

Seascape Management:

Integrated approach to ocean governance and management

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Oceans and Seas

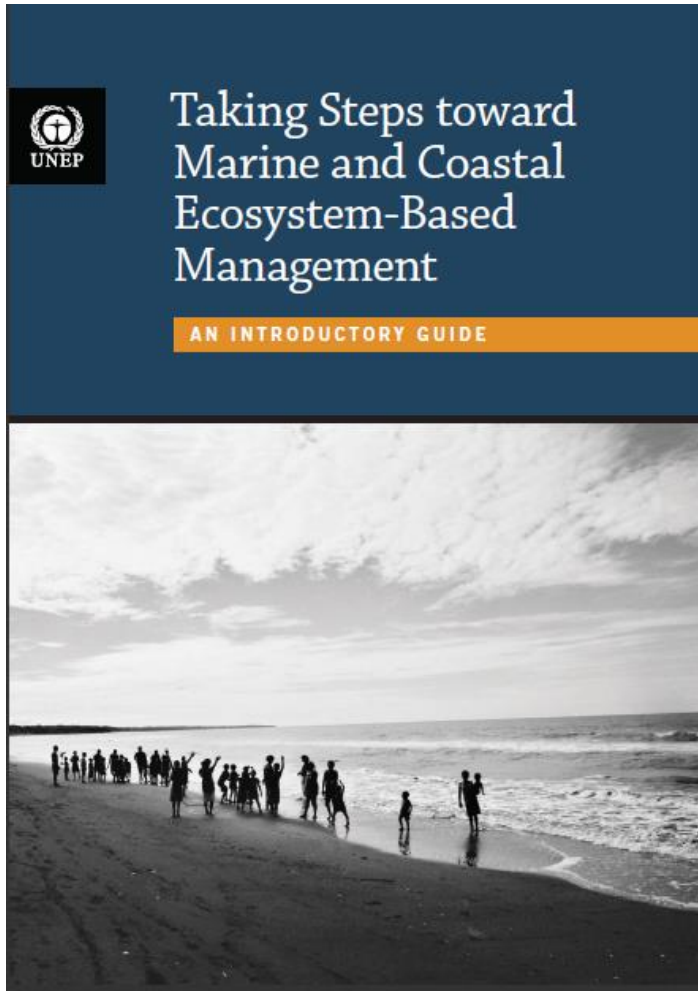
- 71% of the Earth's surface is covered by Oceans.
- 64% of Oceans are considered to be High Seas.
- At least 90 % of the volume of global trade is seaborne.
- Over three billion people depend on marine and coastal resources for their livelihoods.
- In some developing countries, notably Small Island Developing States (SIDS), tourism can account for over 40% of GDP.
- Fish provide 4.3 billion people with about 15 per cent of their intake of animal protein.

Landscape management vs. seascape management

“Seascapes” are defined as: “Large, multiple-use marine areas, defined scientifically and strategically, in which government authorities, private organizations, and other stakeholders cooperate to conserve the diversity and abundance of marine life and to promote human well-being.” (Conservation International)

Large, multiple-use marine areas, stakeholder cooperation, marine life and human well-being -
Analogy with Ecosystem Approach or Ecosystem-based Management

Incremental steps toward Ecosystem-based Management



Core elements of Ecosystem-based Management:

- Recognizing connections
- Ecosystem service perspective
- Cumulative impacts
- Multiple objectives
- Learning and adapting

Mangroves and saltmarshes act as natural filters, trapping harmful sediments and excessive nutrients.

Scenic coastlines, islands, and coral reefs offer recreational opportunities, such as SCUBA diving, sea kayaking, and sailing.

Estuarine seagrasses and mangroves provide nursery habitat for commercial targeted fish and crustacean species.

Healthy rivers provide drinking water for communities and water for agriculture.

Streamside vegetation reduces erosion and traps pollutants.



Offshore reefs create sand and protect the shoreline from severe storms.

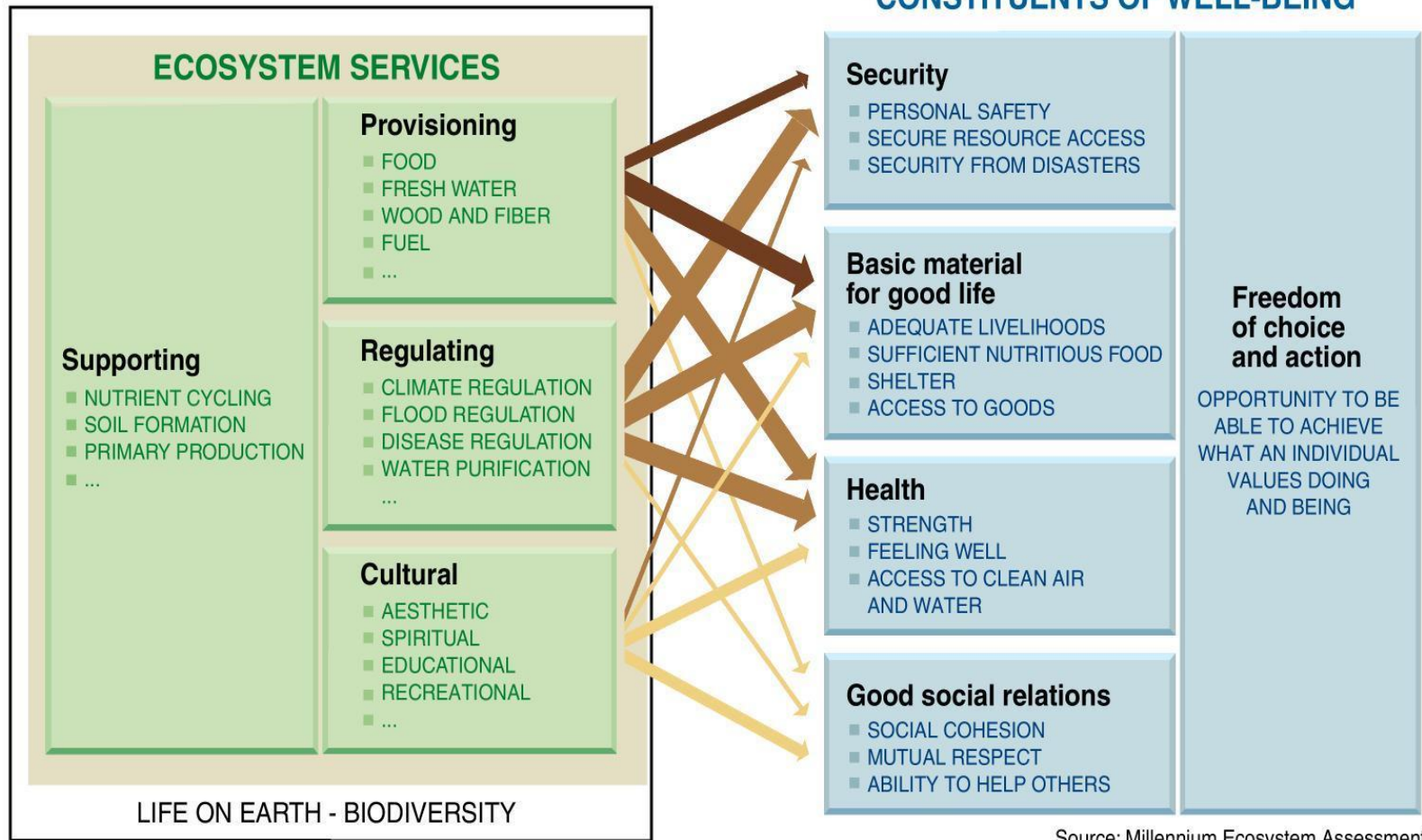
Healthy coral reefs are hotspots of marine biodiversity and can be a source for new medicines and health care products.

Sustainable fisheries provide food, create jobs, and support local economies.

Offshore energy provides power to support coastal development.

Marine ecosystems including seagrasses, mangroves, and saltmarshes act as carbon sinks, reducing greenhouse gases.

Ecosystem Services



Source: Millennium Ecosystem Assessment

ARROW'S COLOR

Potential for mediation by socioeconomic factors

Low

Medium

High

ARROW'S WIDTH

Intensity of linkages between ecosystem services and human well-being

Weak

Medium

Strong

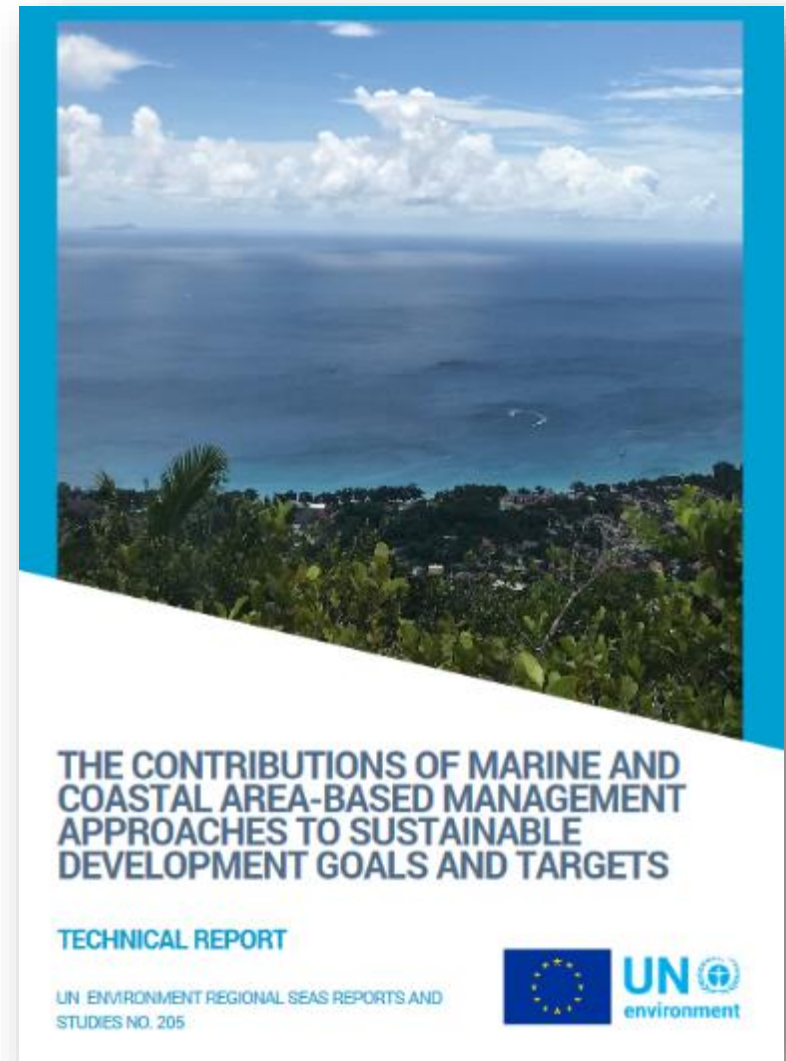
Ecosystem services – the benefits human populations derive, directly or indirectly from ecosystem functions.

Moving towards the Ecosystem Approach

- Ecosystem services and their economic values are not recognized by marine sectors – blue natural capital accounting systems
- Trade-offs for ecosystem services among the users and sectors – trade off analysis tools and physical spatial planning tools such as Marine Spatial Planning and Integrated Coastal Zone Management
- Actual deployment of economic instruments to enable for use of ecosystem services for specific users --- economic instruments such as Payment for Ecosystem Services

Sustainable Development Goals and Area-based management

- * Area-based management has the potential to support SDGs
- * The attributes that make up an area-based management approach helps to provide that support
- * Different tools can be used for different issues
- * Tools can be used in combination
- * Enabling factors: institutional leadership, funding, capacity, trust



http://wcmc.io/oceansdgs_technicalreport

Types of area-based management approach



Marine Spatial Planning



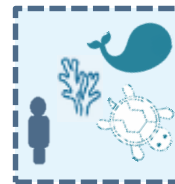
Integrated Coastal Zone Management



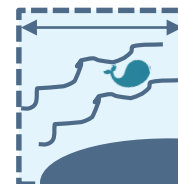
Ridge to Reef



Marine Protected Area



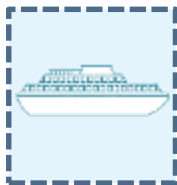
Locally Managed Marine Area



Large Marine Ecosystem



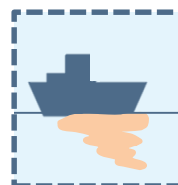
Areas of Particular Environmental Interest



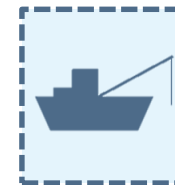
Particularly Sensitive Sea Area



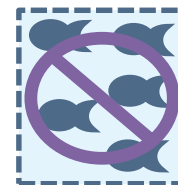
MARPOL Emission Control Area



MARPOL Special Area for Sewage



Vulnerable Marine Ecosystem



Fisheries Closures

Key attributes of approaches and their influence on SDG contributions

Enabling conditions and barriers

Case studies



● Illustrative location of the area-based management approaches included in this study

The boundaries and names shown and the designations used on maps do not imply official endorsement or acceptance by the United Nations Environment Programme or contributory organisations.

Marine Spatial Planning and Integrated Coastal Zone Management

- * Two area-based management tools have been reviewed: Marine Spatial Planning and Integrated Coastal Zone Management
- * Can they be used for pollution control purposes and ecosystem management objectives?
- * Conceptual steps for their application for these purposes
- * Enabling factors: institutional leadership, funding, capacity,

<http://wedocs.unep.org/handle/20.500.11822/26440>



**MARINE SPATIAL PLANNING AND
INTEGRATED COASTAL ZONE
MANAGEMENT APPROACHES TO SUPPORT
THE ACHIEVEMENT OF SUSTAINABLE
DEVELOPMENT GOAL TARGETS 14.1 AND
14.2**

Conceptual Guidelines

UN ENVIRONMENT REGIONAL SEAS REPORTS AND
STUDIES NO. 207



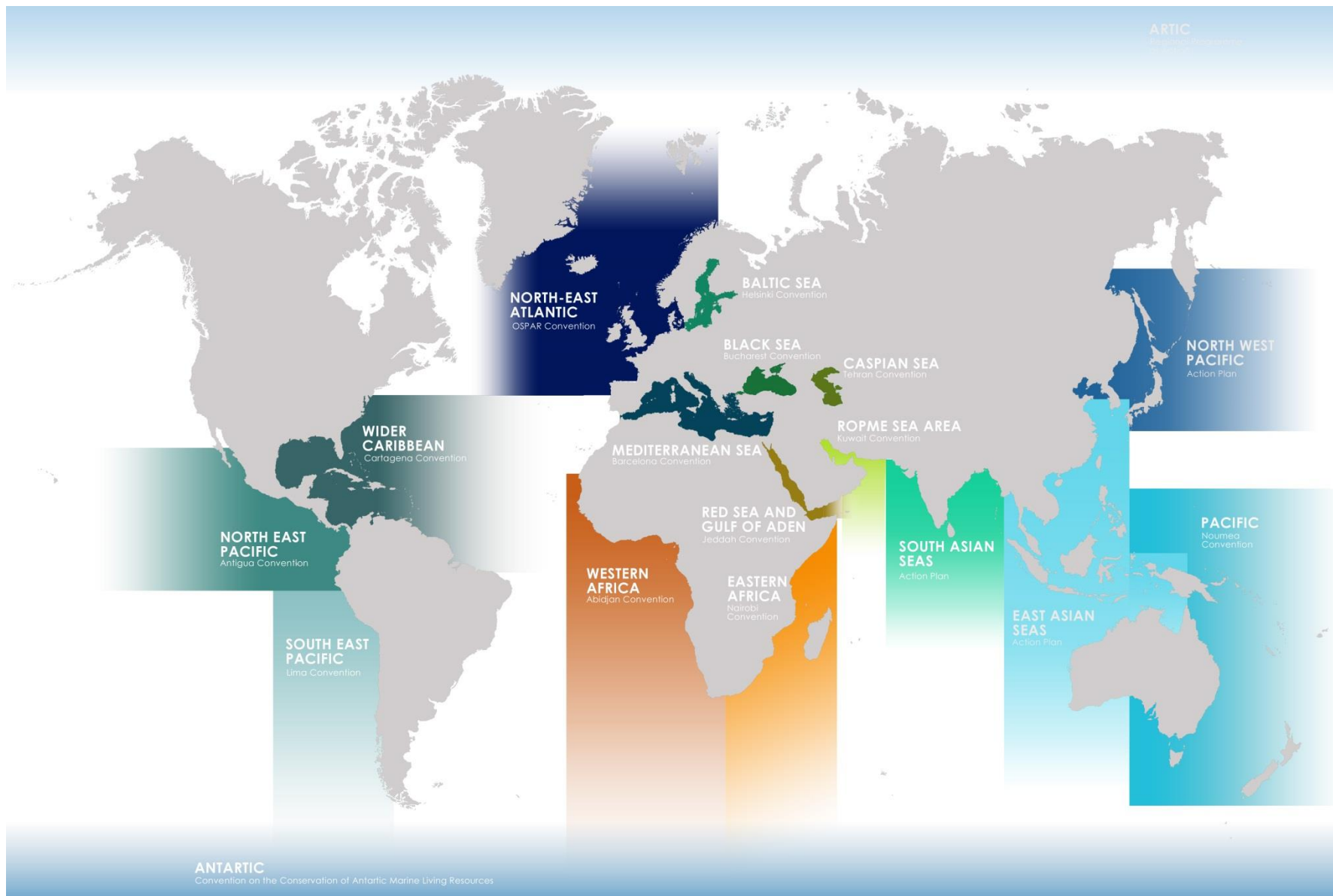
Ecosystem-based or Seascape-based Ocean Governance

1. Institutional, legal, policy and financial framework to make decisions on the ocean resources and space
2. Ecosystem-based --- cross sectoral or integrated approach
3. Scales of marine and coastal ecosystems

Ocean Sectors

Sector	National level	Regional Level	International level
Navigation	Min of Transport	Economic commission	IMO
Fishery	Dept of Fishery	Regional Fishery Bodies	FAO/COFI
Energy	Dept of Energy	Economic commission	IEA, IRENA
Ocean survey	Min of Science	Regional oceanographic commissions	IOC/UNESCO
Environment/ecosystems	Min of Environment	Regional Seas	UNEP
Industry	Min of industry	Economic commissions	UNIDO
Labour	Min of Labour	Economic commissions	ILO
Underwater cable	Min of Communication	Economic commissions	ITU

UN Environment Regional Seas Programme



Regional Seas Activities

**Land-based
pollution**

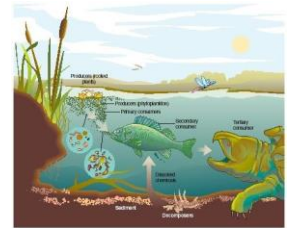
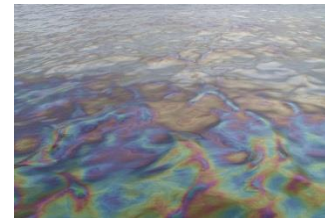
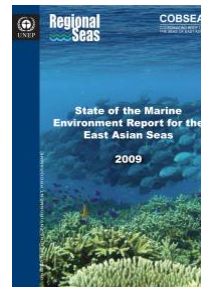
Biodiversity

**Sustainable
Consumption
and
Production**

**Monitoring
and
Assessment**

**Ship-based
pollution**

**Ecosystem-
based
Management**



Case studies on regional cross sectoral cooperation and policy coherence



Ocean Policies and Institutional Arrangements for Cross-sectoral Cooperation

Case studies for achieving Sustainable Development Goals



UNEP Regional Seas Report and Studies No. 204



REALIZING INTEGRATED REGIONAL OCEANS GOVERNANCE

Summary of case studies on regional cross-sectoral institutional cooperation and policy coherence

UN ENVIRONMENT REGIONAL SEAS REPORTS AND STUDIES NO. 199

Success stories

- Integrated Ocean Policies/Strategies or regional sustainable development strategy
- African Ocean Governance strategy
- Regional Seas programmes cooperation with regional fisheries bodies
- Stakeholder – private sector engagement
- Cooperation between Regional Seas and river basin organisation

Developing an regional/national integrated Ocean management programme

- Multi-sector Area-based Management Tools application, such as ICZM and MSP to coordinate sector activities. “Climate proofing” of the area-based management tool application
- Establishment of blue natural capital accounts to support sustainable blue economy
- Effective network of Marine Protected Areas and other conservation measures within the ICZM and MSP
- Land-based sources of pollution control
- Sustainable exploitation of marine living resources
- Institutional development of existing ocean governance mechanisms, particularly private sector engagement
- Sustainable Blue investment in support of the programme