



Caribbean Large Marine Ecosystem (CLME) Project

Results from the preliminary Transboundary Diagnostic Analysis (TDA)

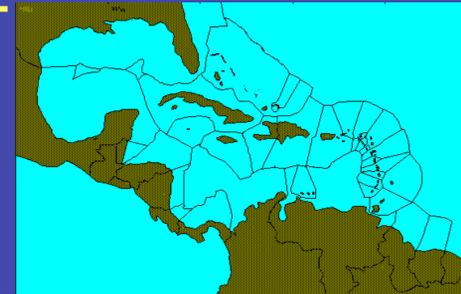


Transboundary Diagnostic Analysis (TDA)

- Is a scientific and technical fact-finding analysis
- It should be an objective assessment and not a negotiated document
- It acts as a diagnostic tool for measuring the effectiveness of SAP implementation

All three major areas of concern are important for the CLME

- **Over-exploitation of living marine resources (LMR)**
- **Habitat degradation**
- **Pollution**



CLME preliminary TDA includes:

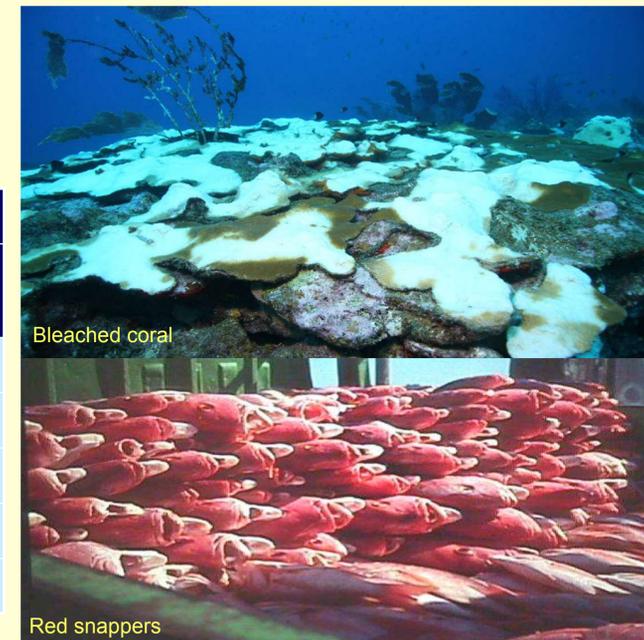
- Specific information on the Central/South American; Guianas-Brazil; and Insular Caribbean subregions
- Synthesis of major transboundary issues in each of three sub-regions, preliminary causal chain analysis and options for the SAP

Commonalities and differences across the 3 subregions

Impacts of Over-Exploitation of Shared LMRs		
GUIANAS/BRAZIL SUBREGION	CENTRAL/SOUTH AMERICA SUBREGION	INSULAR CARIBBEAN SUBREGION
Changes in species and size composition		
Threats to biodiversity from Illegal, Unreported and Unregulated (IUU) fishing		
Reduced abundance of fish stocks due to destructive fishing practices	Reduced abundance of fish stocks	
Excessive by-catch and discards of demersal species in shrimp fishery		

Impacts of Habitat Degradation		
GUIANAS/BRAZIL SUBREGION	CENTRAL/SOUTH AMERICA SUBREGION	INSULAR CARIBBEAN SUBREGION
Reduction/loss of biodiversity		
Modification or loss of ecosystem structure and function		
Reduction in fisheries productivity		
Introduction of invasive species		

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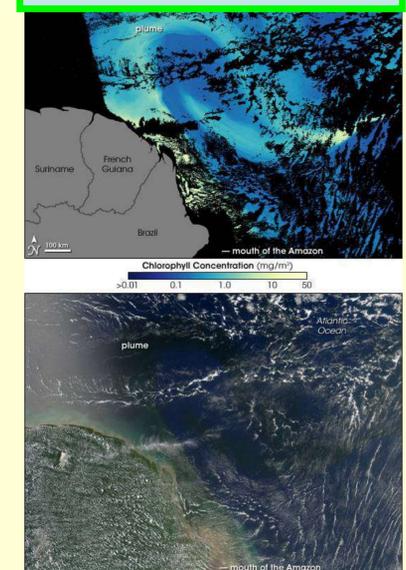
Identifying root causes across the 3 subregions

Possible Causes of Over-Exploitation of Shared LMRs		
GUIANAS/BRAZIL SUBREGION	CENTRAL/SOUTH AMERICA SUBREGION	INSULAR CARIBBEAN SUBREGION
Lack of integrated governance structures and weak governance		
Lack of collaborative management and consensus at the regional level		
Low priority afforded fishing relative to other economic sectors		
Open access rights policies divorced from sustainability levels, insufficient technical and financial capacity, lack of EEZ delimitation		
Rural poverty, illiteracy, cultural and language barriers		
The need for adequate returns on investment by shrimp industry	Lucrative nature of the lobster fishery Excessive nationalism	Growing population pressure for food and employment

Possible Causes of Habitat Degradation		
GUIANAS/BRAZIL SUBREGION	CENTRAL/SOUTH AMERICA SUBREGION	INSULAR CARIBBEAN SUBREGION
Inadequate integrated planning and development strategies at all levels		
Poor legal framework at the regional and national levels		
Weak and ineffective regulatory and institutional frameworks and poor information base on ecosystem economic value		
Natural phenomena including climate change & hurricanes		
	Cultural differences and language barriers	
	Growing population pressure for food, jobs and housing	

Possible Causes of Pollution		
GUIANAS/BRAZIL SUBREGION	CENTRAL/SOUTH AMERICA SUBREGION	INSULAR CARIBBEAN SUBREGION
Weak and ineffective legal, regulatory, and institutional frameworks		
Inadequate integrated planning and development strategies		
Limited financial and human resources		
Poverty and illiteracy	Poor surveillance and enforcement, and limited compliance	
Need for adequate returns on investment	Lack of adequate data and information due to irregular or no monitoring and assessment	

Transboundary nature of the Amazon River plume in the Guianas-Brazil subregion (NASA)



The conceptual basis



The CLME Project - Overall objective

Sustainable management of the shared living marine resources of the Caribbean LME and adjacent regions through an integrated management approach that will meet WSSD targets for sustainable fisheries

CLME Project

Central/SA sub-region
Belize
Colombia
Costa Rica
Guatemala
Honduras
Mexico
Nicaragua
Panama
Venezuela

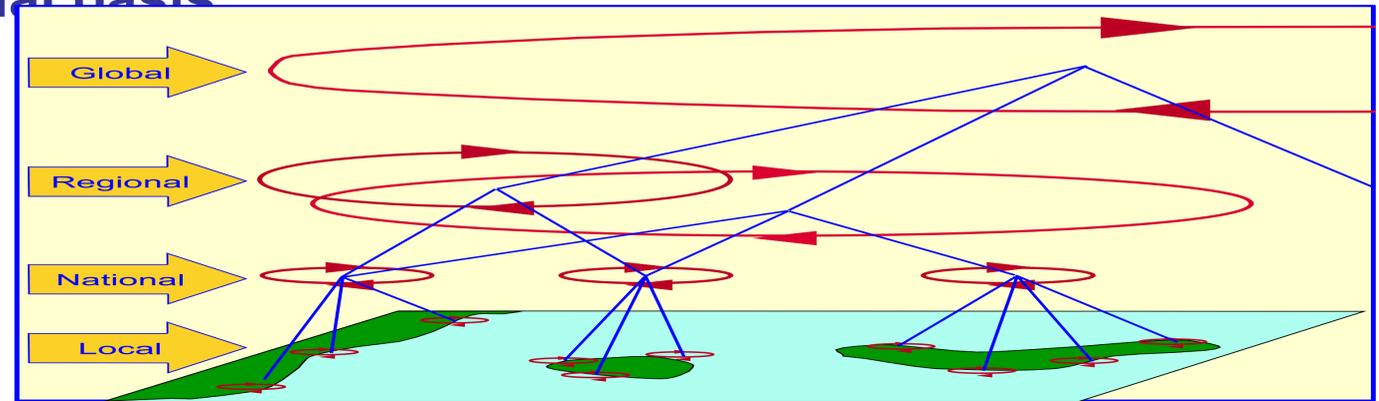


19 territories of France, the Netherlands, UK, US

Guianas/Brazil sub-region
Brazil, Guyana, Suriname, Trinidad & Tobago, and Venezuela

Insular Caribbean sub-region
Antigua
Bahamas
Barbados
Cuba
Dominica
Dominican Republic
Grenada
Haiti
Jamaica
St. Kitts/Nevis
St. Lucia
St. Vincent & the Grenadines

Other current partners include the ACS, CoML, CRFM, Cropper Fdn., FAO-WECAFC, GEF, IOCARIBE, IOCARIBE-GOOS, NOAA, OAS, OECS, OLDEPESCA, OSPESCA, RSMAS, TNC, UNDP, UNECLAC, UNEP, UWI (CERMES)



Policy cycles differ

Policy cycles may pertain to a variety of situations, e.g. fisheries or environment.

Cycles at different levels may have different characteristics. For example:

- Local level cycles may be community or private sector driven,
- National level cycles are likely to be Government driven,
- Regional ones are likely to be driven by intergovernmental organizations
- Those at the highest level will usually be driven by International treaties and the organisations responsible for their oversight.

Cycles may be:

- Participatory, involving a range of stakeholders, or conducted with a single policy actor
- Integrated within a single organisation or spread over several organisations.

Project activities in the first phase (four years)

The CLME Project will:

- Develop a full Transboundary Diagnostic Analysis (TDA) that identifies the priority areas of concern and their underlying causes and a Strategic Action Programme (SAP) to address these causes that is approved by all participating countries
- Carry out activities aimed at enhancing multi-scale ecosystem-based governance,
- Develop a multi-scale approach to monitoring and reporting on the status of the Caribbean Large Marine Ecosystem and providing strategic advice on future directions for sustainable use and conservation of living marine resources.
- Conduct resource-specific adaptive-learning projects aimed at demonstrating good governance at multiple scale levels based on fully-functional policy cycles and at informing the SAP.
 - Reef fisheries and biodiversity
 - Flyingfish
 - Lobster
 - Shrimp and groundfish

Partners and cofinancing

Although the focus will be on the weakest stages in the cycle – namely ‘analysis and advice’ and ‘decision making’ – the aim is to establish complete cycles, so partnering will be an important means of getting the inputs needed at all stages.

A particularly important input is data and information – research on living marine resources is diverse and active in the Wider Caribbean, albeit centralised in a few countries. Biological science research outputs, though available in the region, are often not ‘taken up’ in a policy cycle because ‘analysis and advice’ and ‘decision making’ stages are weak.

The diagram below shows how the policy cycle approach facilitates the identification of stakeholders and their inputs at each stage in the cycle.

The CLME project, and the governance systems it seeks to establish, will provide a means for research to have policy-relevant importance. Research projects and programmes that are generating relevant information will be important in financing environmental management problems and that can lead to advice that is useable by decision makers: local groups, national committees, regional scientific bodies and NGOs



Lucia Fanning, Robin Mahon, Patrick McConney, Bertha Simmons

CLME PCU
Centre for Resource Management and Environmental Studies (CERMES)
The University of the West Indies, Barbados

The CLME approach

LME projects typically comprise five modules:

- Productivity
- Fish and fisheries
- Pollution
- Socioeconomics
- Governance

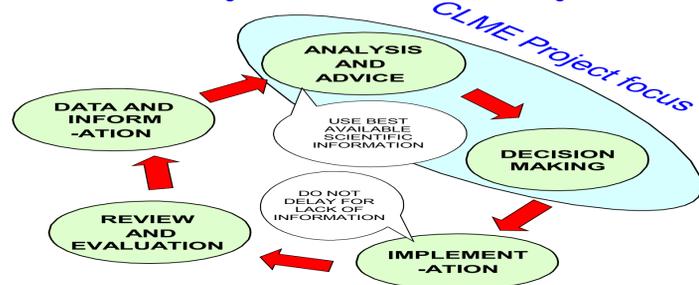
The CLME Project will focus on governance which it will treat as

“Governance is the whole of public and private interactions that are initiated to solve societal problems and to create societal opportunities” and defensible footing.



Interactive Fisheries Governance 2005

Therefore, it is clear that governance is much more than government.



The LME Governance Framework

Multi-level nested governance as depicted in the diagram in the next column is a reality in the Wider Caribbean given its geopolitical complexity the diversity of its resource base. However:

- The scales at which the cycles take place are not always appropriate to purpose,
- The linkages needed are often weak or at inappropriate points in the cycles,
- Cycles are often incomplete.

Rather than creating new organisations, emphasis on scale appropriateness and linkages may be the most effective way to enhance transboundary living marine resource governance in the Wider Caribbean.

Governance framework building interventions

➤ The long-term goal is fully-functional policy cycles at all appropriate levels with the appropriate vertical and lateral linkages.

➤ Interventions can be specifically targeted at:

- Establishing a multi-scale policy cycle

The policy cycle foundation

The governance aspect of the CLME Project is built around the propositions that:

- Effective LME level governance requires complete functioning policy cycles at multiples scale levels
- These cycles must be linked vertically
- Horizontal links are important also
- For effective governance, links must be present at the ‘analysis and advice’ and ‘decision-making stages’ (links at other stages serve to enhance governance performance but are insufficient to ensure effective governance)

Building a multi-level policy-cycle based governance framework

Transboundary diagnostic analysis
Assesses issues to be addressed in activities

Strategic Action Programme
Develops agreed SAP 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

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

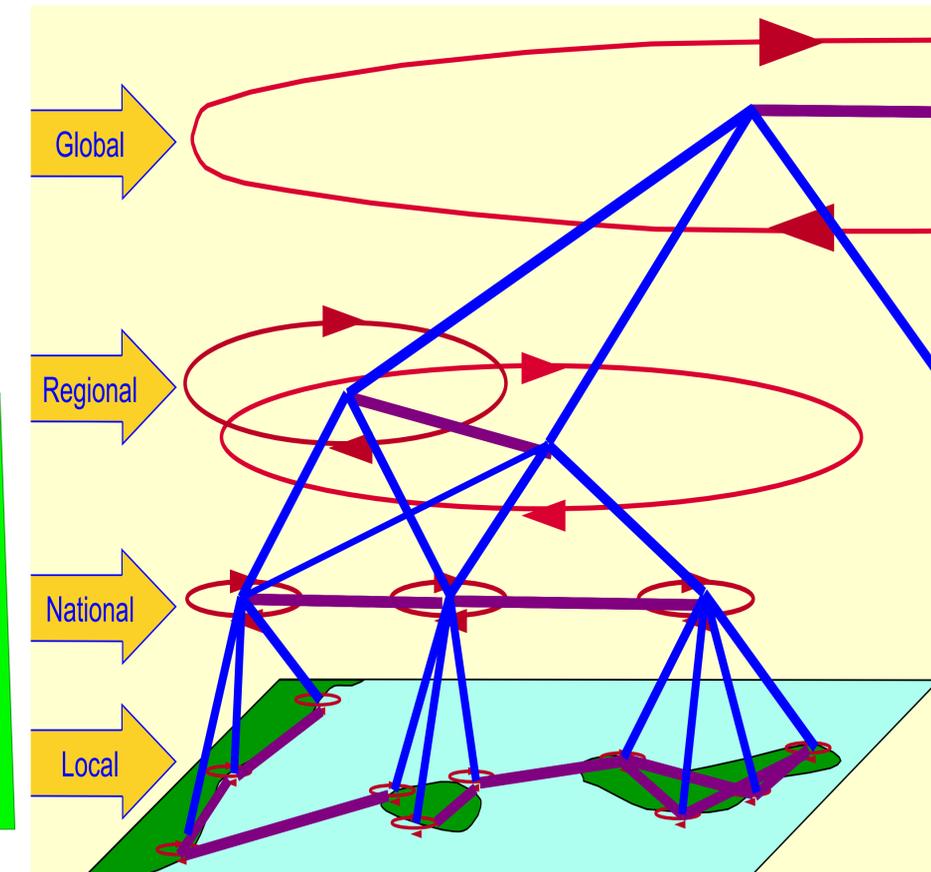
Establishes and operates sub-regional cycle for cooperation in management

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



Responding to key transboundary priorities

Project Design

The CLME Project activities directly address some of the key priorities for transboundary living marine resources identified in the TDA.

In addition to refining and completing the preliminary TDA, the project will implement activities that will attempt to establish/strengthen policy cycles and linkages at multiple levels to inform the development of the Strategic Action Programme to be implemented by the 26 member countries and project partners.

Transboundary Diagnostic Analysis (TDA)	Strategic Action Programme (SAP)
<ul style="list-style-type: none"> ➤ Based on existing information and characteristics, scope and identify underlying causes of transboundary issues relating to management of LMRs from an ecosystem perspective. ➤ Leads to identification of priority interventions for inclusion in the SAP needed to address underlying/root causes. ➤ Includes causal chain analyses, stakeholder analysis, public involvement and communication strategy, institutional mapping, legislative review and socioeconomic evaluation ➤ Conducts pre-feasibility studies of key interventions to inform SAP development 	<ul style="list-style-type: none"> ➤ Identifies policy, legal and institutional reforms and investments needed to address the priority transboundary problems. ➤ Creates a management and governance structure for the Caribbean LME, utilizing the strengths inherent in existing institutions and structures before creating new ones ➤ Promotes the arrangements needed to ensure that all LMR governance activities are linked into the LME-wide governance framework ➤ Establishes a monitoring and evaluation framework based on a suite of GEF IW indicators and

Large Pelagics

Proposed activities led by UWI CERMES:

- Get Caribbean countries more involved in the International Commission for Conservation of Atlantic Tunas (ICCAT) which has the mandate to manage ocean species, e.g. yellowfin tuna, billfishes, swordfish
- Establish a functional policy cycle for management of regional large pelagics not currently being addressed by ICCAT, e.g. dolphinfish, blackfin tuna, wahoo
- Assess status of key regional large pelagics

Flyingfish Demonstration Project

Proposed activities led by CARICOM CRFM:

- Stakeholder analysis at local, national and regional levels
- Enhance stakeholder capacity for effective involvement in governance processes at all levels
- Develop, and obtain stakeholder agreement for, an appropriate regional policy cycle for flyingfish building on the WECAFC Ad Hoc Working Group
- Identify and fill critical information gaps for ecosystem-based management

Reef Fisheries and Biodiversity Demonstration Project

Proposed activities led by UNEP/ CEP/RCU

- Strengthen existing management frameworks based on Ecosystem Based Management principles including lateral linkages among local entities and vertical linkages with national and regional policy cycles
- Review and analyze existing management regulations and enforcement mechanisms at selected sites
- Enhance public awareness and education, with particular emphasis on regulations and enforcement
- Transfer best practices and dissemination of lessons learnt
- Implement adaptive management and best practices

Purpose of Demonstration Projects

- Establish regular subregional management and policy cycles for the shared living marine resources of the Caribbean that will:
 - Utilize the best available information from all sources,
 - Develop regional management plans,
 - Provide advice to legitimate decision-making bodies,
 - Support transparent decision-making and timely implementation,
 - Promote Ecosystem-Based Management

Spiny Lobster Demonstration Project

Proposed activities led by SICA OSPESCA:

- Enhance operation of a subregional policy cycle for ecosystem-based management of lobster fisheries.
- Review existing fisheries information and identify gaps.
- Fill information gaps on migration, landings and fishing effort

Review management tools for lobster fisheries with a view to harmonizing them at regional scale

Shrimp and Groundfish Demonstration Project

Proposed activities led by FAO WECAFC:

- Stakeholder analysis at local, national and regional levels
- Enhance stakeholder capacity for effective involvement in governance processes at all levels
- Evaluate existing national and local policy cycles and linkages and recommend improvements for Ecosystem Based Management.
- Identify and obtain agreement on an appropriate sub-regional decision-making mechanism/forum (policy cycle) building on the WECAFC Ad Hoc Working Group
- Operate policy cycle for one iteration to implement recommendations and test subregional decision-making mechanism

CLME DEMO PROJECTS