

Institutionalizing the TDA-SAP approach *Indicators & target-setting for LMEs*

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Session 5: Meeting LME Data & Information Needs

Day of presentation: 1 October 2015

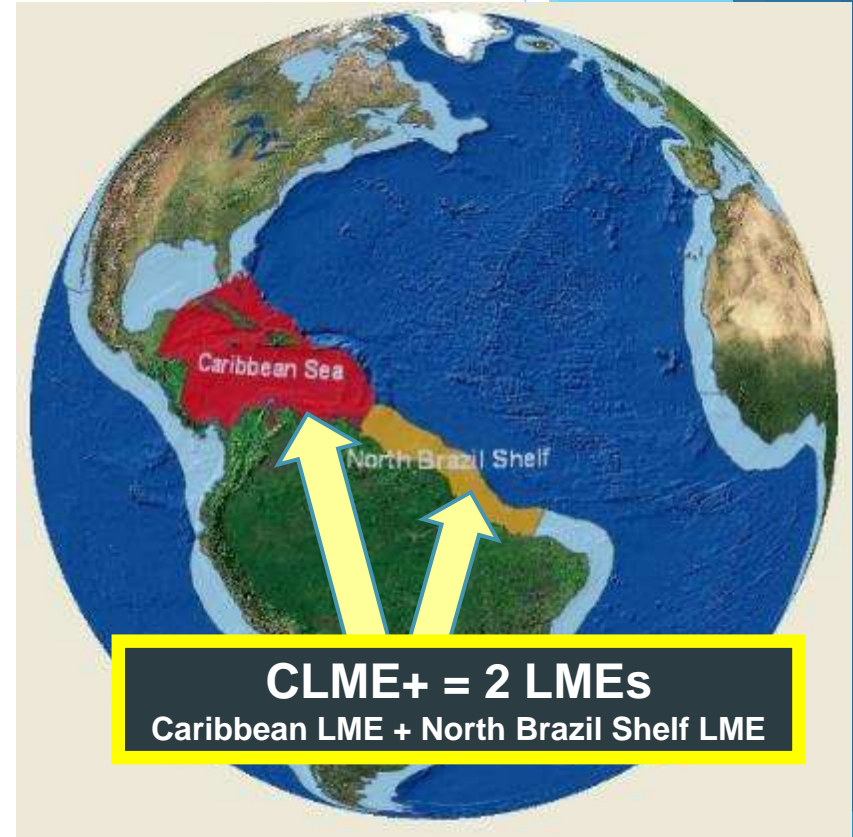
LARGE MARINE ECOSYSTEMS

Large Marine Ecosystems (LMEs) are regions of the world's oceans, *encompassing coastal areas from river basins and estuaries* to the seaward boundaries of continental shelves and the outer margins of the major ocean current systems, and/or occupying semi-enclosed seas.

LMEs typically cover relatively large areas, characterized by distinct bathymetry, hydrography, productivity, and trophically dependent populations of marine species (NOAA, 2014).

The LME concept was adopted by the Global Environment Facility (GEF) as a **meaningful geospatial unit for the implementation of an ecosystem-based management (EBM) approach**.

Due to the transboundary nature of many LMEs, their adoption as a management unit generally **requires inter-national coordination and collaboration**.



Globally, 66 different LMEs have been delineated

CHANGING STATES OF THE LMES: INDICATOR MODULES

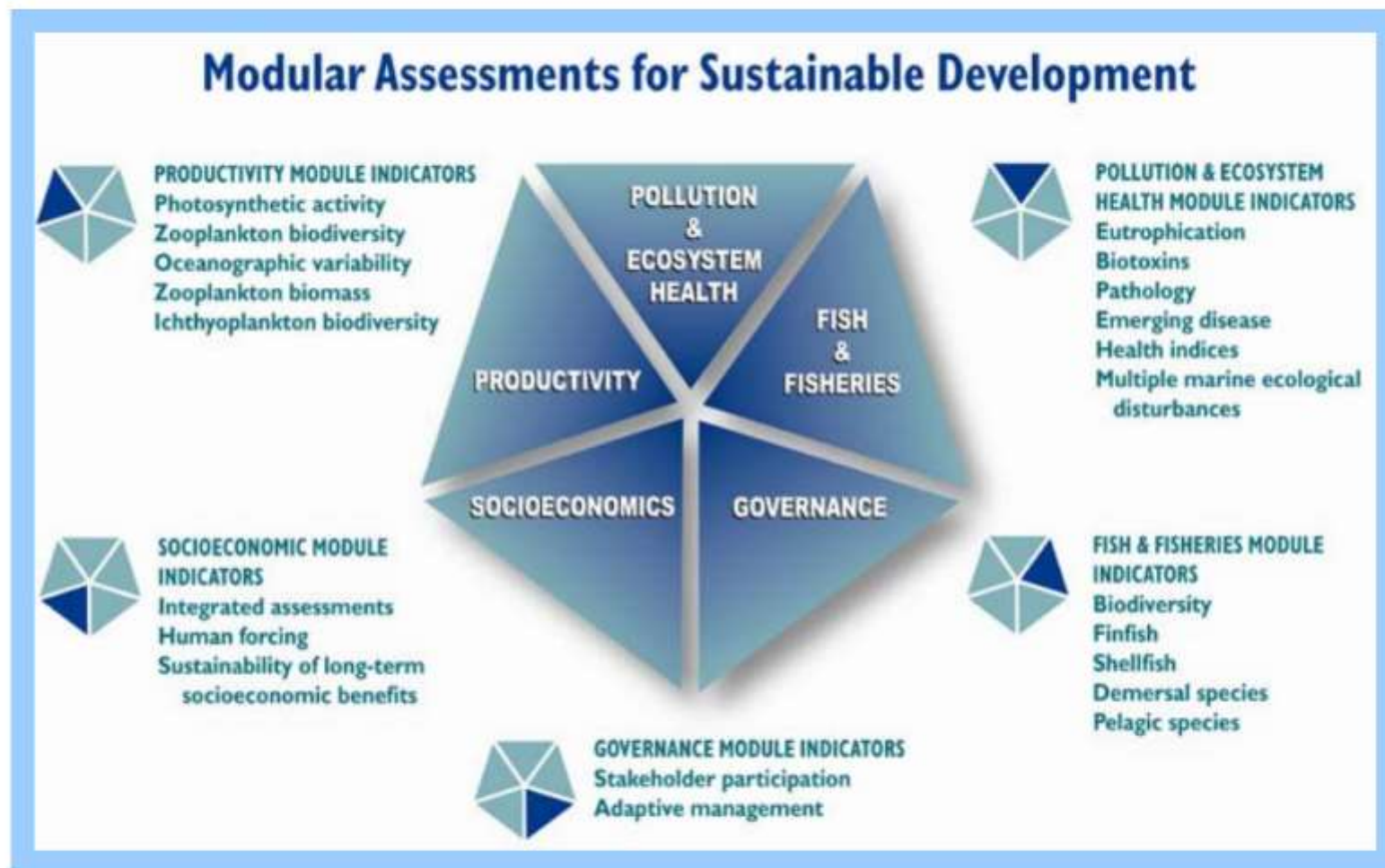
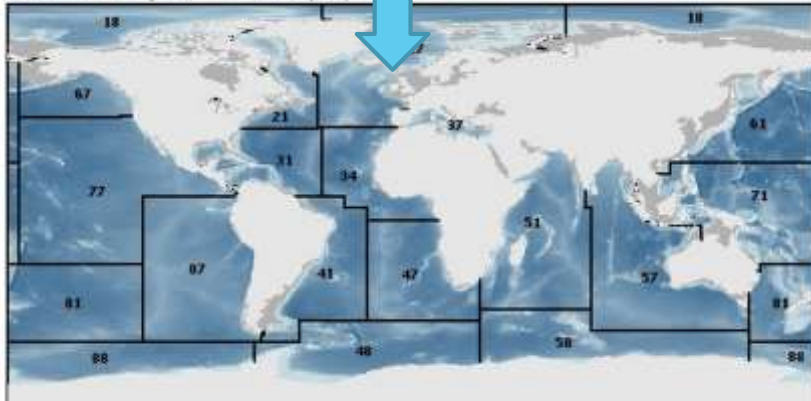


Figure 4. The Large Marine Ecosystem (LME) approach to sustainable development includes 5 modules with indicators.

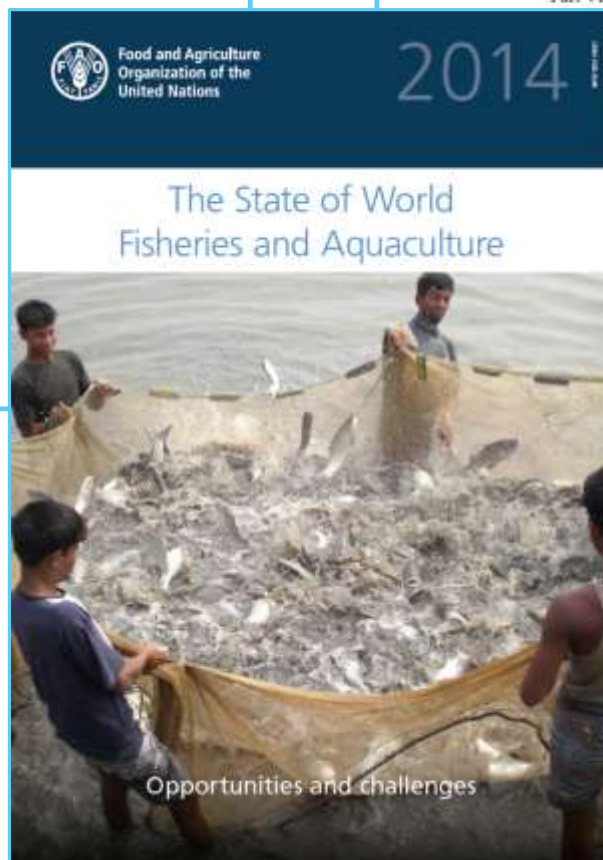


IOC Regional Sub-Commissions,
Committees, Programme Offices and
Project Offices



THE UNEP LARGE MARINE ECOSYSTEMS REPORT

A PERSPECTIVE ON CHANGING CONDITIONS IN
LMES OF THE WORLD'S REGIONAL SEAS



Summary of the first global integrated marine assessment

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ICES WGLMEBP - Meeting at IOC in Paris, 28-29 September 2015

Monday 28 September

- 14:00-14:45 Welcome, introduction, adoption of agenda
- 14:45-15:45 Agenda item a) *Gather information about past and current integrated ecosystem assessments (IEA) into an inventory of IEAs, their geographic scope or scale, and the reference points used*
- 15:45-16:15 Comfort break
- 16:15-17:30 Agenda item b) *Develop a brief synthesis of the most commonly used science-based indicators for ecosystem-based management*

Tuesday 29 September

- 09:00-10:45 Agenda item d) *Develop ecosystem overviews for LMEs in ICES core areas, Arctic and other LMEs as far as possible (in cooperation with LME projects)*
- 10:45-11:15 Comfort break
- 11:15-13:00 Agenda item e) *Identify areas of collaboration and mutual interest between ICES and LME groups, including knowledge transfer, communication and capacity development*

The First Meeting of the Regional Seas Indicators Working Group 23 October 2015, Istanbul

Working Documents

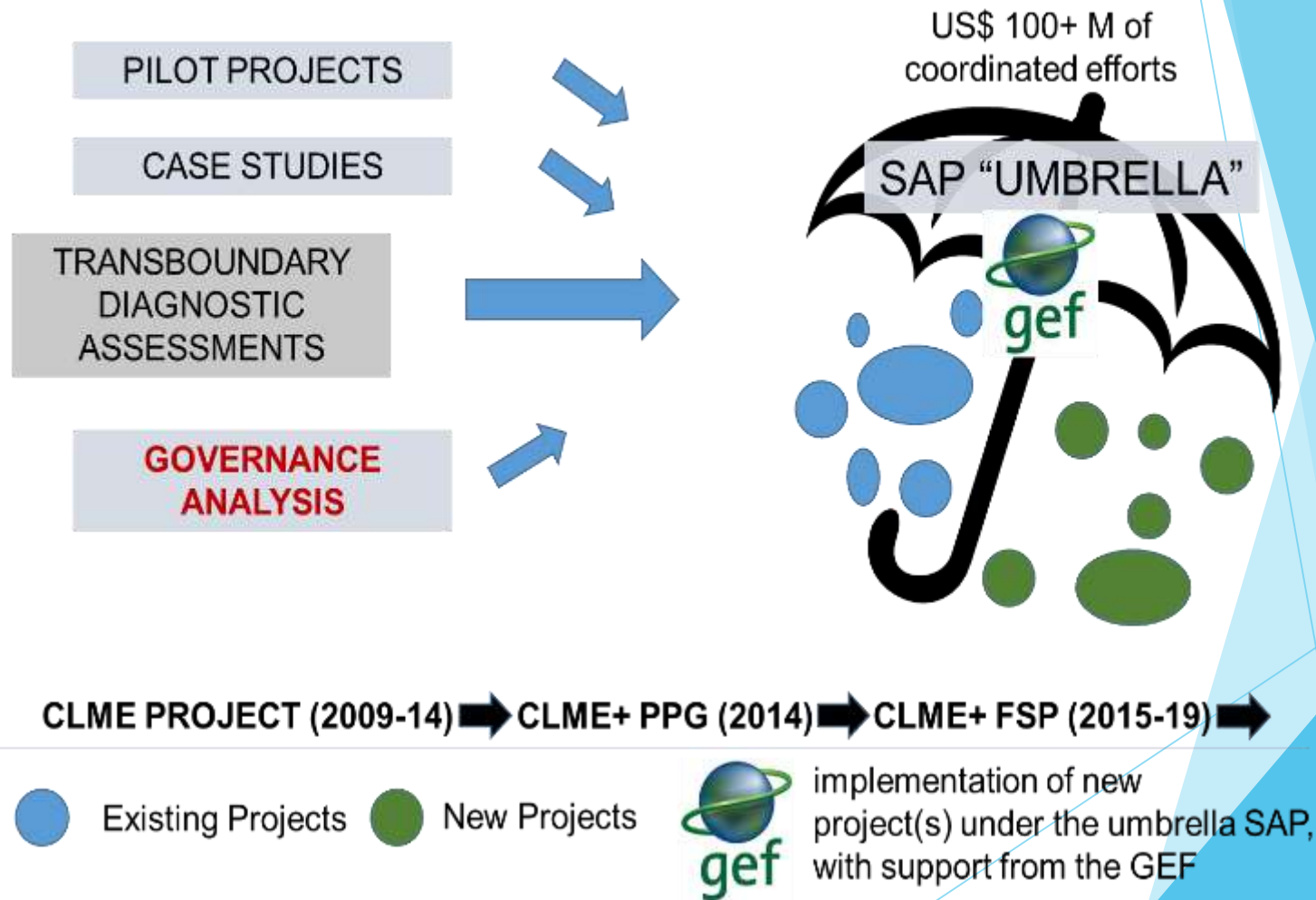
UNEP/EARS/WG.2/1	Provisional Programme
UNEP/EARS/WG.2/2	Draft Terms of Reference of the Working Group
UNEP/EARS/WG.2/3	Draft Matrix of Regional Seas Indicators
UNEP/EARS/WG.2/4	Draft Workplan of the Working Group
UNEP/EARS/WG.2/5	Draft conclusion of the meeting

Information Documents

UNEP/EARS/WG.2/INF1	Provisional list participants
UNEP/EARS/WG.2/INF2	Provisional list of documents
UNEP/EARS/WG.2/INF3	Ecosystem Approach to Regional Seas
UNEP/EARS/WG.2/INF4	Report of the Technical Workshop on Selecting Indicators for the Stat of Regional Seas, 30 June – 2 July 2015, Geneva
UNEP/EARS/WG.2/INF5	Measuring Success - Indicators for the Regional Seas Conventions and Action Plans
UNEP/EARS/WG.2/INF6	TWAP LME publication (draft)
UNEP/EARS/WG.2/INF7	TWAP Open Ocean publication (draft)
UNEP/EARS/WG.2/INF8	Transforming Our Future (draft)

The GEF TDA/SAP approach for IW/LME's

The CLME "Umbrella" SAP



ROOT CAUSES OF ENVIRONMENTAL DEGRADATION IN THE CLME⁺

1. Weak governance (including legal & institutional frameworks, inadequate environmental quality standards and legislation)

2. Limited human and financial resources

3. Inadequate (access to) data and information (inadequate knowledge)

4. Inadequate public awareness & participation

5. Inadequate consideration of value of ecosystem goods & services

6. Population and cultural pressures

7. Trade and external dependency (high dependence on fish for income and export earnings)

GEF IW TDA/SAP approach & “Causal-Chain” Analysis



CLME SAP ACTIONS

ENVIRONMENTAL STATUS INDICATORS

Eg. damaged coral reefs

ENVIRONMENTAL IMPACTS

SOCIO-ECONOMIC IMPACTS

Eg. Loss of livelihoods

- subsistence fishing
- artisanal fishing
- tourism
- beach erosion

SOCIO-ECONOMIC STATUS INDICATORS

DIRECT CAUSES

examples:

- physical impact (fishing gear)
- physical impact (tourism)
- illegal fishing
- invasive species
- pollution

STRESS REDUCTION INDICATORS

INDIRECT CAUSES

Various human and economic activities:

- tourism
- fishing
- agriculture
- transport

ROOT CAUSES

examples:

- lack of awareness
- inadequate data
- limited resources
- high level of illegal fishing
- inadequate governance framework

PROCESS INDICATORS

1. NOAA “LME” CONCEPT: 5-MODULAR APPROACH

- productivity indicators
- fish/fisheries indicators
- pollution/ecosystem health indicators
- socio-economic indicators
- governance indicators

2. GEF LME INDICATOR FRAMEWORK:

- process indicators
- stress reduction indicators
- environmental / ecosystem status indicators
- (socio-economic indicators)

3. GEF TRANSBOUNDARY WATERS ASSESSMENT PROGRAMME (TWAP)

- governance architecture
- governance effectiveness

GOVERNANCE EFFECTIVENESS ASSESSMENT FRAMEWORK (GEAF) ADOPTED BY CLME+

GOVERNANCE EFFECTIVENESS

Mandate:

- Geographic scope: ecosystem? Species range?
- Thematic scope: sectoral? Integrated?

Arrangements/
architecture in
place?

Mandates assigned
for each
component?

Governance
processes
operational?

Mandates
effectively
executed?

Linkages effective?

Stakeholders
appropriately
engaged?

Ecosystem
stressors
reduced?

Socially just
outcomes
achieved?

Ecosystems
improved/
protected?

Human
well-being
improved/
assured?



the Policy Cycle

CHANGING STATES OF THE LMES: INDICATOR MODULES

IOC?

UNDP (GEF)

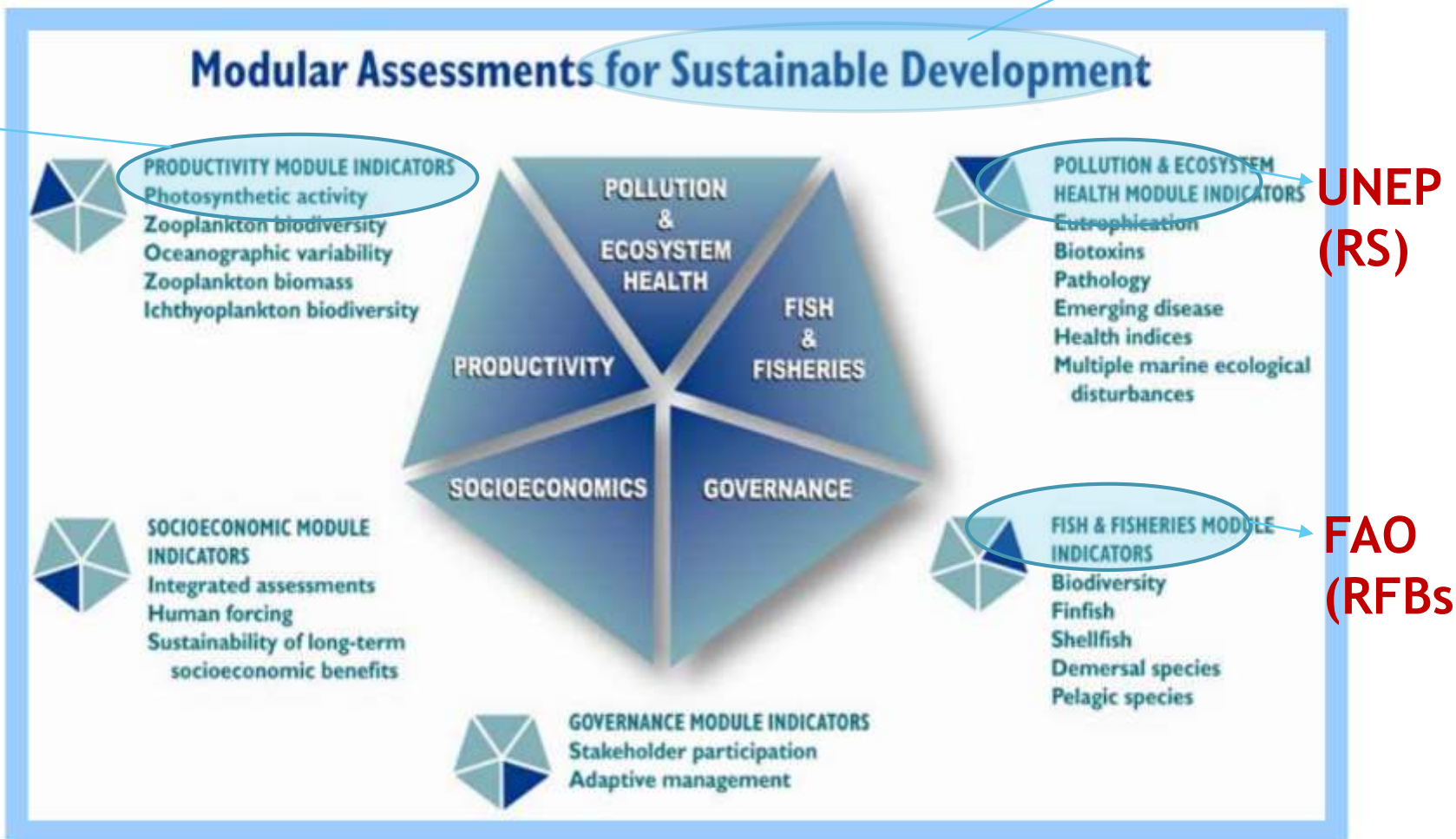
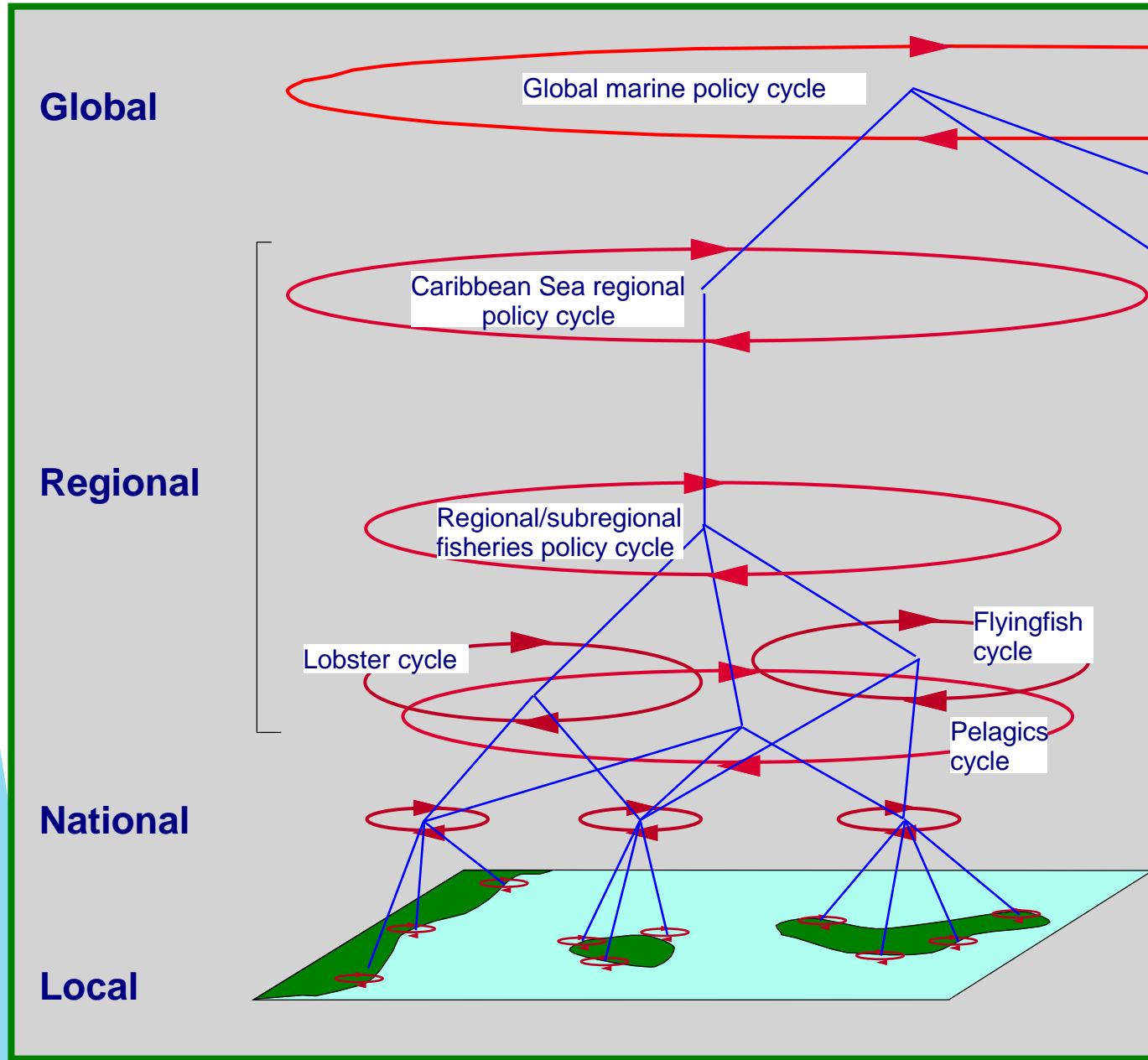
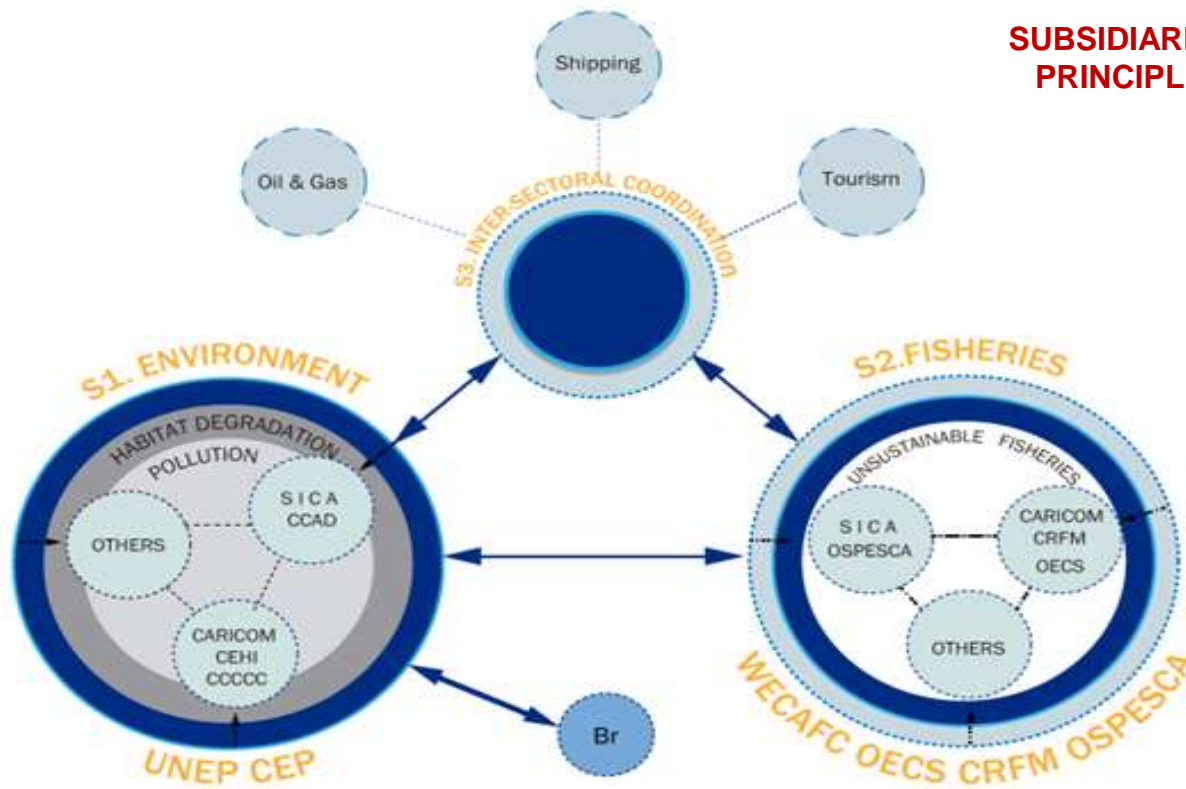


Figure 4. The Large Marine Ecosystem (LME) approach to sustainable development includes 5 modules with indicators.

Multi-level, nested Governance Framework for the CLME+



SUBSIDIARY PRINCIPLE



2009-
2014

CLME Project: Sustainable Management of shared living
marine resources in the CLME and adjacent areas



2015-
2020

CLME+ Project : Objective: *Facilitating EBM/EAF in the CLME+ for the sustainable and climate resilient provision of goods and services from shared living marine resources, in line with the endorsed CLME+ SAP*



YR 0 TDA

INDICATORS: BASELINE

YR 1-10 SAP

INDICATORS: TARGETS

MID-TERM/
FINAL SAP REVIEW
(YR 5 / YR 10)

INDICATORS: UPDATED BASELINE (<- TDA)

INDICATORS: REVISED TARGETS (<- SAP)

THEMATIC REPORT FOR THE CENTRAL/SOUTH AMERICAN
SUB-REGION

Prepared for the CLMII Project

by
Sergio Marchesi



CTMF Project Implementation Unit
Centre for Resource Management and Environmental Studies (CRMES)
University of the West Indies
Cave Hill Campus, Barbados

June 2007

CLME-TT-5-Fin
 Barcelona, June 2007
 Original: Spanish

Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem & Adjacent Regions

CLME
REEF & PELAGIC ECOSYSTEMS
TRANSBOUNDARY DIAGNOSTIC
ANALYSIS

Sherry Markman
April 2011

Caribbean Sea Ecosystem Assessment
(CARSEA)

A contribution to the Millennium Ecosystem Assessment
prepared by the Caribbean Sea Ecosystems Assessment Team

En utilisant 1 rail 3 rails

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THE CROPPER FOUNDATION

John's "Universal" and "Universal"



Status and Trends of Caribbean Coral Reefs: 1970-2012

EDITED BY
HILARY JALANIS · NANCY DUNSTON · RUTH CRABBE · VIVIAN LAM

**Towards an
institutionalized,
Integrated,
well-coordinated
long-term approach?!**

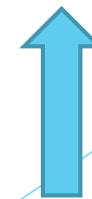
CLME+ PROJECT

OUTCOME 5 - (a) enhanced coordination and collaboration among shared Living Marine Resources (sLMR) projects and initiatives in the region; (b) adaptive management of sLMR-related projects and initiatives in the region; (c) exchange of best/good practices among the LME CoP

- ❑ Partnerships/cooperation among development partners, programmes, projects, initiatives (PPIs) and countries/territories with a stake in the CLME+ SAP (**“CLME+ SAP Partnership”**)
- ❑ Common/compatible approaches for the joint Monitoring & Assessment of overall SAP implementation
- ❑ SAP implementation web portal(s) and other dissemination means providing CLME+ stakeholders with overview of periodically updated indicator sets (*process, stress reduction, environmental/ecosystem and socio-economic status indicators*)

❑ **“State of the Marine Ecosystems and shared Living Marine Resources in the CLME+” Digital Portal and Report** (*“Progress with CLME+ SAP” and “CLME+ Project implementation” sections*)

- ❑ Global dissemination and sharing of experiences with other LMEs
 - ❑ *IW:LEARN / LME:LEARN twinnings / exchanges*
 - ❑ *regional IW:LEARN / LME:LEARN workshops*



**INSTITUTIONALIZATION OF THE TDA/SAP APPROACH:
PARTNER RESPONSABILITIES IN ALIGNMENT WITH FORMAL
MANDATES/RECOGNIZED LONG-TERM ROLE IN THE LME**



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Welcome to the website of the Caribbean Marine Atlas Project. The purpose of the CMA2 is to develop a regional data, information and services sharing platform that will contribute to the development of national and regional atlases and related products and services to support Decision Making (DM) and Monitoring & Evaluation (M&E) processes for improved marine and coastal resources management in the Caribbean region.


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WELCOME

Discover valuable resources for marine management in the Eastern Caribbean


FEATURED TOOLS




Coral Reef tool

[View all 8](#)

LATEST MAPS




Managed Area Boundaries with Coral Reef Extent



St. Lucia Point Sables Environmental Protection Area and ...

[View all 2](#)

LATEST DOCUMENTS



Fundraising Success Indicator



BIOPAMA
Biodiversity and Protected Areas Management Programme

The Caribbean Protected Areas Gateway:

Linking data to better decisions





Overcoming the Data Challenge

One of the most serious challenges facing the Caribbean region is the need for improved data collection and management systems.

REGIONAL HOST

The Caribbean Protected Areas Gateway (The Caribbean Gateway) is hosted by the University of West Indies (UWI) and

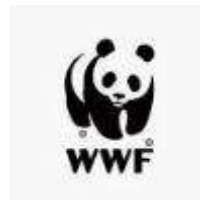


UNDP/GEF Caribbean & North Brazil Shelf Large Marine Ecosystems Project (CLME+)

co-financing/co-executing partners



prospective partners (declarations of intent)



Thank you

www.clmeproject.org

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