

An Information Booklet

# State of the Marine Environment and associated Economies

## CLME+ SOME in the Wider Caribbean

... a collaborative, integrated long-term reporting mechanism



*The CLME+ SOME is being collaboratively developed by Inter-Governmental Organizations with a mandate on the marine environment in the Wider Caribbean, with the support of the UNDP/GEF CLME+ Project (2015-2020):  
“Catalyzing the implementation of the Strategic Action Programme for the Sustainable Management of shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems”*

Photo Credit: J. Vega



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## CONTENT

The Wider Caribbean / CLME+ region

The 10-year CLME+ Strategic Action Programme (SAP)

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SOMEE: A collaborative, integrated reporting mechanism - marine environment & economies

Online Platforms Supporting SOMEE and SAP M&E

Examples of SOMEE content (mock-up)

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This booklet introduces a unique and first ever regional mechanism for assessment and reporting on the state of the marine environment and how the marine environment contributes to socio-economic development and human wellbeing. This mechanism, the main outputs of which will be an integrated report and interactive online platform, has been called for by the countries and by Intergovernmental Organizations with a mandate for ocean governance in the region. The aim of this booklet is to raise awareness about and increase stakeholder buy-in for the SOME E mechanism. A description of the building blocks for the SOME E mechanism, the assessment approach, and report outline is followed by examples of the kind of contents to be expected in the SOME E report.



Photo Credit: P. Debels



## THE WIDER CARIBBEAN / CLME+ REGION

Integrating the UN Environment “Regional Seas” Programme, the work of Regional Fisheries Bodies and the Global Environment Facility “Large Marine Ecosystems” Programme to safeguard our marine resources, support human well-being and livelihoods, and catalyze the region-wide development of Sustainable Blue Economies

The Wider Caribbean Region as defined under the Cartagena Convention “for the Protection and Development of the Marine Environment” covers a large area of marine space, largely coinciding with the combined area formed by 3 of the world’s **Large Marine Ecosystems** or LMEs: the Gulf of Mexico LME, the Caribbean LME, and the North Brazil Shelf LME. Likewise, the Convention Area overlaps with the area of mandate of the Western Central Atlantic Fishery Commission (FAO WECAFC) as shown in the map on the following page.

Large Marine Ecosystems or LMEs are a scientific concept developed by NOAA, USA. They are considered meaningful geospatial units for the implementation of an Ecosystem-Based Management approach (EBM).

Over the past decade, the Global Environment Facility (GEF) has provided substantial financial support to facilitate a transition towards EBM for shared marine resources in the Wider Caribbean. An important part of this support has focussed on the **Caribbean and North Brazil Shelf LMEs**, further jointly referred to as the “**CLME+ region**”.

Mainstreaming the GEF-supported work on the Caribbean and North Brazil Shelf LMEs into the work programmes of the **Cartagena Convention** and the **WECAFC** has allowed to build bridges among key programmes and organizations with a stake in the marine environment.



### Supporting a blue economy

- The goods and services provided by the region’s marine ecosystems underpin a blue economy, supporting livelihoods, human well-being, and sustained socioeconomic development.
- Nearly 1 million persons are directly employed in marine capture fisheries, with another 3 million jobs in ancillary activities.
- Indicative annual gross revenue from fisheries and aquaculture in the Caribbean estimated at about US\$5 billion in 2012.
- Caribbean coral reefs generate about US\$4 billion in income to the region each year (shoreline protection, fish nurseries and habitat, tourism activities).
- Gross revenue from tourism and recreation was estimated at US\$47 billion in 2012.
- The region is also important for shipping and is a major producer of oil and gas.

## THE CLME+ SAP (2015-2025)

A common roadmap towards sustainable marine-based (“blue”) socio-economic development, with initial focus on enhancing the governance and management of shared living marine resources in the Wider Caribbean / CLME+ region



The Global Environment Facility (GEF) has been supporting transboundary collaboration among countries sharing LMEs since 1991. Financial support through the UNDP/GEF CLME Project (2009-2014) led to the development of Transboundary Diagnostic Analyses (TDAs) for the CLME+ region.

These TDAs pointed to **habitat degradation, marine pollution** and **unsustainable fisheries** as the key problems affecting the marine environment. It is further generally believed that **climate variability and change** will exacerbate the negative impacts of these problems on both the environment and on human societies that depend on it.

Based on the outcomes of the TDAs, a 10-year **Strategic Action Programme (SAP)** for the “Sustainable Management of Shared Living Marine Resources in the CLME+ region” (2015-2025) was collaboratively developed and

widely politically endorsed. The SAP is supportive of many of the internationally set sustainable development objectives. To date (October 2018), the CLME+ SAP has been signed by 35 ministers, representing 26 Countries and 8 overseas territories.

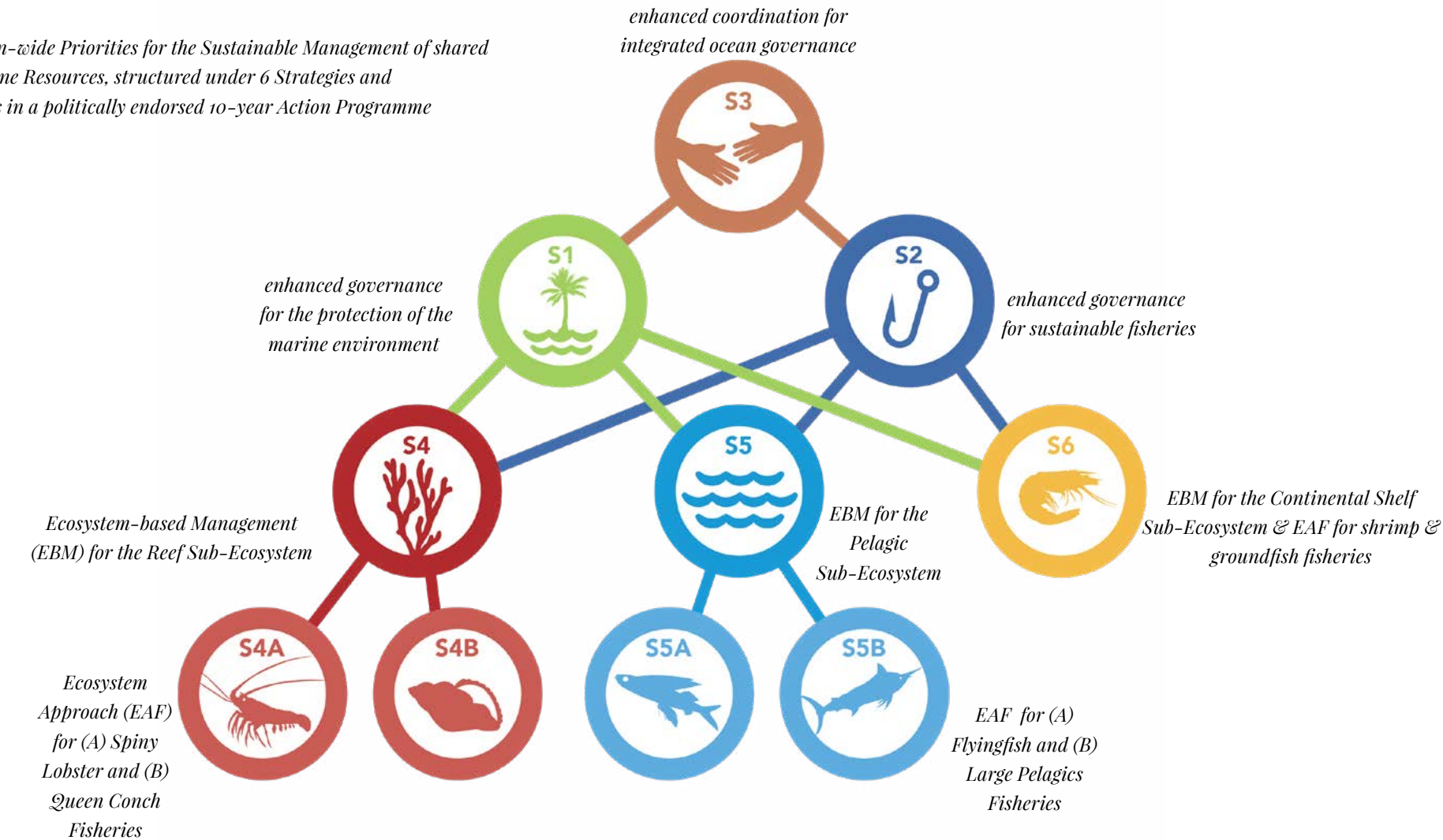
The SAP aims to address the key transboundary problems by tackling their root causes. Such root causes include: weaknesses in governance arrangements, lack of awareness and/or (access to) data and information.

The SAP therefore calls, amongst other actions, for the urgent consolidation of a regional framework for integrated ocean governance, and for enhanced, comprehensive reporting on the state of the marine environment.

### THE CLME+ VISION:

A HEALTHY MARINE ENVIRONMENT THAT SUPPORTS THE WELL-BEING AND LIVELIHOODS OF THE PEOPLES OF THE REGION

The CLME+ SAP: Region-wide Priorities for the Sustainable Management of shared Living Marine Resources, structured under 6 Strategies and 4 Sub-Strategies in a politically endorsed 10-year Action Programme



The SAP structures 76 priority actions to safeguard the marine environment under 3 region-wide Strategies (S1-S2-S3), 3 Strategies at the Sub-Ecosystem level (S4-S5-S6), and 4 additional Sub-Strategies dealing with fisheries deemed of strategic importance to the region.

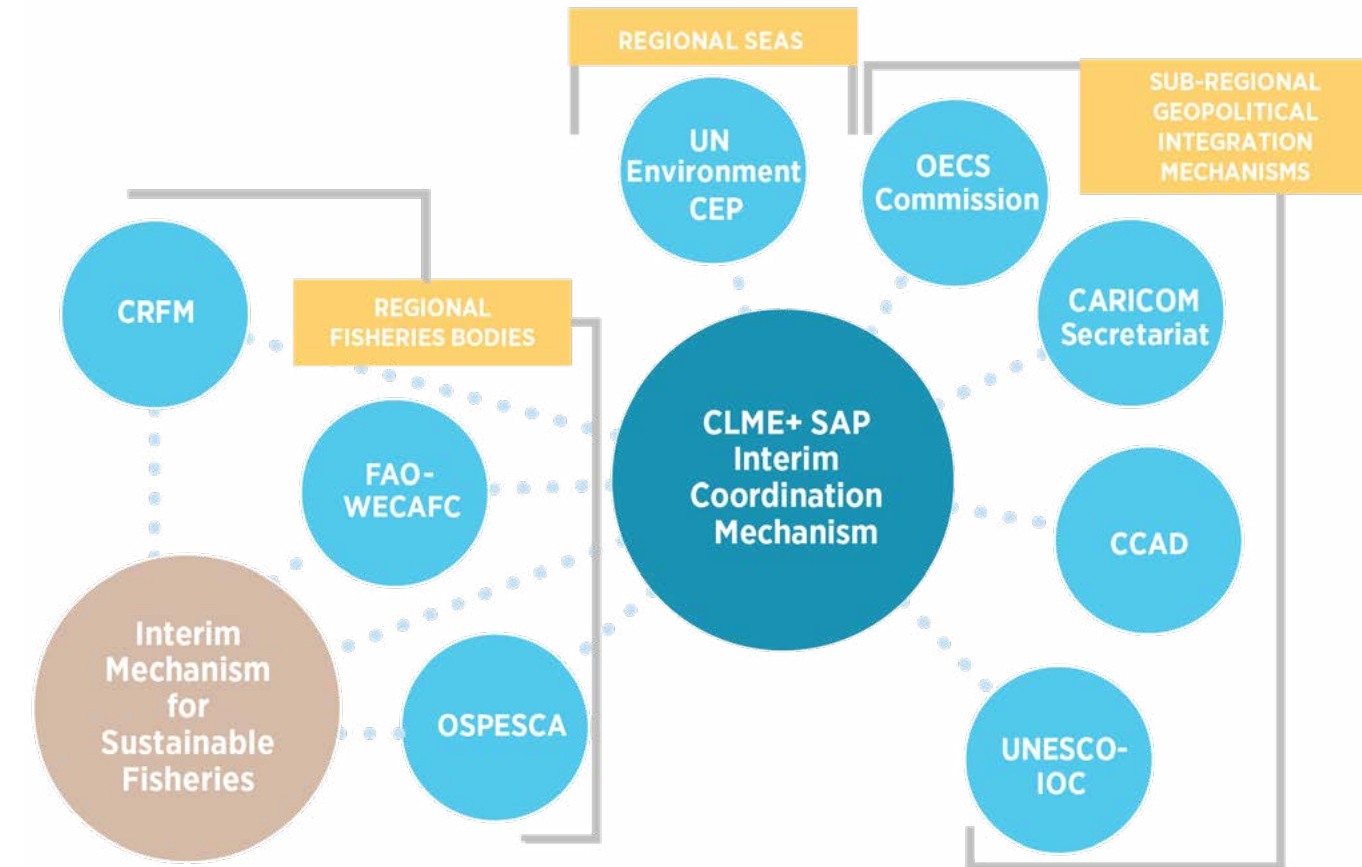
## CONSOLIDATING A REGIONAL FRAMEWORK FOR MARINE RESOURCES GOVERNANCE

The Wider Caribbean region, with its 26 countries and 18 overseas territories, is a highly complex region from a geopolitical perspective. At the sub-regional level, several political integration mechanisms have been created, such as the Central American Integration System (SICA), the Caribbean Community (CARICOM) and the Organization of Eastern Caribbean States (OECS). These organizations and their subsidiary bodies have received mandates from their member states that relate to the marine environment. At the over-arching regional level, additional organizations, including several UN bodies, also work on marine environmental matters.

The CLME+ SAP recognizes the need to enhance the collaboration and coordination among these many organizations. The 5-year UNDP GEF “CLME+” Project (2015-2020) - which aims at catalyzing the implementation of the CLME+ SAP - is facilitating the creation of such enhanced, multi-level framework for integrated

ocean governance, where countries, subregional and regional bodies work together to secure the sustainable use of marine resources.

In 2017, an **Interim Coordination Mechanism**, the “CLME+ SAP ICM” was established among 8 regional inter-governmental organizations (IGOs) with a core mandate on the marine environment. The CLME+ Project is now further supporting regional negotiations towards the identification of a Permanent Coordination Mechanism for Ocean Governance in the Wider Caribbean, including a Sustainable Financing Plan. Consultations with the countries of the Wider Caribbean will continue to take place throughout 2019 for this purpose. The Permanent Coordination Mechanism is expected to have as one of its core tasks: the coordinated, collaborative development of a long-term reporting and decision-support mechanism: “State of the Marine Environment and associated Economies” (CLME+ SOMEE).



The “CLME+ SAP” Interim Coordination Mechanism (ICM) was created with the support of the CLME+ Project. Its membership consists of 8 IGOs: UN Environment – Caribbean Environment Programme (CEP); the FAO Western Central Atlantic Fishery Commission (WECAFC); the Subregional Commission for the Caribbean of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, IOCARIBE; the OECS Commission; the CARICOM Secretariat; the Central American Commission on Environment and Development (CCAD); the Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus (OSPESCA), and the Caribbean Regional Fisheries Mechanism (CRFM).

For the duration of the CLME+ Project, the CLME+ Project Coordination Unit (PCU) serves as the ICM Secretariat. Together with the PCU, the ICM members are collaboratively working on the development of the first version of the “State of the Marine Environment and associated Economies” (SOMEE) report.



# STATE OF THE MARINE ENVIRONMENT AND ASSOCIATED ECONOMIES

## INSTITUTIONALIZING A COLLABORATIVE, INTEGRATED REPORTING MECHANISM ON THE MARINE ENVIRONMENT AND ITS CONTRIBUTIONS TO SUSTAINABLE BLUE ECONOMY

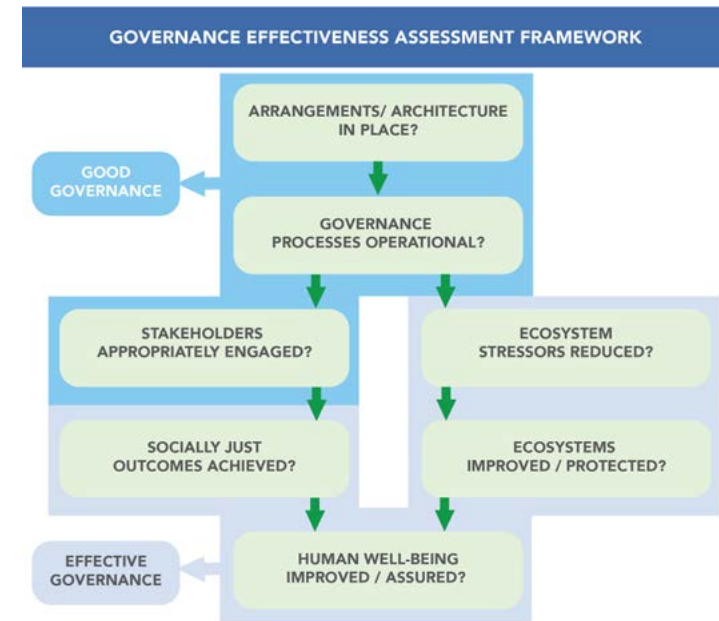
Having a good **understanding of the conditions of our seas, and how these relate to human well-being and our economies**, is of critical importance to trigger timely action, and for making those decisions that will secure the region's resource base for a sustainable blue economy. With such knowledge, the goods and services provided by marine and coastal ecosystems can be safeguarded for the benefit of current and future generations.

Several regional organizations are mandated to undertake assessments of either environmental status (e.g. pollution, habitats), or associated natural resources (e.g. fish stocks). In the past such assessments of natural conditions often did not sufficiently make the link with socio-economics, nor did they look at the status of governance arrangements and processes which underpin the sustainable management and use of our marine environment. Assessments in the region have often been, just like many of the marine projects and initiatives, "ad hoc", highly fragmented and disconnected. Such has hampered the good use of existing knowledge

and information to adequately support the region's ambitions to progress towards the **Sustainable Development Goals**, specifically SDG 14.

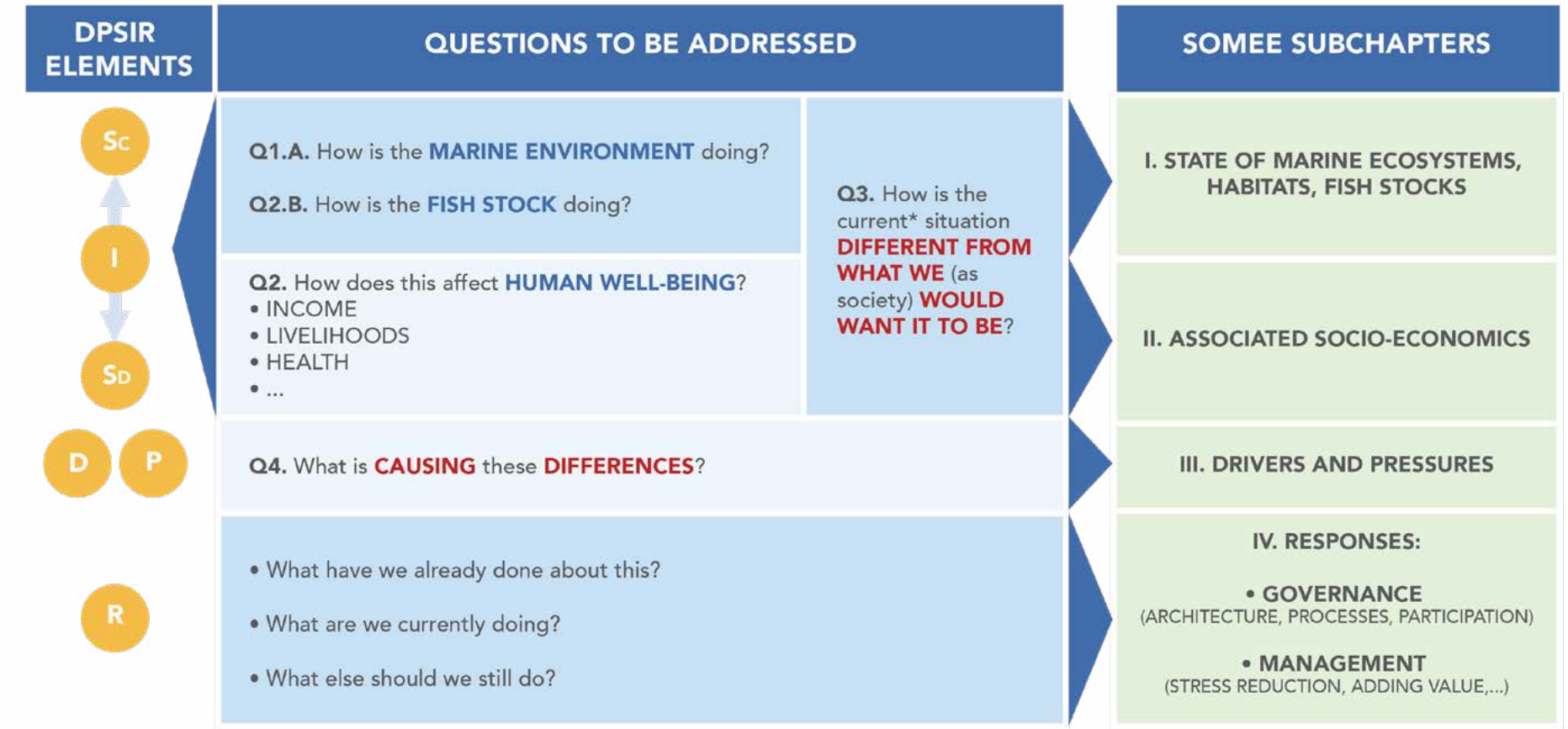
A unique opportunity is now provided through the UNDP/GEF CLME+ Project for the SAP ICM members (see previous pages) to join efforts and collaboratively work on the **development and institutionalization of a long-term integrated reporting mechanism that will trigger timely action and support enhanced decision-making** on the governance and management of our shared marine resources. The mechanism will build on, and integrate existing reporting efforts and mandates, such as those under the Cartagena Convention and FAO's State of Fisheries.

Ownership of the **"State of the Marine Environment and associated Economies"** ("SOME") reporting mechanism will therefore be held by the countries of the Wider Caribbean. Responsibilities for its development and periodic updating will be shared by the different IGOs, with each organization taking on a role aligned with its formal mandate.



*The Governance Effectiveness Assessment Framework (Fanning and Mahon) clearly highlights as our "ultimate" goal: improved human well-being. It recognizes however that to achieve such, enhancing the arrangements and processes for marine resources governance will be required*

### THE SOME "STORY": A QUESTIONS-BASED ASSESSMENT APPROACH



SOME will use a "STORY TELLING APPROACH", building on the "DPSIR" Driver (D) - Pressure (P) - Status (S) - Impact (I) - Response (R) Analytical Framework to explore current, past and possible future conditions of marine habitats, biodiversity and fish stocks, what this means for human well-being and our economies, why current (or future) conditions may be different from what we desire and from the targets we set for ourselves as societies. SOME will then continue to explore the reasons for these differences, as well as what has, is, and can be done to progressively close the gap between current conditions and our societal aspirations. The structure of the SOME chapters will be based on the DPSIR Framework and the SAP Strategies (see next page).

# SOME E REPORT - PRELIMINARY OUTLINE

## INCLUDING LINKAGES WITH THE CLME+ SAP STRATEGIES

### CHAPTER 1

#### Introduction

- 1.1 Global importance of the oceans
- 1.2 Regional approaches to ocean governance
- 1.3 The CLME+ region
- 1.4 Towards a blue economy for the CLME+ region
- 1.5 Regional Governance Framework
- 1.6 The 10-year CLME+ SAP
- 1.7 CLME+ SOME E: purpose, mandate and approach

### CHAPTER 2

#### General state of the marine environment & associated economies

- 2.1 State of the LMEs and their associated living resources
- 2.2 Associated socioeconomics
- 2.3 Drivers and pressures
- 2.4 Responses
  - 2.4.1 Region-wide governance arrangements and processes for the protection of the marine environment
  - 2.4.2 Region-wide governance arrangements and processes for Sustainable Fisheries
  - 2.4.3 Region-wide arrangements and processes for Integrated Ocean Governance

### CHAPTER 3

#### Sub-ecosystem: coral reefs, mangroves and seagrass beds

- 3.1 Ecosystem-based Management for the Reefs Sub-Ecosystem
  - 3.1.1 Status and trends of the reef sub-ecosystem
  - 3.1.2 Associated socioeconomics
  - 3.1.3 Drivers and pressures
  - 3.1.4 Responses
- 3.2 Ecosystem Approach to Fisheries on the reef sub-ecosystem (spiny lobster, queen conch & other reef fisheries)



### CHAPTER 4

#### Sub-ecosystem: Pelagic

- 4.1 Ecosystem Approach to Fisheries for the Pelagic Sub-Ecosystem (pelagic, flying fish, large pelagic fisheries)



### CHAPTER 5

#### Sub-ecosystem: Continental Shelf (sandy/muddy flats)

- 5.1 Ecosystem-based Management for the Continental Shelf Sub-Ecosystem
- 5.2 Ecosystem Approach to Fisheries for the Continental Shelf (shrimp and groundfish fisheries)



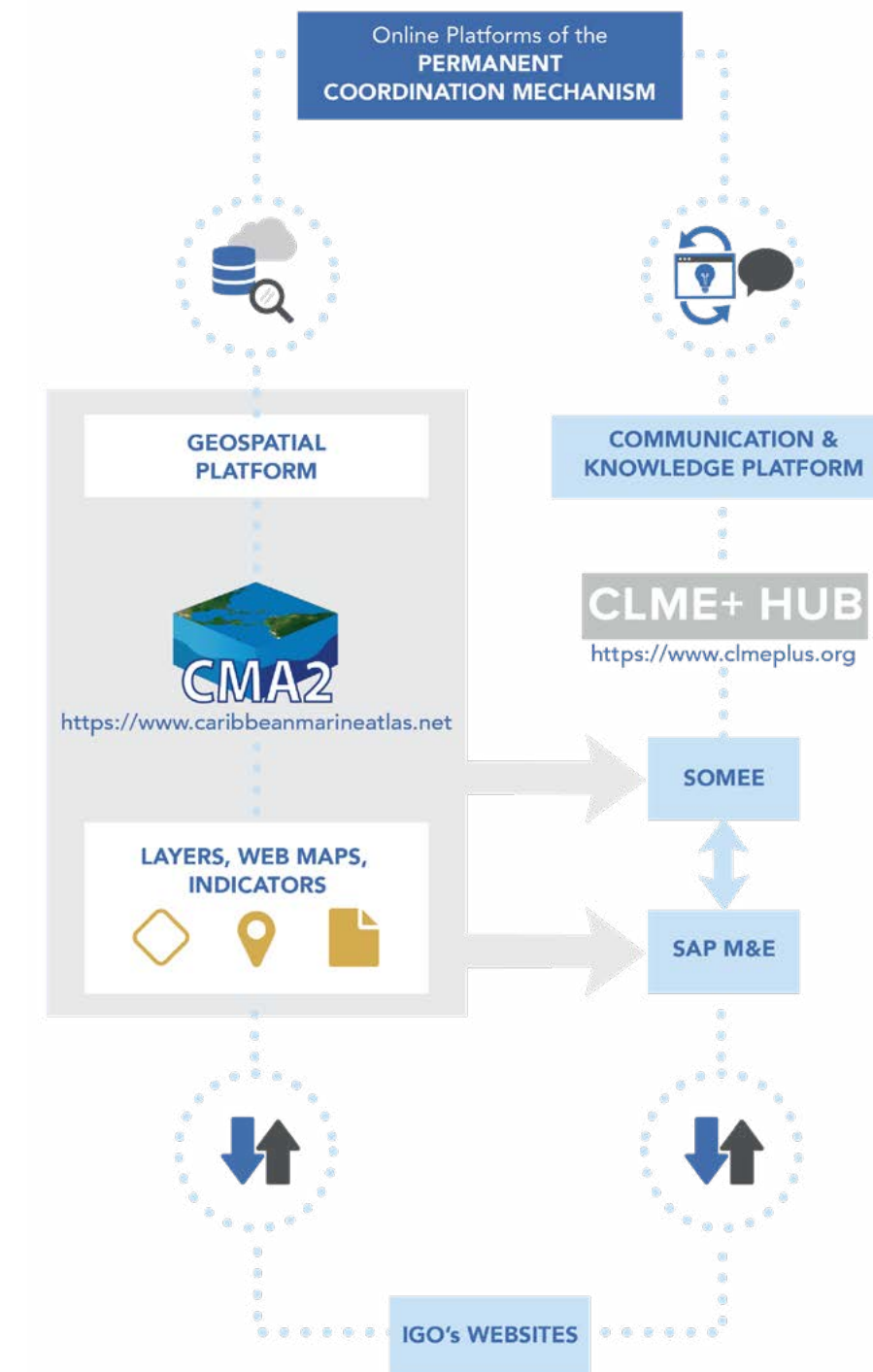
### SYNTHESIS & CONCLUSIONS

*In addition to institutionalizing the SOME E mechanism as well as the implementation, monitoring and evaluation (M&E) of the SAP, the Permanent Coordination Mechanism (PCM) will also help reduce fragmentation and duplication in the approach to communication and access to data and information. Such efforts will be supported through the use of interconnected online communication, knowledge and geospatial platforms.*

*The PCM's communication and knowledge platform is the CLME+ HUB, which has been designed to: 1) accommodate the information needs of PCM members and other CLME+ stakeholders, 2) provide access to key information and products through its document library and tools such as the database of projects and initiatives, 3) facilitate online tracking of SAP actions, 4) provide access to the online version of SOME E.*

*The Caribbean Marine Atlas Project Phase 2 (CMA2) has developed an online platform for geospatial information including the maps that will be used for SOME E reporting and SAP M&E. Information from the platform can be retrieved for use on IGO websites, supporting the M&E of progress obtained under IGO Strategies and Work Programmes.*

*These platforms are expected to facilitate dynamic updating and exchange of information between IGOs, governments, NGOs and experts, among others.*





# CLME+ SOMEE

## MOCK-UP

### EXAMPLES OF THE KINDS OF CONTENT SOMEE CAN BRING

to trigger region-wide positive action  
and support better decision-making



Photo Credit: J. Vega

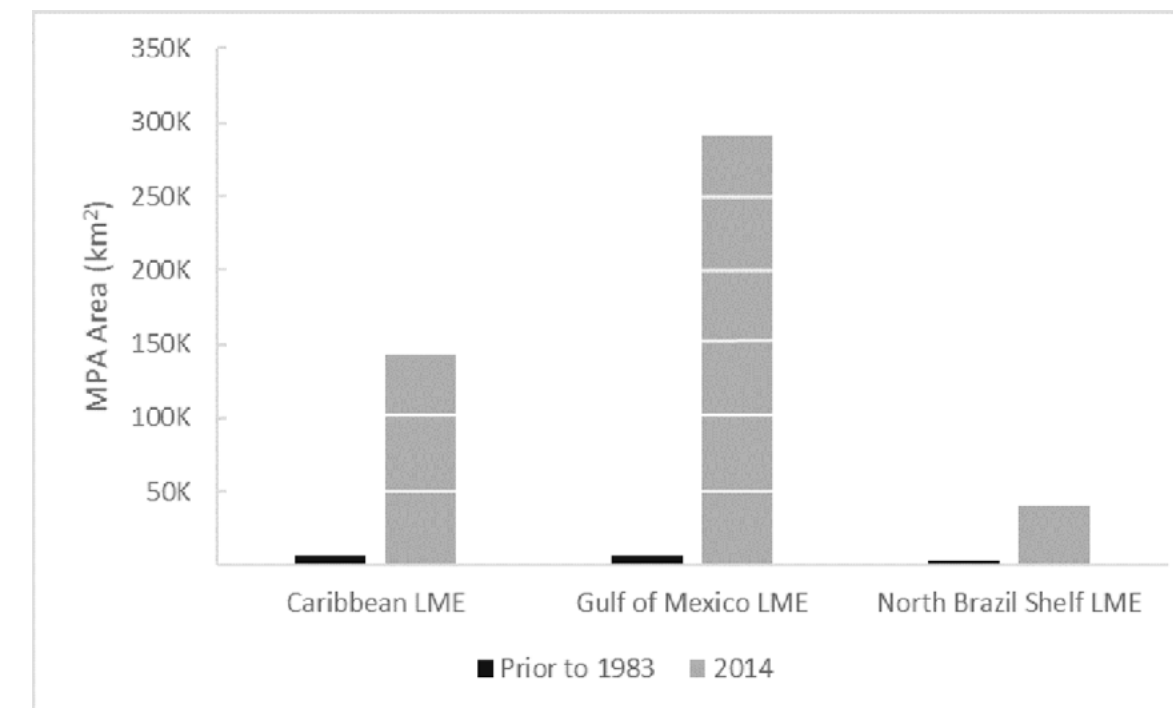
## Marine Habitats



CLME+ SOMEE  
Sample Content

REPORT SECTION 2.4.1 - REGION-WIDE GOVERNANCE ARRANGEMENTS AND PROCESSES  
FOR THE PROTECTION OF THE MARINE ENVIRONMENT

### Action to Protect Critical Habitats: Marine Protected Areas in the Wider Caribbean / CLME+ region



The Graph to the left compares the total relative area under MPAs in each of the 3 transboundary LMEs in the Wider Caribbean region between 2014 and the pre-1983 period

Related international commitments:



Organization(s) responsible for monitoring:



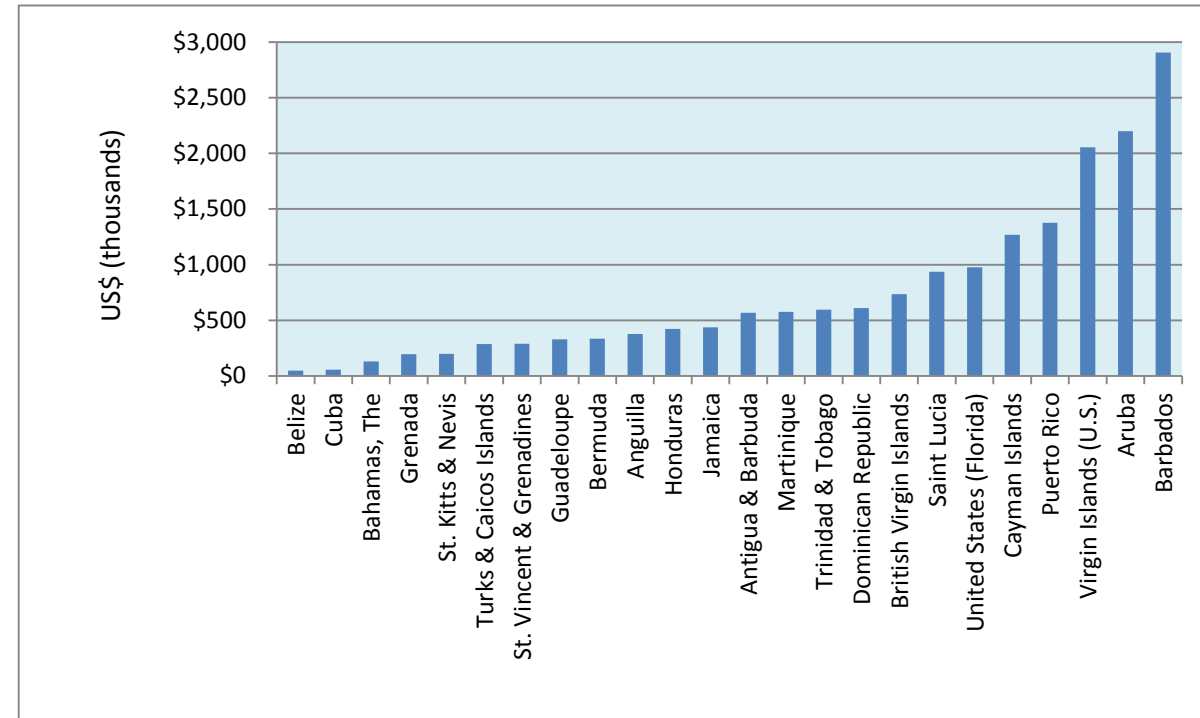
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# Marine Habitats



CLME+ SOME  
Sample Content

## REPORT SECTION 3.1.2 - THE REEF SUB-ECOSYSTEM: ASSOCIATED SOCIO-ECONOMICS



The Graph to the left shows the estimated mean value of coral reefs in thousands of USD per km<sup>2</sup> per year, for selected countries from the Wider Caribbean

Source:  
Mapping the global value and distribution of coral reef tourism (Spalding et al 2017, Marine Policy 82)

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# Marine Pollution



CLME+ SOME  
Sample Content

## REPORT SECTION 2.4.1 - REGION-WIDE GOVERNANCE ARRANGEMENTS AND PROCESSES FOR THE PROTECTION OF THE MARINE ENVIRONMENT



### Action against Land-Based Sources of Pollution: the LBS Protocol (Cartagena Convention)

The map to the left shows the location of Dead Zones throughout the Wider Caribbean region (Status: October 2018)

Related international commitments:



Organization (s) responsible for monitoring:



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# Marine Pollution



CLME+ SOME  
Sample Content

REPORT SECTION 2.4.1 - REGION-WIDE GOVERNANCE ARRANGEMENTS AND PROCESSES FOR THE PROTECTION OF THE MARINE ENVIRONMENT



## Action against Land-Based Sources of Pollution: the LBS Protocol (Cartagena Convention)

The map to the left shows the status of ratification of the LBS Protocol in the Wider Caribbean region (Status: September 2017)

Related international commitments:



Organization (s) responsible for monitoring:



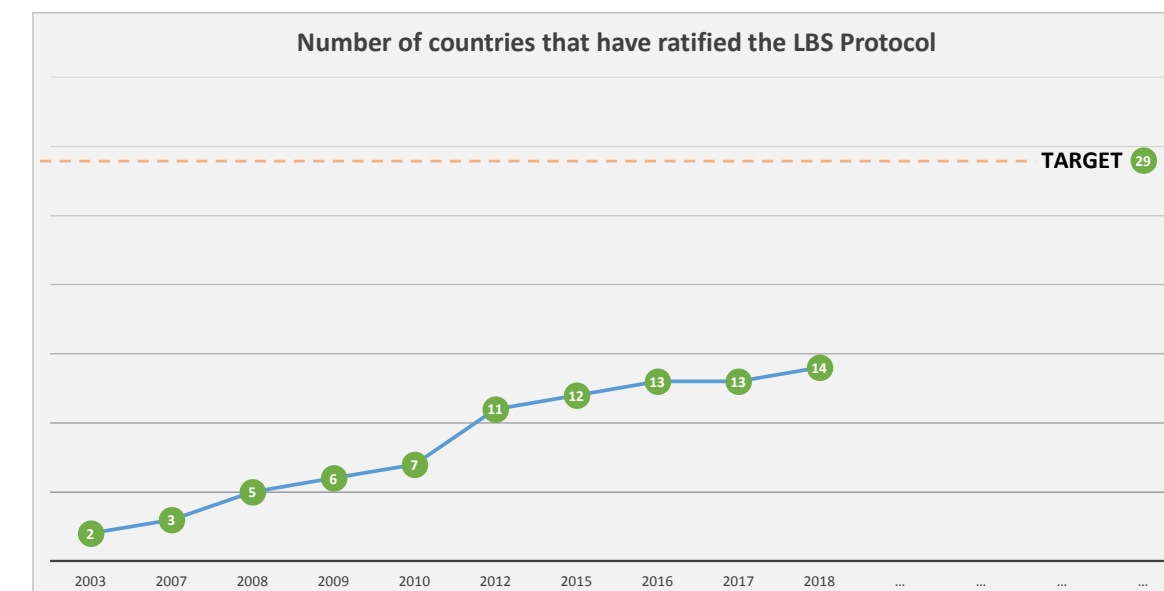
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# Marine Pollution



CLME+ SOME  
Sample Content

REPORT SECTION 2.4.1 - REGION-WIDE GOVERNANCE ARRANGEMENTS AND PROCESSES FOR THE PROTECTION OF THE MARINE ENVIRONMENT



## Action against Land-Based Sources of Pollution: the LBS Protocol (Cartagena Convention)

The graph to the left shows progress towards ratification of the LBS Protocol by all countries in the Wider Caribbean since the Protocols' adoption in 1999 (Status: September 2017)

Related international commitments:



Organization (s) responsible for monitoring:



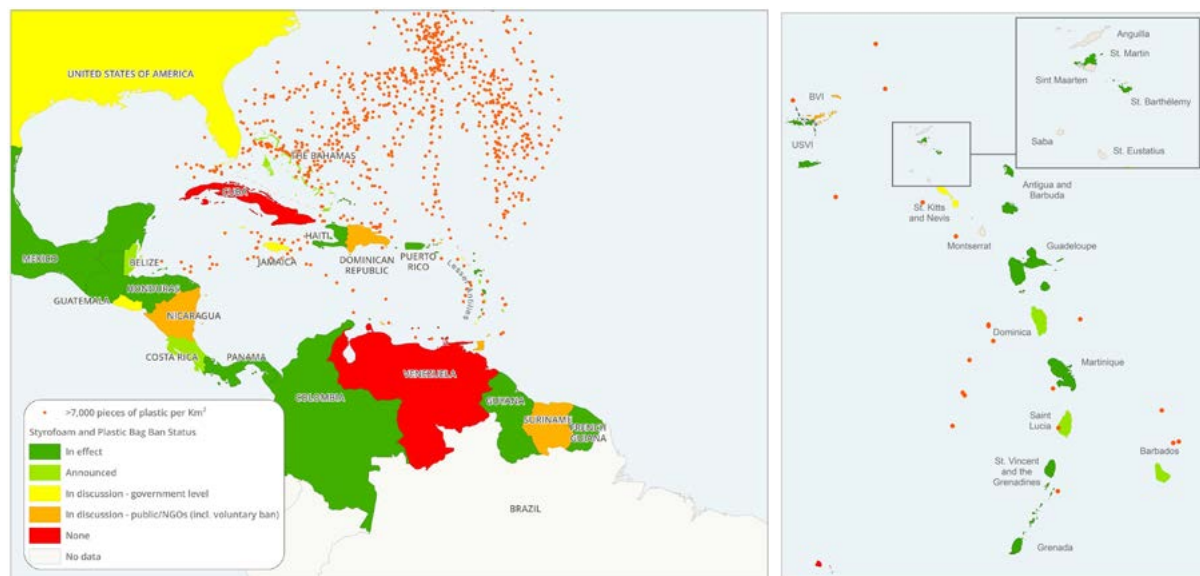
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# Marine Pollution



CLME+ SOME  
Sample Content

REPORT SECTION 2.4.1 - REGION-WIDE GOVERNANCE ARRANGEMENTS AND PROCESSES FOR THE PROTECTION OF THE MARINE ENVIRONMENT



## Action against Land-Based Sources of Pollution: the LBS Protocol (Cartagena Convention)

The map to the left shows which countries in the Wider Caribbean have implemented a ban on single-use plastics and/or styrofoam (Status: October 2018)

Related international commitments:



Organization(s) responsible for monitoring:



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# Sustainable Fisheries



CLME+ SOME  
Sample Content

REPORT SECTION 2.4.2 - REGION-WIDE GOVERNANCE ARRANGEMENTS AND PROCESSES FOR SUSTAINABLE FISHERIES



## Action against Illegal, Unreported and Unregulated (IUU) Fishing: the FAO Port State Measures Agreement (PSMA)

The map to the left shows the status of ratification of the PSMA in the Wider Caribbean region (Status: October 2018)

Related international commitments:



Organization(s) responsible for monitoring:



coordinator

contributor

contributor

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