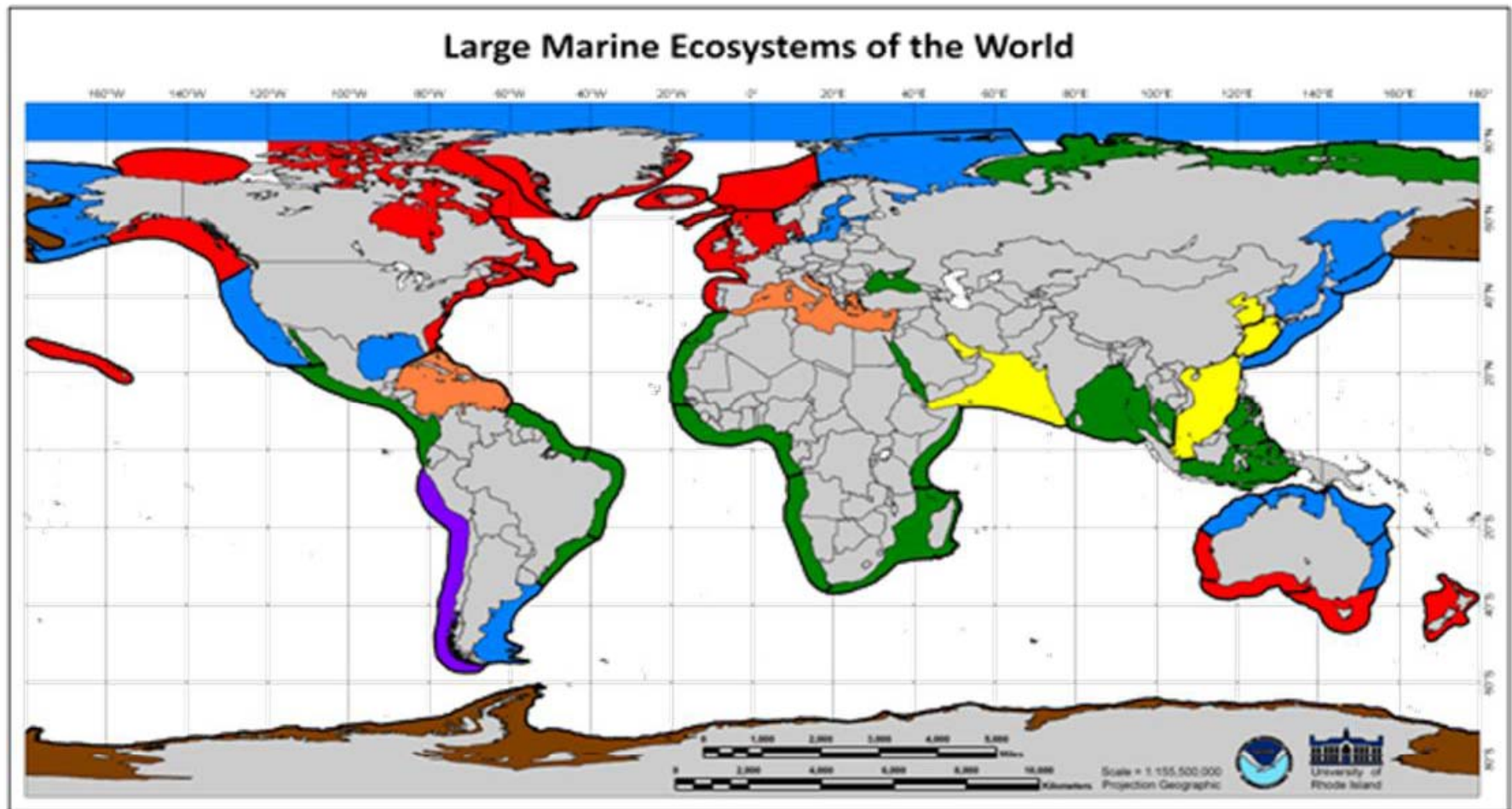


■ Importance of small-scale fisheries








Characteristics of LME clusters



Where are the clusters



Cluster key

	1		2		3		4		5		6		7
---	---	---	---	---	---	---	---	---	---	---	---	---	---

Governability and governance approach

	Governability characteristics	Governance approach?
1	High governability – few large countries with high GDP and governance indicators; low biodiversity	
2	Low governability – relatively few small countries with uniformly low GDP and governance indicators	
3	Low governability – relatively few countries with small EEZs, low GDP and governance indicators, high diversity among countries, biodiverse ecosystems; good fishery resource base to support governance reforms	
4	Low governability – Many countries with small EEZs and high biodiversity; moderately high and diverse governance indicators and GDP; low fishery resource base to support governance reforms	

Governability and governance approach

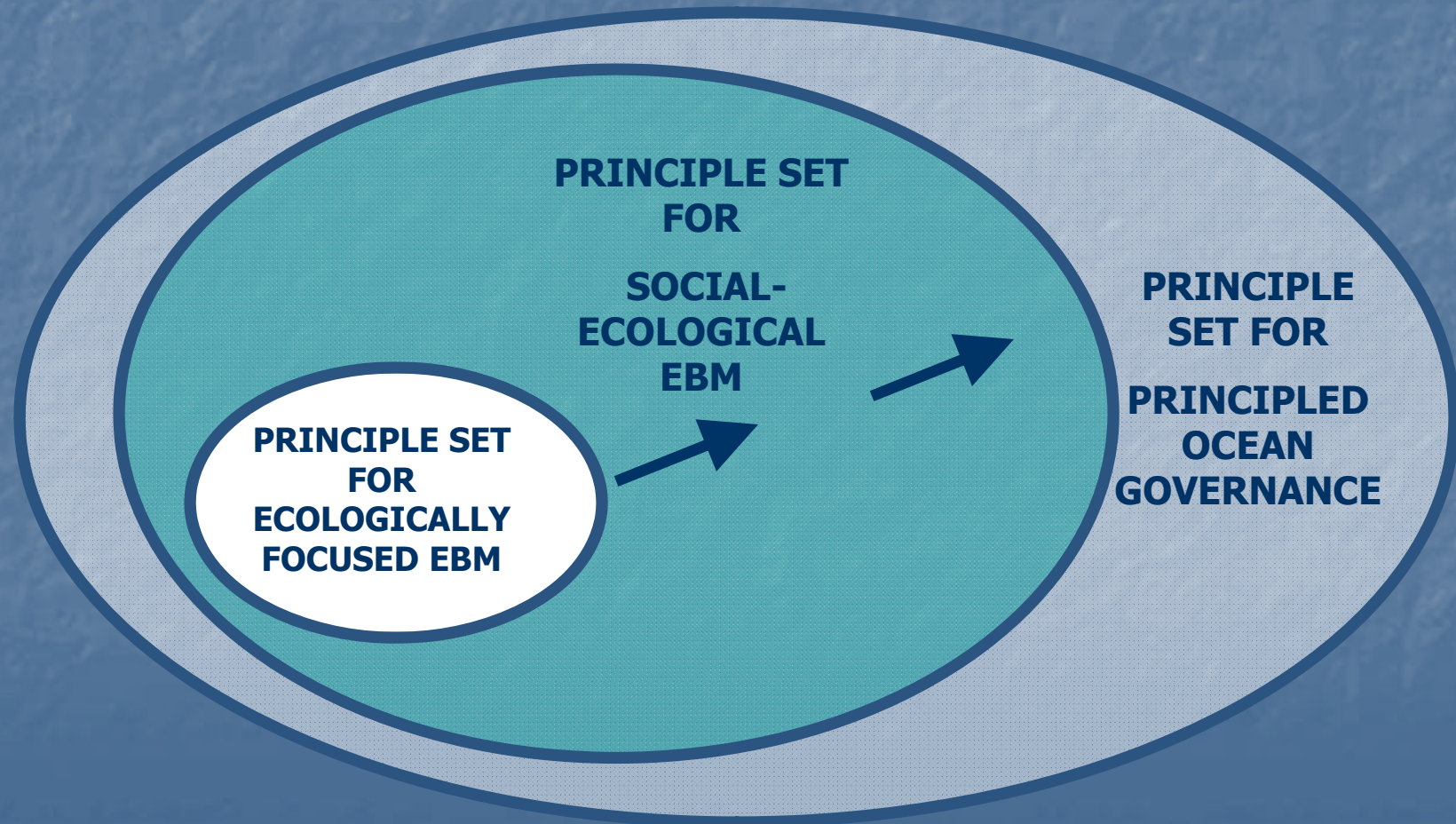
	Governability characteristics	Governance approach?
1	High governability – few large countries with high GDP and governance indicators; low biodiversity	Amenable to conventional hierarchical governance with strong technical inputs?
2	Low governability – relatively few small countries with uniformly low GDP and governance indicators	Focus on institutions that are resistant to corruption and political interference; pursue conservation projects opportunistically where conditions are favorable?
3	Low governability – relatively few countries with small EEZs, low GDP and governance indicators, high diversity among countries, biodiverse ecosystems; good fishery resource base to support governance reforms	As for group 2 and also channel revenues from resources into governance institutions?
4	Low governability – Many countries with small EEZs and high biodiversity; moderately high and diverse governance indicators and GDP; low fishery resource base to support governance reforms	Multi-level network governance to optimise use of limited capacity; adaptive capacity building?

Topic 3

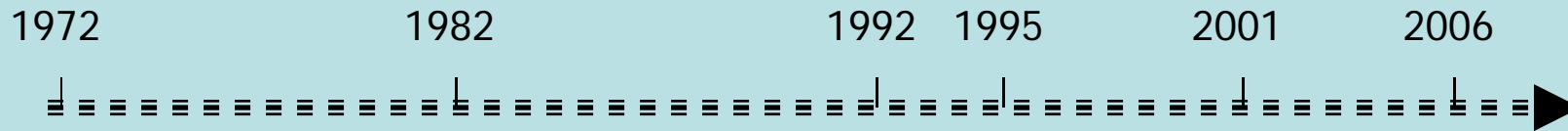
What is EBM?

Ecosystem-Based Management (EBM) as an essential part of POG

EBM is emerging as significant in POG and is evolving its own set or sets of principles



EBM Concept development



UNCLOS



UNCED



FAO



Ecosystem Approach to Fisheries



Ecosystem



*"the joint functioning and interaction of two compartments (populations (e.g. fish, people) and environment) in a **functional unit of variable size**"*

These components interact and are affected by:

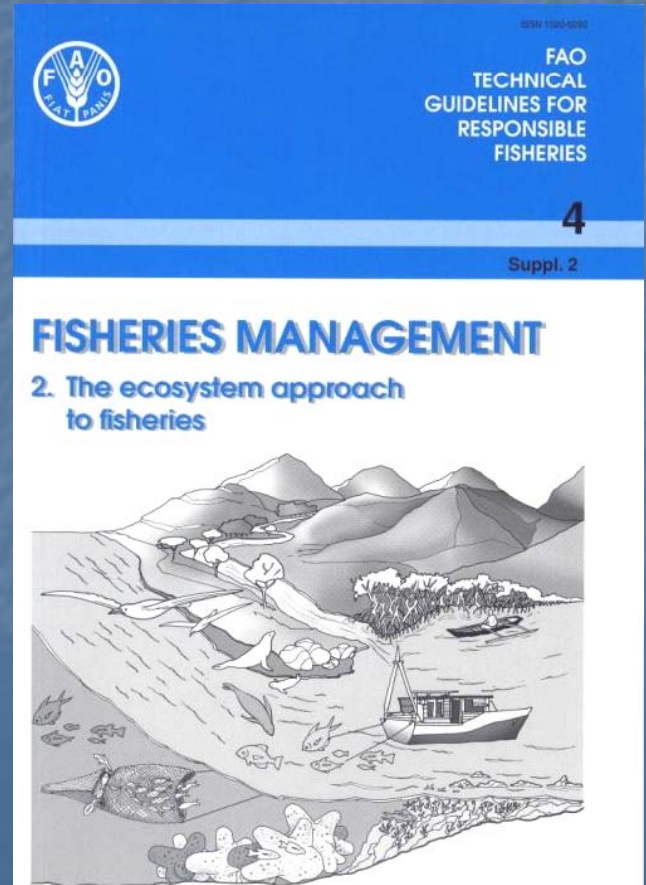
- other sectors' activities;
- the global climate;
- other ecosystems, usually adjacent, with which they exchange matter and information;
- the socio-economic environment as reflected in the market, relevant policies and societal values.

Ecosystem Approach

*“a strategy for the **integrated** management of land, water, and living resources that promotes conservation and sustainable use in an **equitable** way”* (CBD, COP 5)

Focuses on **balance**:

- Meeting human requirements
....
- whilst maintaining the biological richness and ecological processes necessary to sustain the composition, structure and function of the habitats or ecosystems concerned



Ecosystem Management : Paradigm shift

From



To

Individual species or sector

Ecosystems

Small spatial scale

Multiple scales

Short-term perspective

Long-term perspective

Humans independent of ecosystems

Humans integral part of ecosystem

Management divorced from research

Adaptive management

Managing commodities

Sustaining production potential for ecosystem goods and services

Issues - CBD principles (1-6)

Principle 1: The objectives of management of land, water and living resources are a matter of societal choice.

Principle 2: Management should be decentralized to the lowest appropriate level.

Principle 3: Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.

Principle 4: Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context. Any such ecosystem-management programme should:

- (a) Reduce those market distortions that adversely affect biological diversity;
- (b) Align incentives to promote biodiversity conservation and sustainable use;
- (c) Internalize costs and benefits in the given ecosystem to the extent feasible.

Principle 5: Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.

Principle 6: Ecosystems must be managed within the limits of their functioning.

Issues – CBD principles (7-12)

Principle 7: The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.

Principle 8: Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.

Principle 9: Management must recognize that change is inevitable.

Principle 10: The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.

Principle 11: The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.

Principle 12: The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

What is EBM/EAF in the literature?

Ten commandments Ecosystem-Based Fisheries Scientists (Francis et al 2007):

1. Keep a perspective that is holistic, risk-averse, and adaptive.
2. Question key assumptions, no matter how basic.
3. Maintain old-growth age structure in fish populations.
4. Characterize and maintain the natural spatial structure of fish stocks.
5. Characterize and maintain viable fish habitats.
6. Characterize and maintain ecosystem resilience.
7. Identify and maintain critical food web connections.
8. Account for ecosystem change through time.
9. Account for evolutionary change caused by fishing.
10. Implement an approach that is integrated, interdisciplinary, and inclusive.

So EBM in a nutshell is..

- An integrated approach to management that considers the entire ecosystem, including humans.
- The goal of EBM is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need.
- EBM considers the cumulative impacts of different sectors rather than focusing on a single sector.

The Barbados EBM conference and findings



Marine Ecosystem Based Management in the Caribbean: an essential component of Principled Ocean Governance

Regional symposium sponsored by the Nippon Foundation, organized by Dalhousie University, the International Ocean Institute and the University of the West Indies, held at the Cave Hill Campus, Barbados, 10-12 December 2008

EBM symposium summary and messages for Caribbean marine resource policy-makers and all other stakeholders

What is marine ecosystem based management (EBM)?

EBM is an integrated, comprehensive approach to the management of all human activities in the seas and oceans. Human systems and marine resource systems are managed as being closely linked and affecting each other. It also links the various sectors that share use of marine ecosystems, e.g. fisheries, tourism, shipping, energy, and addresses complexity.

What is principled ocean governance?

Principled ocean governance will become a reality for the Caribbean when all decisions that affect the Caribbean Sea are guided by a set of shared principles. Principles are drawn from international, regional and national statements of policy and law. They are needed to guide marine resource decisions at all levels from resource user to minister.



Symposium vision for marine EBM in the Wider Caribbean

Healthy marine ecosystems in the Wider Caribbean that are fully valued and protected through strong institutions at local, national and regional levels providing effective governance that involves everyone, is fully understood and supported by the public, and enhances livelihoods and human well-being

This vision was assembled from the elements of the four individual visions that emerged in working group sessions for reef ecosystems, pelagic ecosystems, continental shelf ecosystems and governance (see over).

The Barbados EBM conference and findings

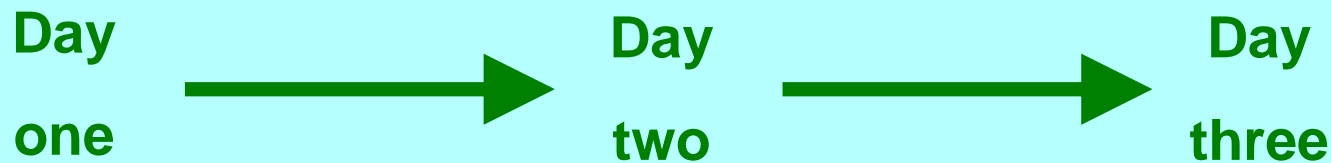
What did the symposium set out to achieve?

- Bring together a wide cross-section of leaders in living marine resource governance in the Caribbean.
- Explore if they are working from common principles
- Develop a shared vision for EBM in the Wider Caribbean
- Identify key strategies needed to implement EBM

Creating linkages among key players will help to keep the EBM shared vision alive and in sight and will help to coordinate efforts regionally.

The Barbados EBM conference and findings

The flow of the symposium....



Presented papers and key principles

Two keynote and
Twenty-one topical
presentations



What is the vision?

*What do you see in place in 10
years time when EBM/EAF has
become a reality in the
Caribbean?*



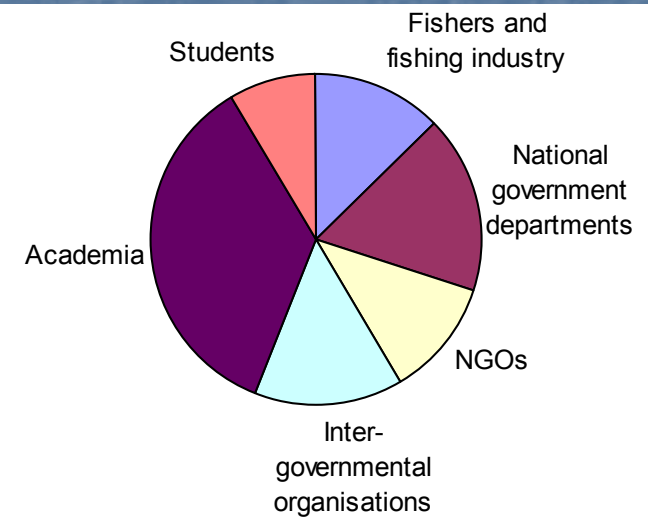
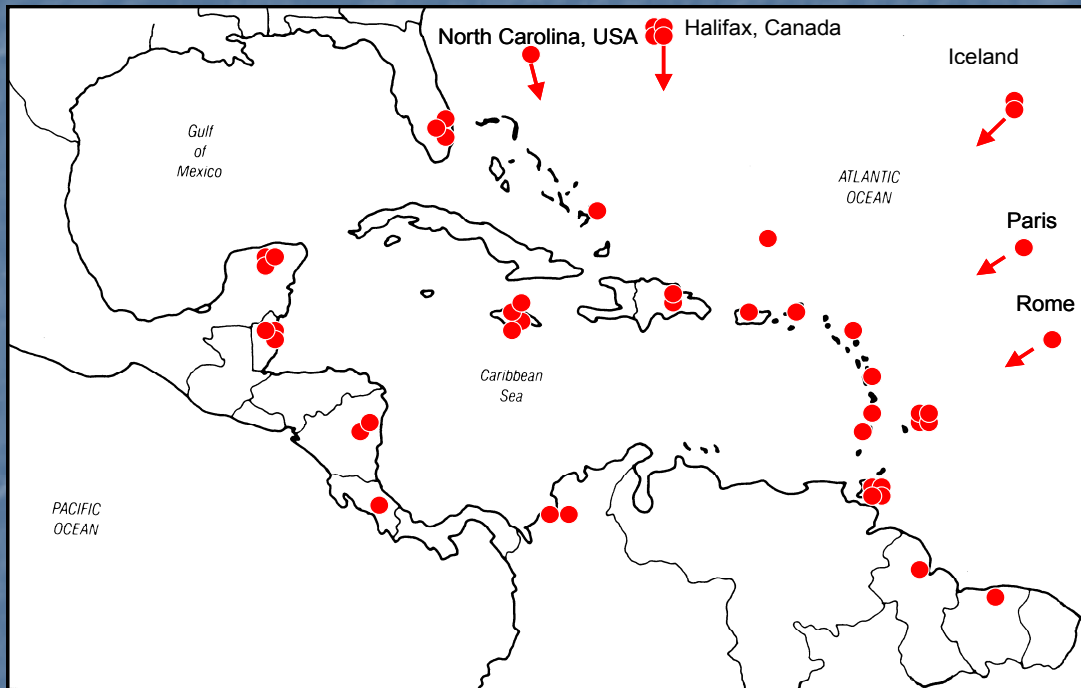
Achieving the vision

*How do we get from here to
where the vision is a reality?*



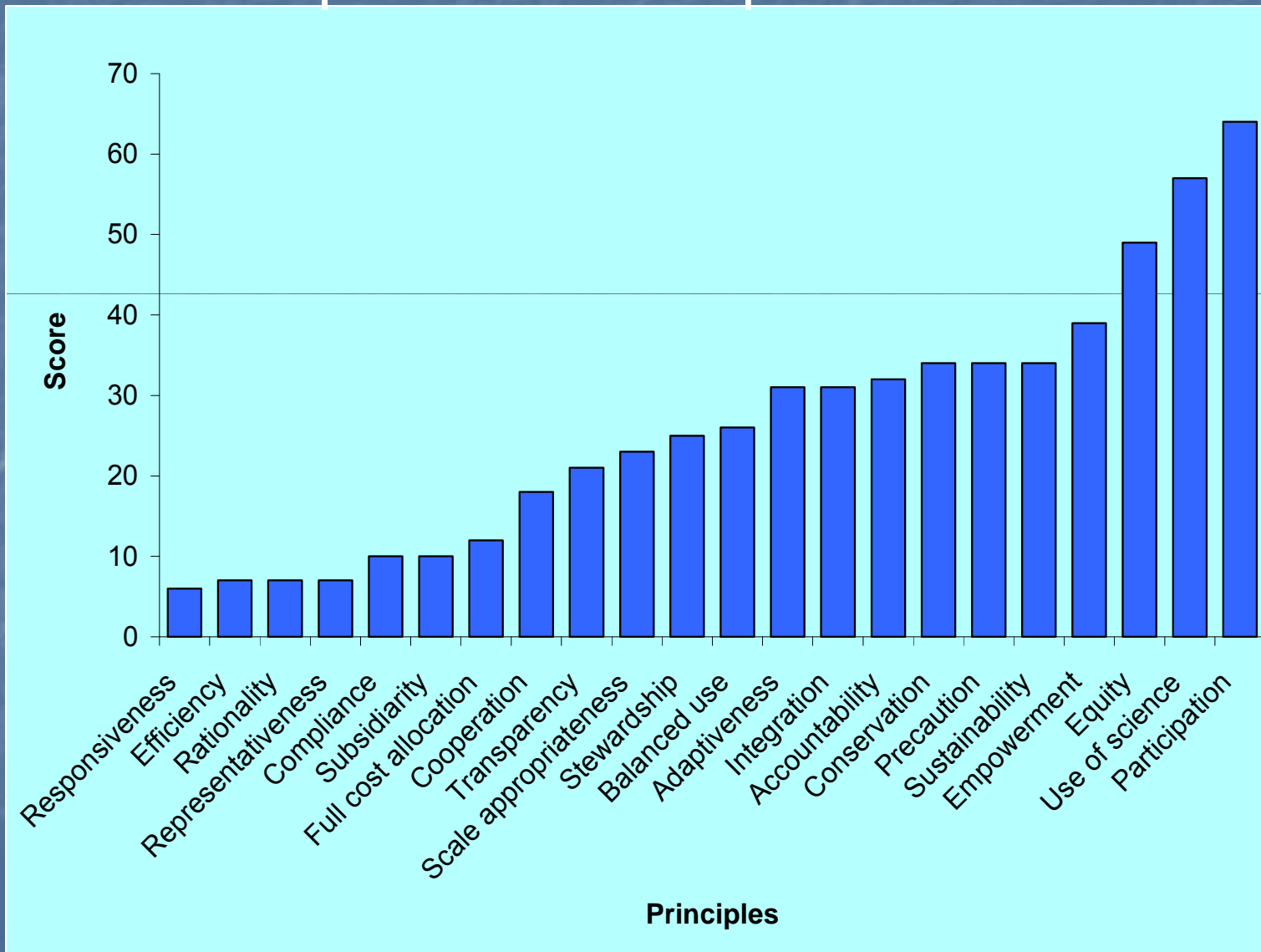
The Barbados EBM conference and findings

Where they came from and who they were



The Barbados EBM conference and findings

Principles seen as important



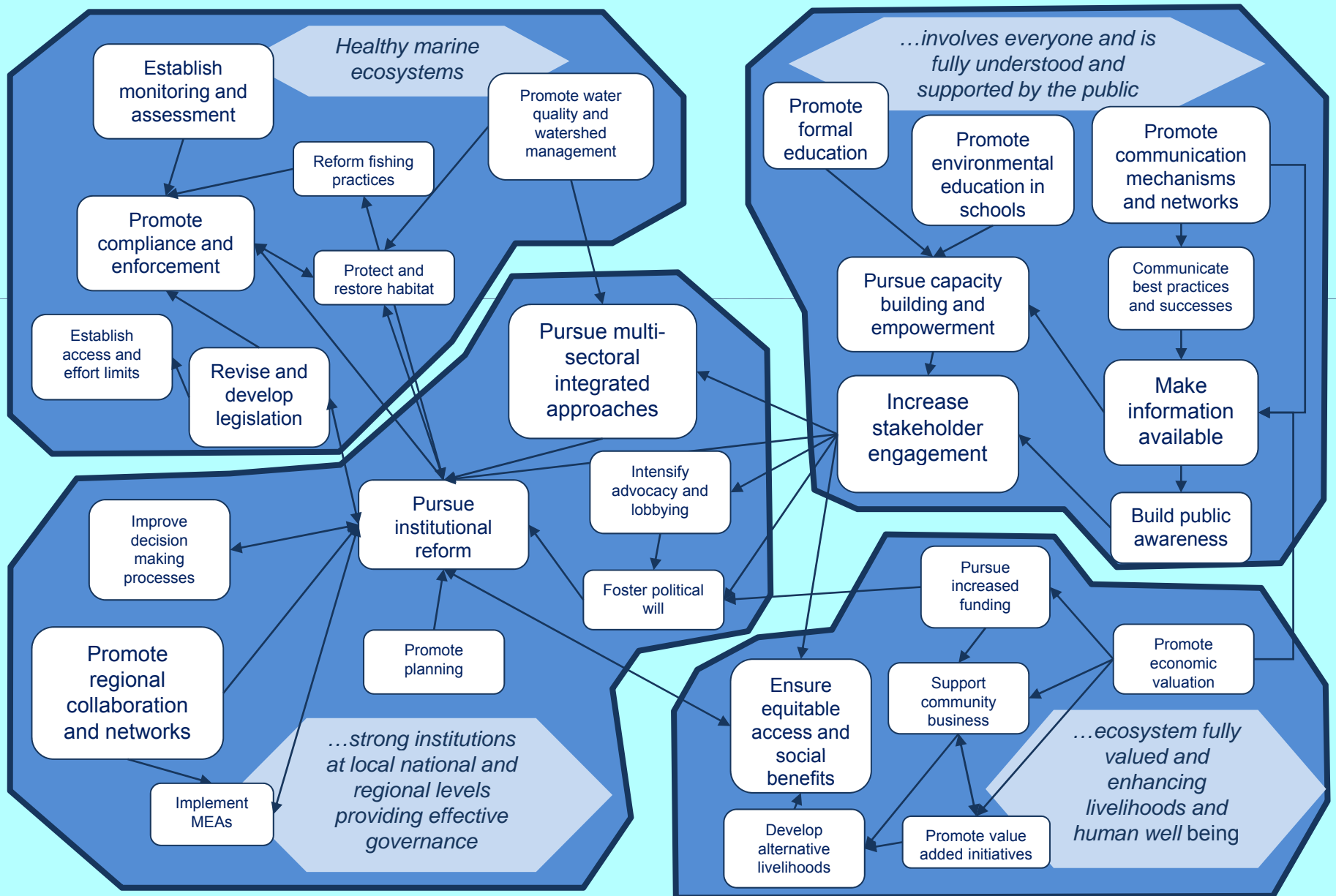
The Barbados EBM conference and findings

Symposium vision for marine EBM in the Wider Caribbean

**Healthy marine ecosystems in the Wider Caribbean that
are fully valued and protected through strong
institutions at local, national and regional levels
providing effective governance that involves everyone,
is fully understood and supported by the public, and
enhances livelihoods and human well-being**

This vision was assembled from the elements of the four individual visions that emerged in working group sessions for reef ecosystems, pelagic ecosystems, continental shelf ecosystems and governance .

Network of strategic directions



Discussion

What do you see as the main challenges to implementing EBM?

Topic 4

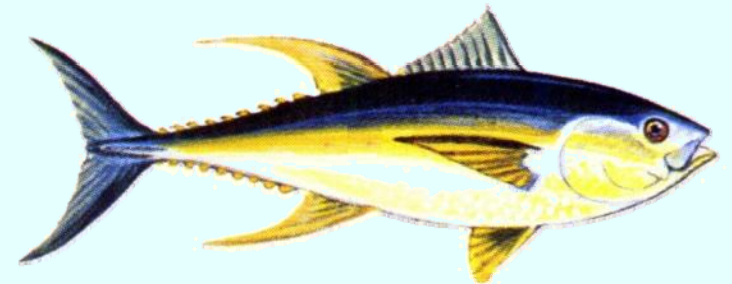
The Large Marine Ecosystem (LME) Governance Framework

What's different about Caribbean fisheries?

No large commercial revenue earning fishery to fund RFMO as in:

- **West Central Pacific Commission (tunas)**
- **SE Atlantic (SEAFO)(orange roughy)**
- **NW atlantic (NAFO) (groundfish)**

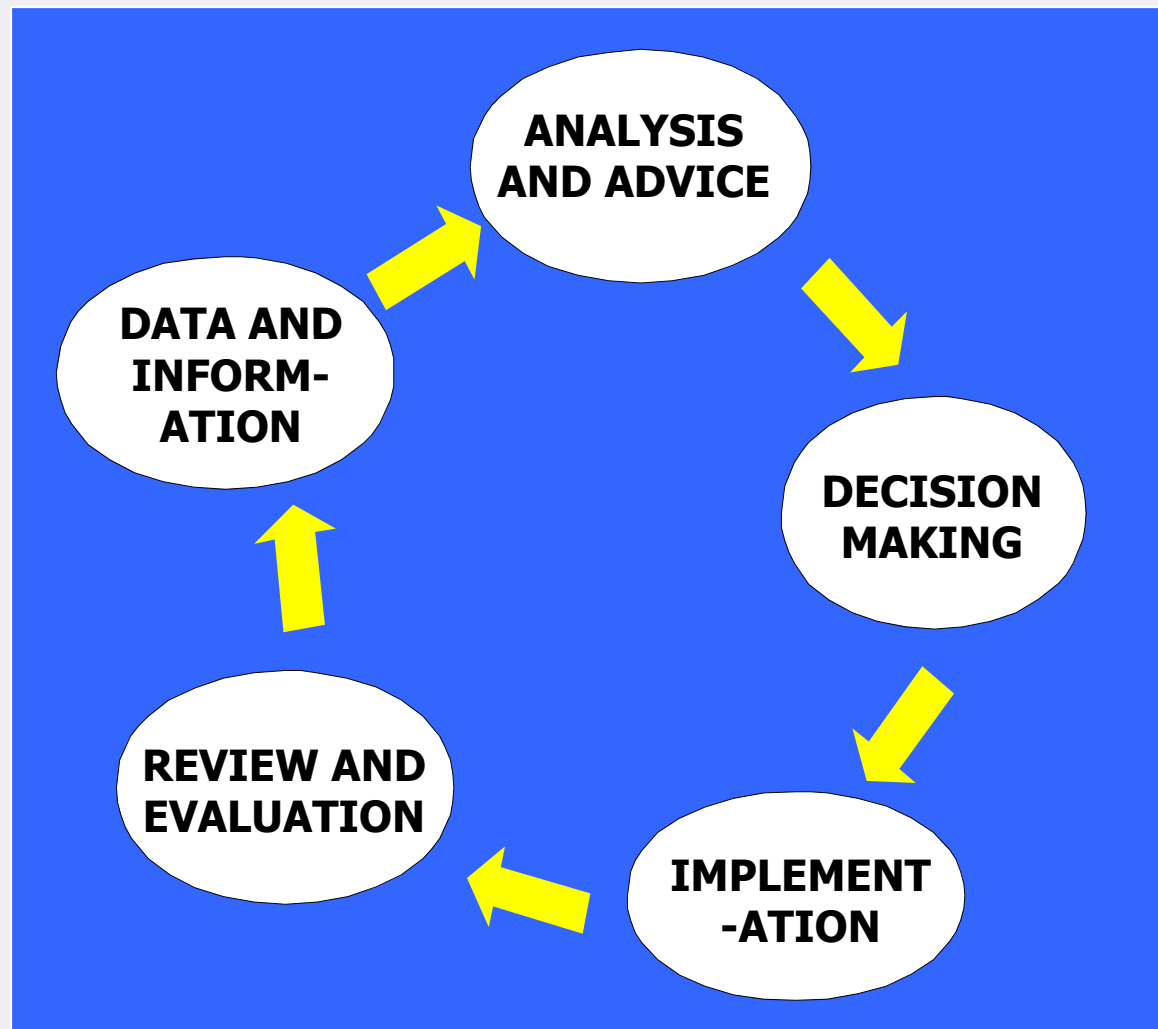
So What may be the way forward in the Caribbean?



We propose that a networking approach that makes the best use of existing organisations?

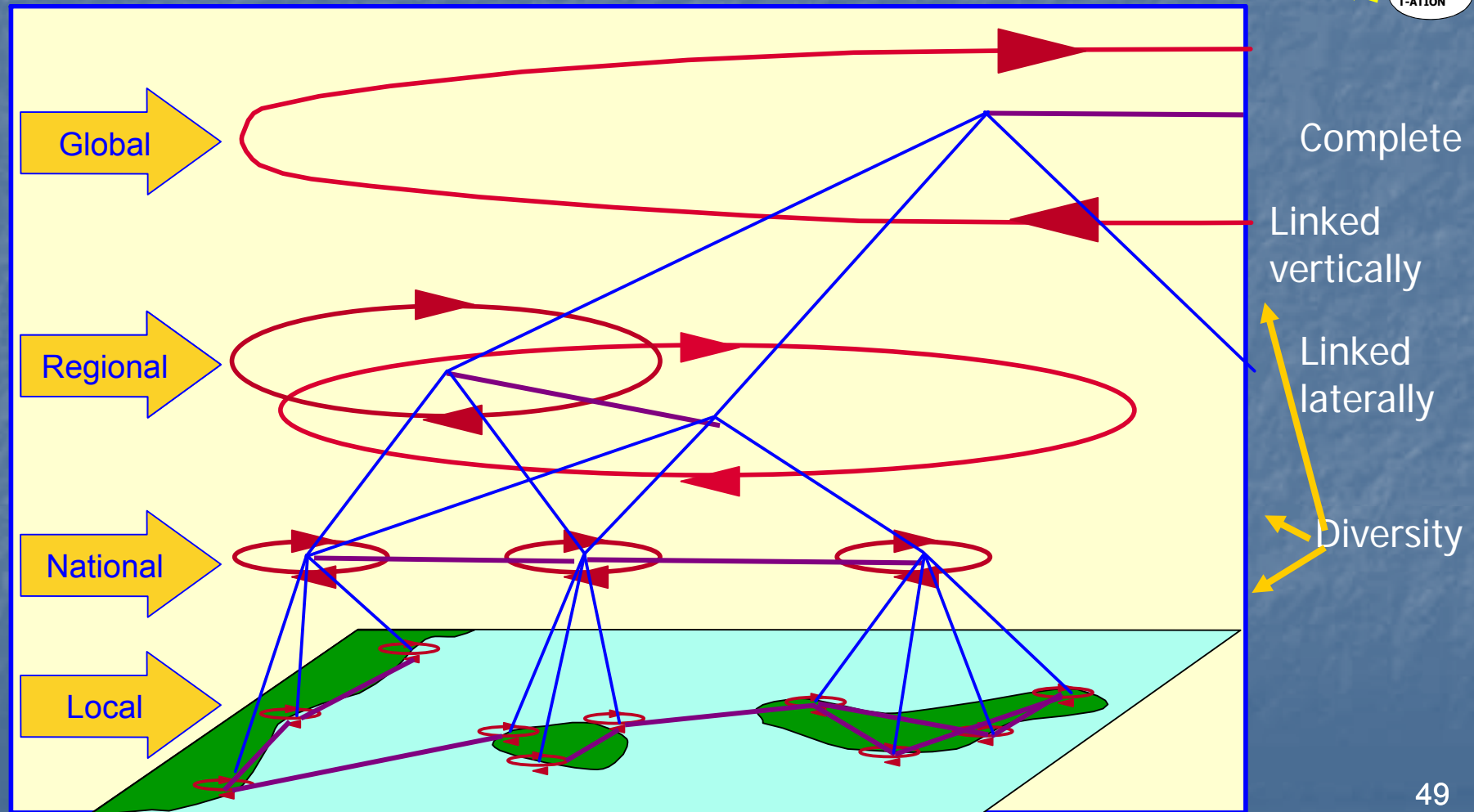
A networking approach that makes the best use of existing organisations?

We believe this can be approached through a governance framework using the conventional policy cycle -- Like this one.

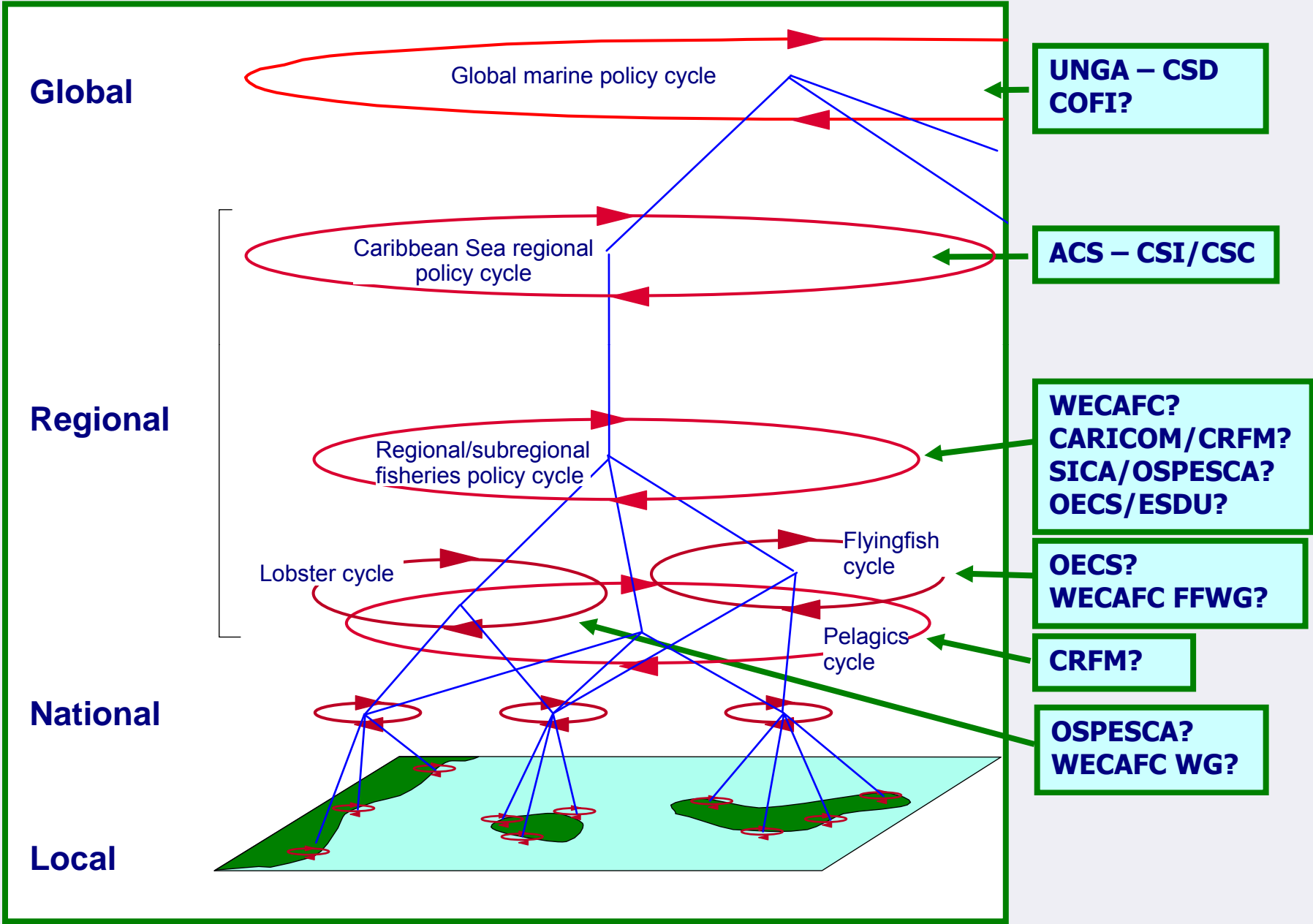


The CLME Project – Governance framework

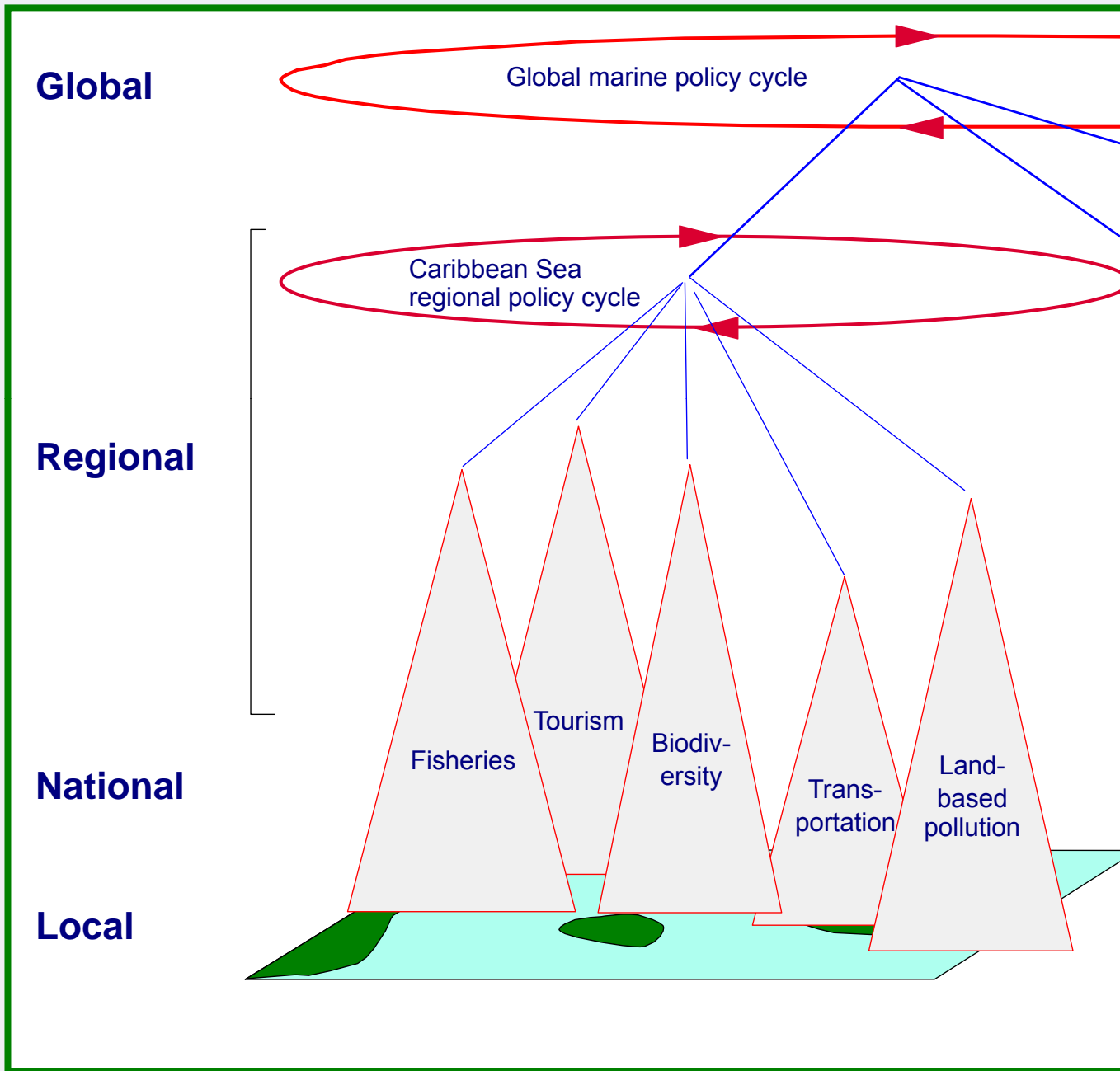
Building a multi-scale policy-cycle based governance framework



LME Governance Framework for Caribbean Fisheries



LME Governance Framework



Building the LME Governance Framework

“Learning by doing”

Long-term goal

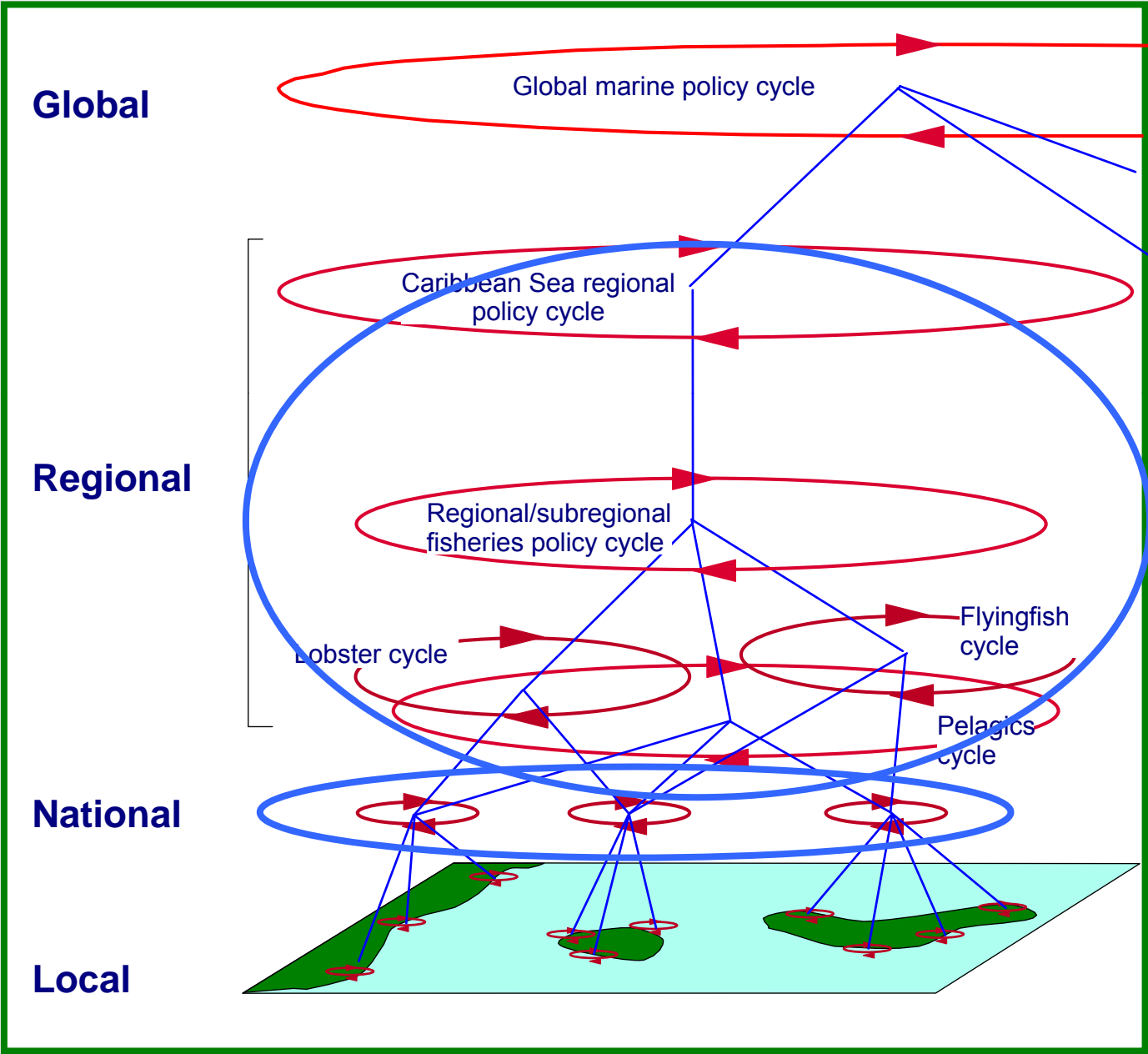
Fully-functional policy cycles at all appropriate levels with the appropriate vertical and lateral linkages.

Framework building interventions

- Interventions can be:
 - Approached incrementally by targeting deficient areas
 - Specifically targeted at:
 1. Establishing or completing policy cycles
 2. Building or enhancing linkages

This framework may be an adequate basis for monitoring

LME Governance Framework for Caribbean Fisheries



The CLME Project Structure:

Building an integrated, ecosystem-based approach for the Caribbean Sea

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 the shared stocks.

Eastern Caribbean Flyingfish

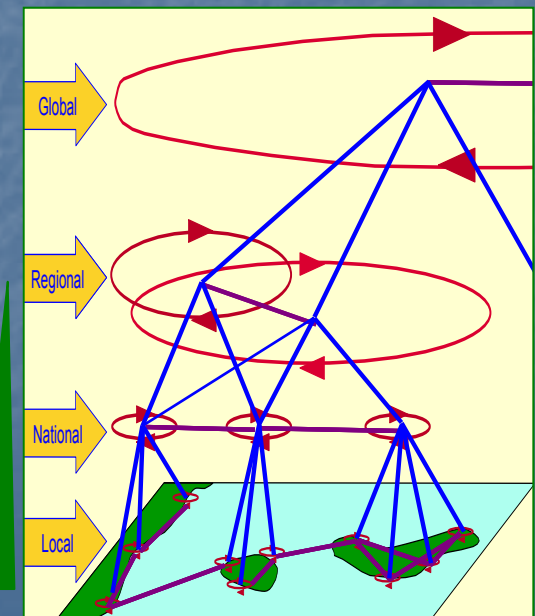
Establishes and operates sub-regional cycle for cooperation in management

Reef Fisheries and Biodiversity

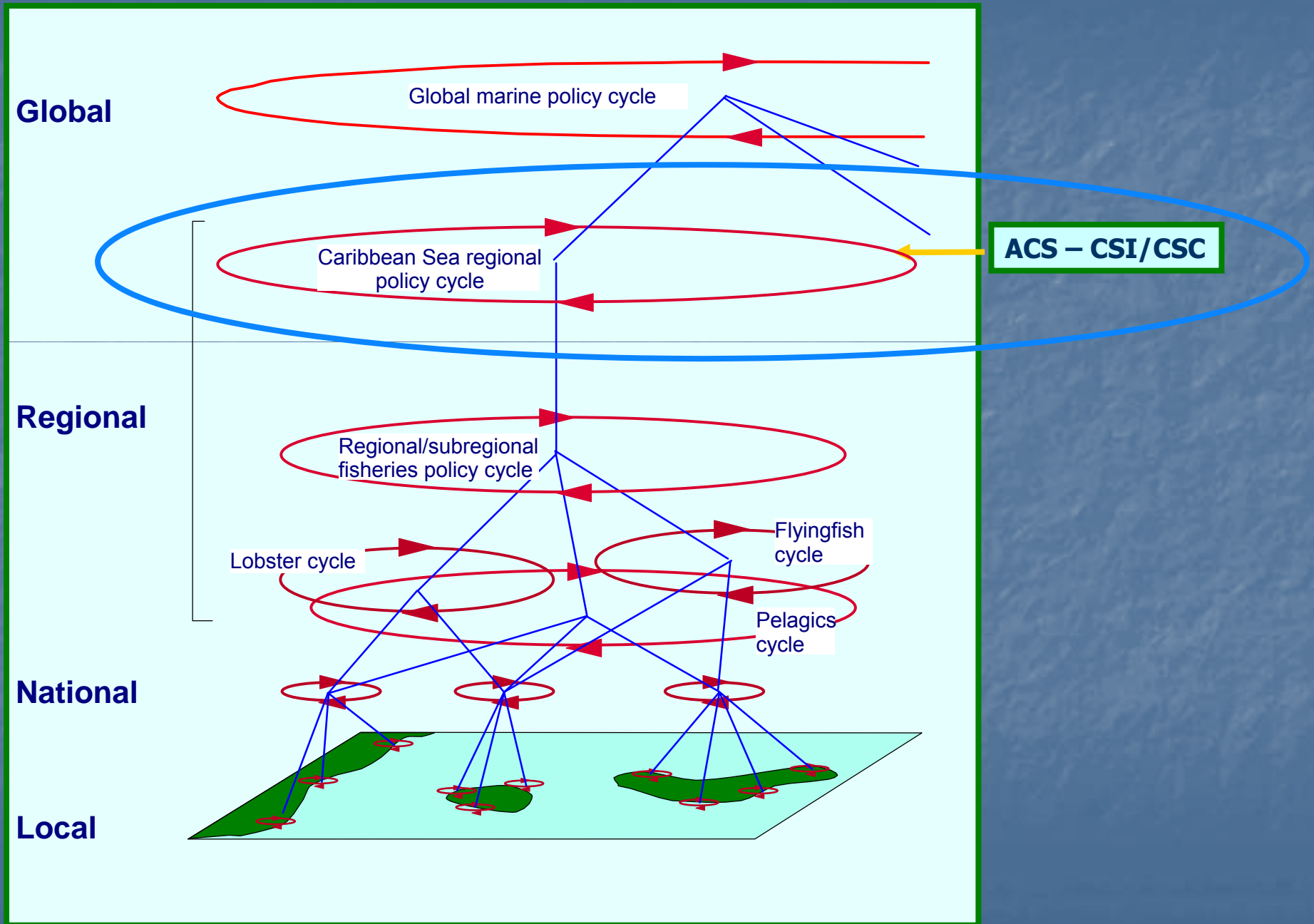
Enhances local level linkages among fishery and non-fishery stakeholders and upward linkages to national and regional levels

Spiny Lobster

Enhances local level capacity and linkages among western Caribbean fishery stakeholders and upward linkages to national and regional levels

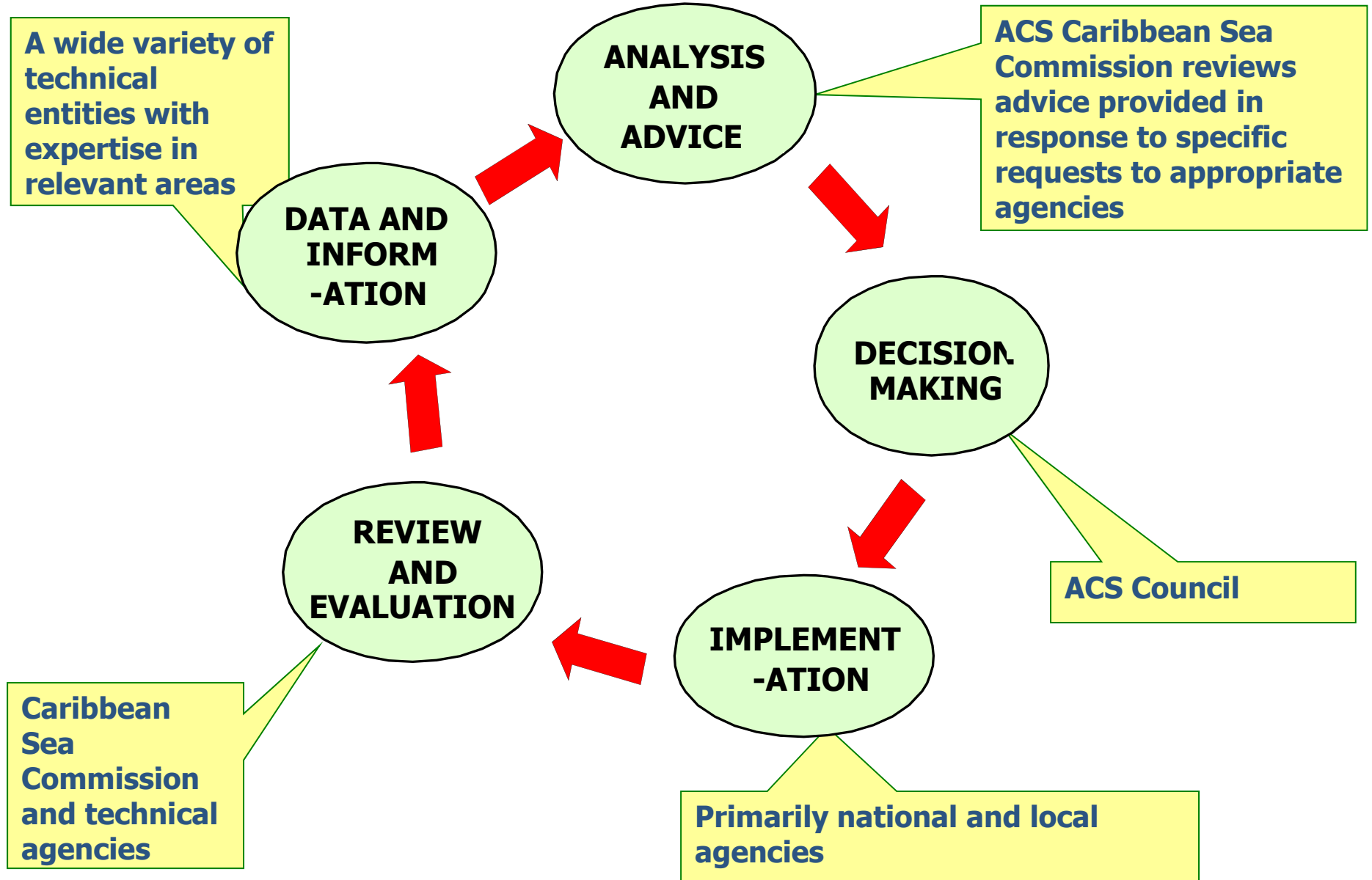


Wider Caribbean Region science policy interface



ACS-CLME Partnership

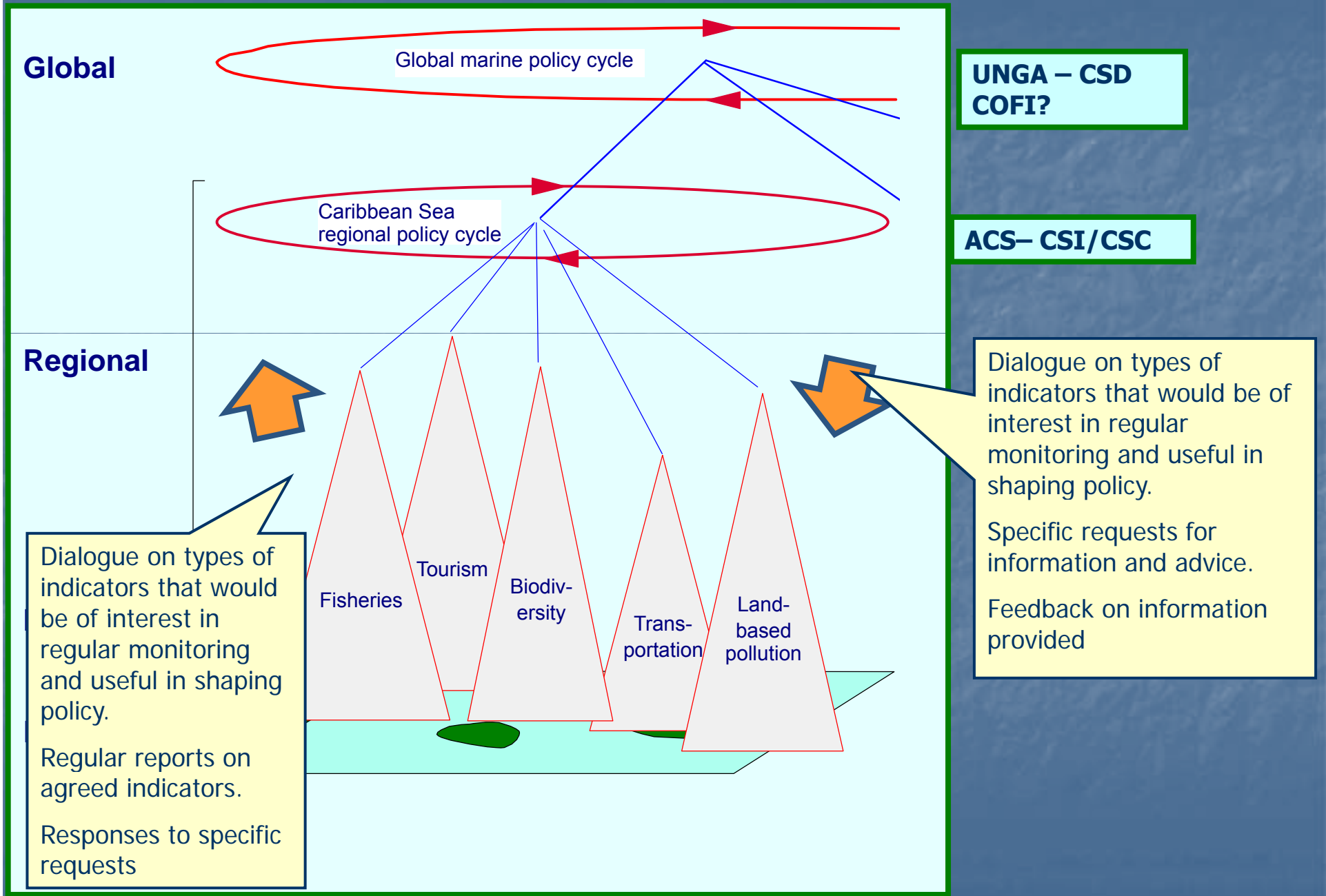
ACS policy cycle for living marine resources



Issues of large scale and complexity in the Wider Caribbean

- Lots of technical work has been done
- Has had little impact on governance
- Many local efforts at management
- Uncoordinated and disconnected at regional level
- Duplication of effort

CLME and CSI - Monitoring and reporting



What does this mean in technical terms

ACS/CSC.....

- Must have access to timely and comprehensive information and analyses on matters of importance.
- This should be on a regular cycle, but...
- When gaps are identified, there can be activities targeted to filling those gaps

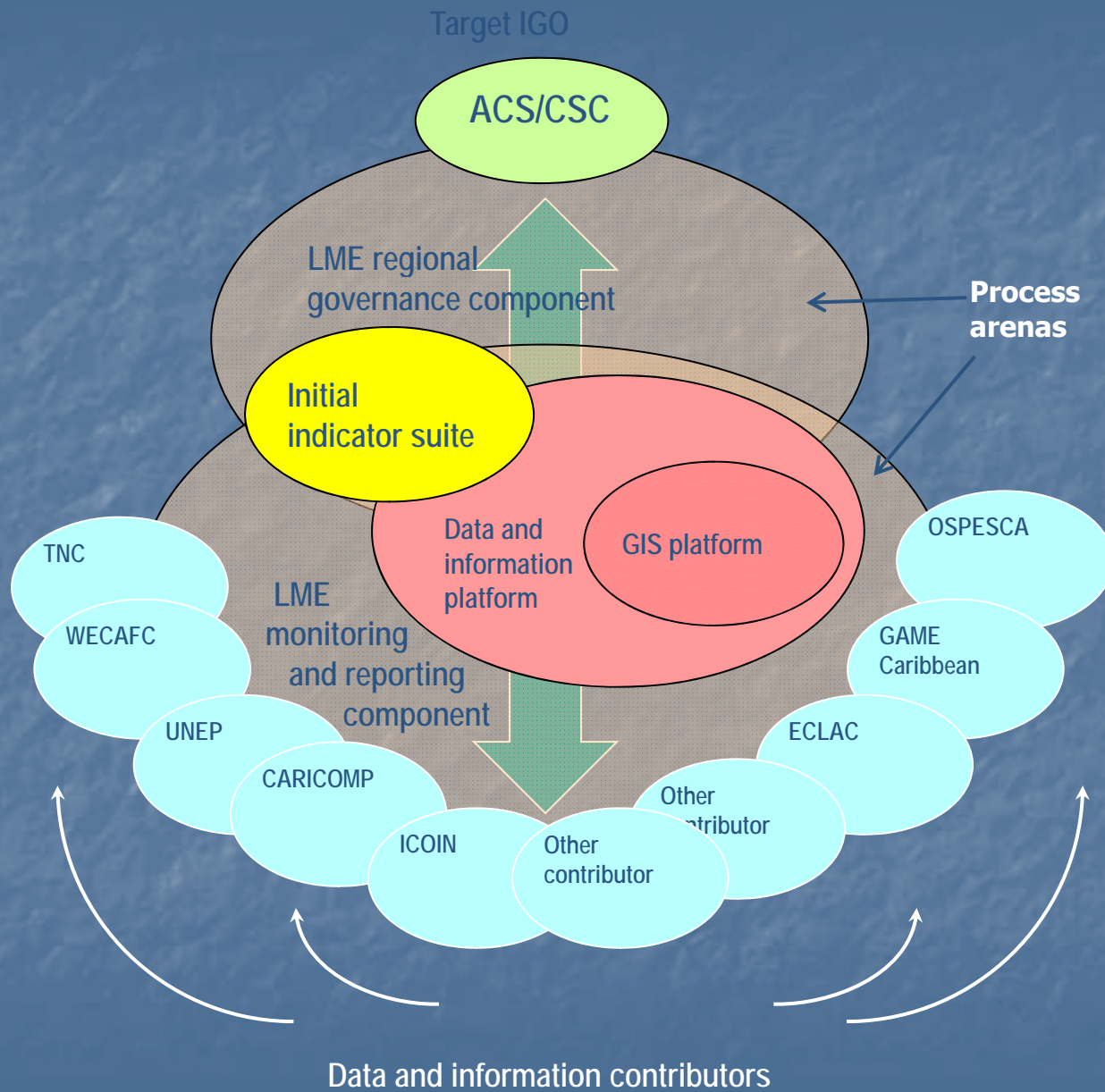
But.....

- Does not have resources to carry out the information gathering and analysis that would be required

So.....

- Must develop relationships with organizations and institutions already doing this in the region and promote their development to fill gaps

CSI/CSC – Science policy interface



Initial focus of the Commission

- Start in one area and expand from there into the others
- Living marine resources
- Caribbean Large Marine Ecosystem and Adjacent Areas (CLME) Project provides an opportunity
 - Involves all countries of Wider Caribbean
 - Agreed need for regional policy advisory mechanism
 - Brings funds to the partnership

Progress thus far

- Commission established
- Structure and operation approved
- Initial planning meetings for Subcommissions
- Initial linkages with partners and donors
 - CARICOM
 - SICA
 - OECS
 - CLME Project
 - Finland, Spain, Korea, Turkey?

Planning for operationalisation

- Develop a clear plan for how to proceed over the next 4-5 years
 - Engage partners
 - Allow funders to see where they can contribute
 - Communicate to the UNGA

'Expert Consultation on Operationalisation of the Caribbean Sea Commission'

Building a science-policy interface for ocean governance in the Wider Caribbean

The consultation - Purpose

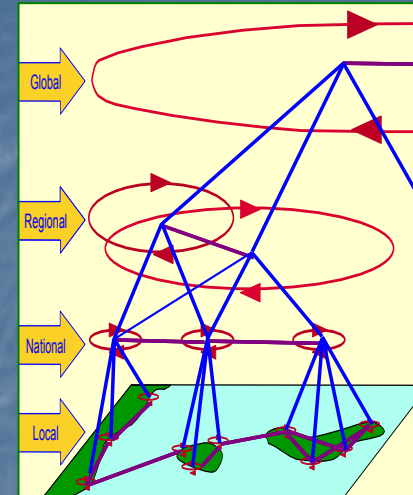
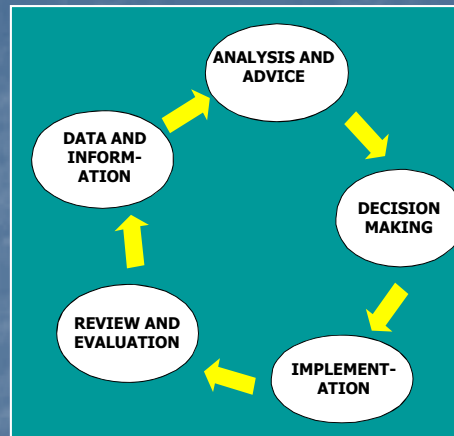
- Share information with critical partners on the plans for and status of 'Operationalisation of the Caribbean Sea Commission' ;
- Obtain feedback on the feasibility of the proposals and ideas for improvement of the plan;
- Build a common vision of how the partners can work together to achieve the overall goal of ocean governance in the Wider Caribbean Region.

National engagement

National engagement in the ocean governance process is critical for its success:

- Develop an intersectoral approach to ocean affairs
- Provision of expertise and information
- Signing of regional agreements
- National enabling and implementation

Sustainable Governance of the Caribbean Sea



Discussion Questions

- Does this approach fit with your perception of governance and of governance architecture needed at large scales?
- What would need to be modified for this to be implemented in your area?
- What would be needed to implement this in your area?