

# Regional MSPforum - Latin America and the Caribbean



## Cartagena Convention: Supporting Integrated Environmental Assessments and the use of Marine Spatial Planning in the Wider Caribbean Region

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# What is the Cartagena Convention?

Framework for regional cooperation for the protection and development of the Wider Caribbean Region



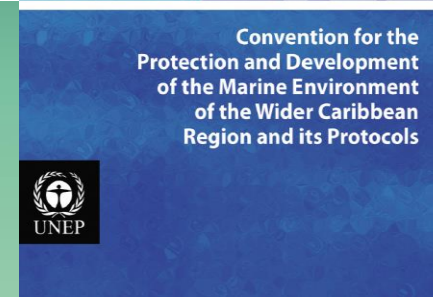
Adopted in Cartagena, Colombia on 24<sup>th</sup> March 1983

**Entered into force on 11<sup>th</sup> October 1986**

**1972** Leading global environmental authority

Established in **1974** to address the accelerating degradation of the world's oceans and coastal areas

Established in **1981** for the protection and sustainable development of the marine and coastal resources in the Wider Caribbean Region



# Presentation Outline



## DRIVERS

Population growth, urbanisation, human development patterns, economic development, climate change



## PRESSURES

Untreated wastewater, solid waste, agricultural run-off, industrial waste, deforestation, coastal construction, ocean acidification, global warming



## STATE

Indicators: nutrients, eutrophication, hypoxia, sedimentation, bacterial contamination, acidification



## IMPACTS

Destruction of critical marine habitats, biodiversity loss, disruption of economic activities (fisheries, tourism), human health hazards, decreased resilience



## RESPONSES

Global and regional environmental agreements, policies and regulations, taxes, bans, national and regional programmes, ecosystem preservation and restoration, education and research, private sector engagement.

# State of Marine Pollution (SOCAR 2000)



All indicators except oxygen and pH showed a high proportion of sites **with poor status**

Pollution from most indicators is **higher in wet season**



**Faecal contamination** of coastal waters with *Enterococcus* and *E.coli* is **widespread in** every country assessed

**Hotspots** were identified mostly in localized areas such as river mouths and sewer outfalls



Wastewater continues to pose a serious threat to the marine environment

**15 km<sup>3</sup>** of domestic wastewater was generated in 2015

**63%** of it was released in the environment without treatment

# State of Marine Pollution/2

## PLASTIC WASTE



Multiple **single-use plastic bans** although solid waste management remains a challenge.

Plastic waste remains a major problem with an estimated floating plastic concentration **among the highest** in the world.

# 1.3

**MILLION TONS**  
of plastic discharged in  
Caribbean waters in 2015

## MERCURY



Most Caribbean islands showed **high concentrations of mercury** in human hair samples

Mercury emitted by industrial activities, energy production and gold mining **bioaccumulates** in **fish** consumed like mahi-mahi, tuna and kingfish

# State of Marine Habitats (SOMH 2021)



The interlinked coral reef-mangrove-seagrass complex is one of the most biologically diverse and productive systems in the world

Coral reef, mangrove and seagrass habitats are significantly degraded and declining after decades of cumulative stresses

Marine habitats provide critical ecosystem services such as acting as nurseries for fisheries, protecting coasts from storms, preventing beach erosion and flooding, filtering water and trapping sediments, and acting as carbon sinks



# Root Causes

## Inadequate Management Systems

Lack of integration of pollution control into development planning

Life Cycle approach including control of pollution at source

Circular Economy opportunities – Waste as a Resource



## Lack of Data & Information

Interaction between Environmental, Social & Economic data.

Lack of Business/Investment Models for Restoration and/or Pollution control

Implications of Environmental Policy decisions & land use on marine biodiversity

## Enabling Environment

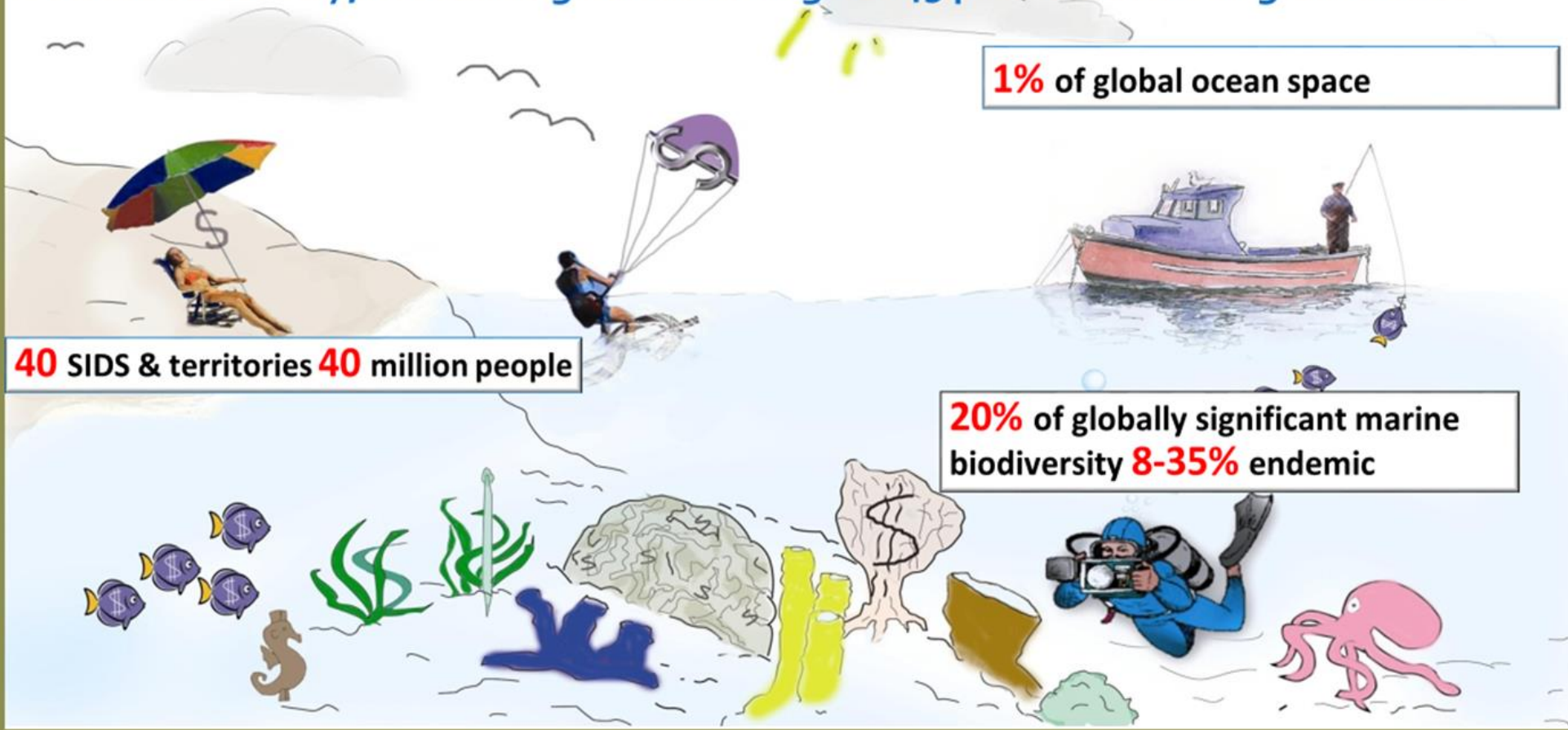
Policy, Legislation & Enforcement

Awareness, Attitudes & Behavior

Political Priorities



Caribbean SIDS economies are the most tourism-dependent. Tourism is the largest economic activity, accounting for an average of 45 percent of the region's GDP.



**1%** of global ocean space

**40** SIDS & territories **40** million people

**20%** of globally significant marine biodiversity **8-35%** endemic

We cannot benefit from a **Blue Economy** if we continue to pollute.



# Impacts: Economic Prospects at risk

Increasing marine pollution and habitat degradation threatens the livelihoods and safety of many human communities, and existing and future prospects of ocean-based economies



Tourism

**23%** OF GDP  
on average in  
the Wider  
Caribbean.



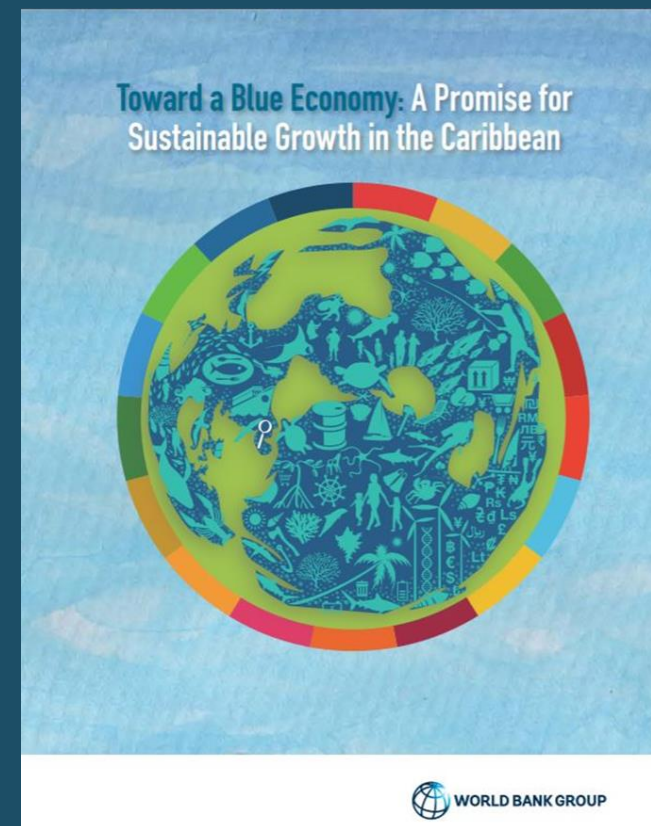
Fishing

FISHING IS **ARTISANAL**  
in most Wider Caribbean countries  
and a vital source of income and  
animal protein for many  
communities.

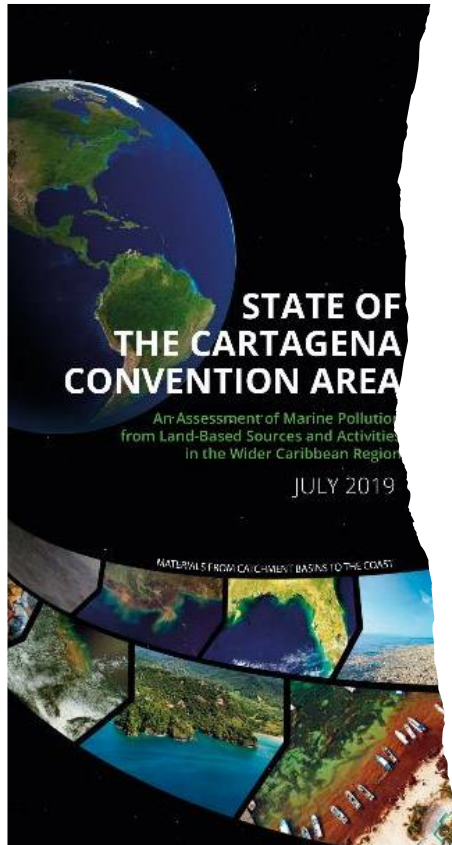
**40** MILLION TONS

of fish could be produced  
using only limited areas in  
the Wider Caribbean.

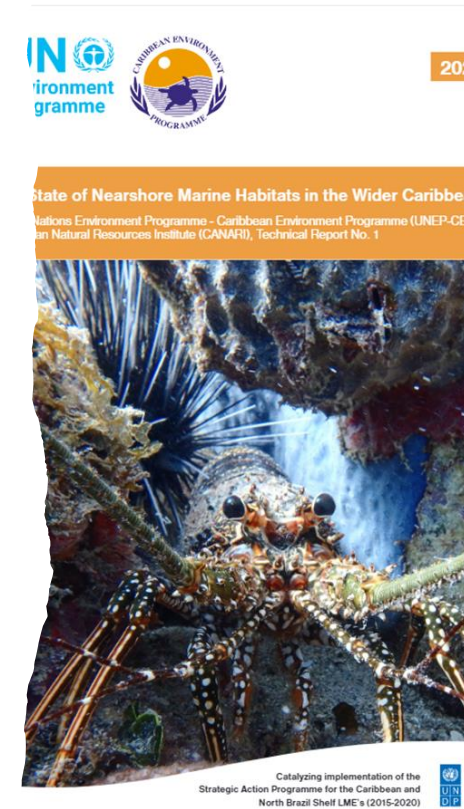
**A Blue Economy is heavily dependent on a clean environment and healthy and productive coastal and marine ecosystems.**



# What is missing which MSP must consider?



- Quantification of Economic Impacts
- Science-Policy Divide
- Lack of Decision-Support tools
- Integrated Ecosystem-Based Management Approaches
- Nature-Based Solutions
- Private Sector Engagement
- Partnerships to address Transboundary Stressors



<https://bit.ly/2J4x6Nc>

# Responses: Ecosystem-Based Management, Marine Spatial Planning & Integrated Ecosystem Assessment all work together



## **Circular Economy**

Maximise the use of resources, prevent waste generation

*Recycling, upcycling, more sustainable primary materials, energy generation from waste*



## **Nature-Based Solutions**

Use ecosystems natural abilities for human purposes

*Constructed wetlands for wastewater treatment, green infrastructure for rainwater control*



## **Water "RRR" Management**

Reduce, Reuse, Recycle for sustainable water management

*Treated wastewater reuse in irrigation, industrial cooling, non-drinking purposes*



## **Sustainable Agriculture**

Improve input efficiency, reduce run-off and pollution

*Seasonal fertilizer use, drip irrigation, cover crops, sustainable land management*



## **Finance for Sustainability**

Financial mechanisms to target and value natural assets and environmental benefits

*Payment for Environmental Services (PES), environment valuation, natural capital, debt-for-nature swap*

# What can Governments do to enhance use of MSP?



**Ratify and/or implement** the Cartagena Convention, its Protocols, and other regional and global agreements on coastal and marine ecosystems and pollution.

**Expand cooperation** including for the implementation of existing Regional Strategies and Action Plans on Nutrient Pollution Reduction, Marine Litter Management and the Valuation, Protection and/or Restoration of Marine Habitats & related international agreements.

**Use harmonized monitoring and data collection methodologies** to support efforts to analyse and report on the status of marine resources, threats, impacts and effectiveness of response measures



# What else can Governments do to support MSP?

**Engage in future regional, sub-regional and national assessments** that support development of State of Pollution and Environment Reports and the implementation of the Pollution (LBS) and Marine Biodiversity (SPAW) protocols of the Cartagena Convention which promote use of MSP

**Strengthen national institutional frameworks**, including via policy harmonisation, to guide strategic, data-driven, long-term, and coordinated ecosystem-based management of marine and coastal resources using MSP and other management tools

**Invest in and scale up best management practices and technologies** to protect marine habitats and to prevent, reduce, and control pollution using MSP as a planning tool

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 UNEPCartagenaConvention   UNEP\_CEP  Youtube: CEPUNEP  LinkedIn: UNEP-Caribbean Environment Programme

Thank you! ¡Gracias! Merci !

<https://www.unenvironment.org/cep/>

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