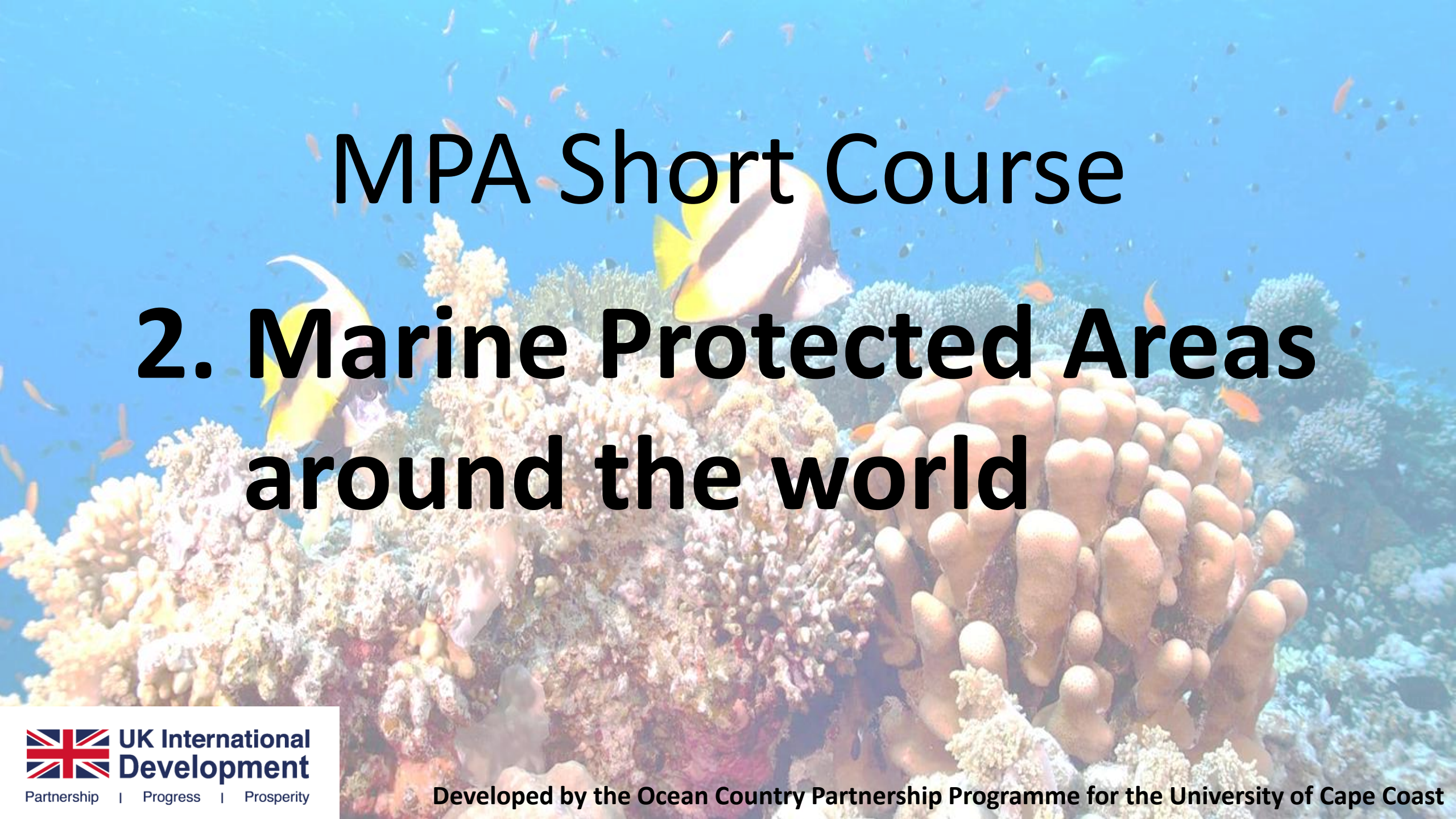


MPA Short Course

2. Marine Protected Areas around the world

UK International Development

Partnership | Progress | Prosperity

Developed by the Ocean Country Partnership Programme for the University of Cape Coast

MPA Course Overview

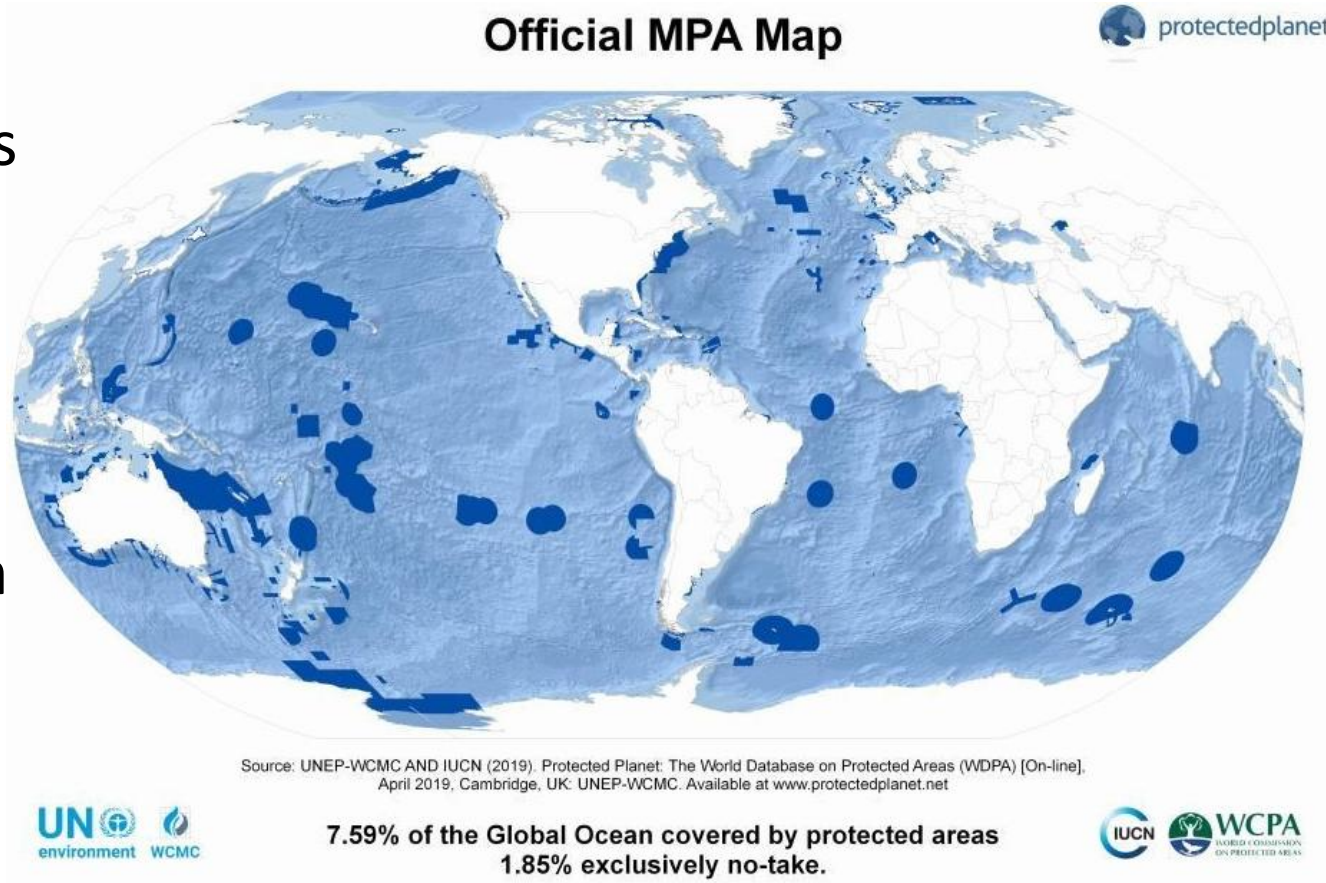
You are here!

1. ~~Introduction to MPAs~~ ✓
2. **MPAs around the world**
3. MPAs in Ghana
4. MPA identification and regulation
5. MPA management planning & management
6. MPA monitoring
7. MPA & Marine Spatial Planning
8. Your Voice

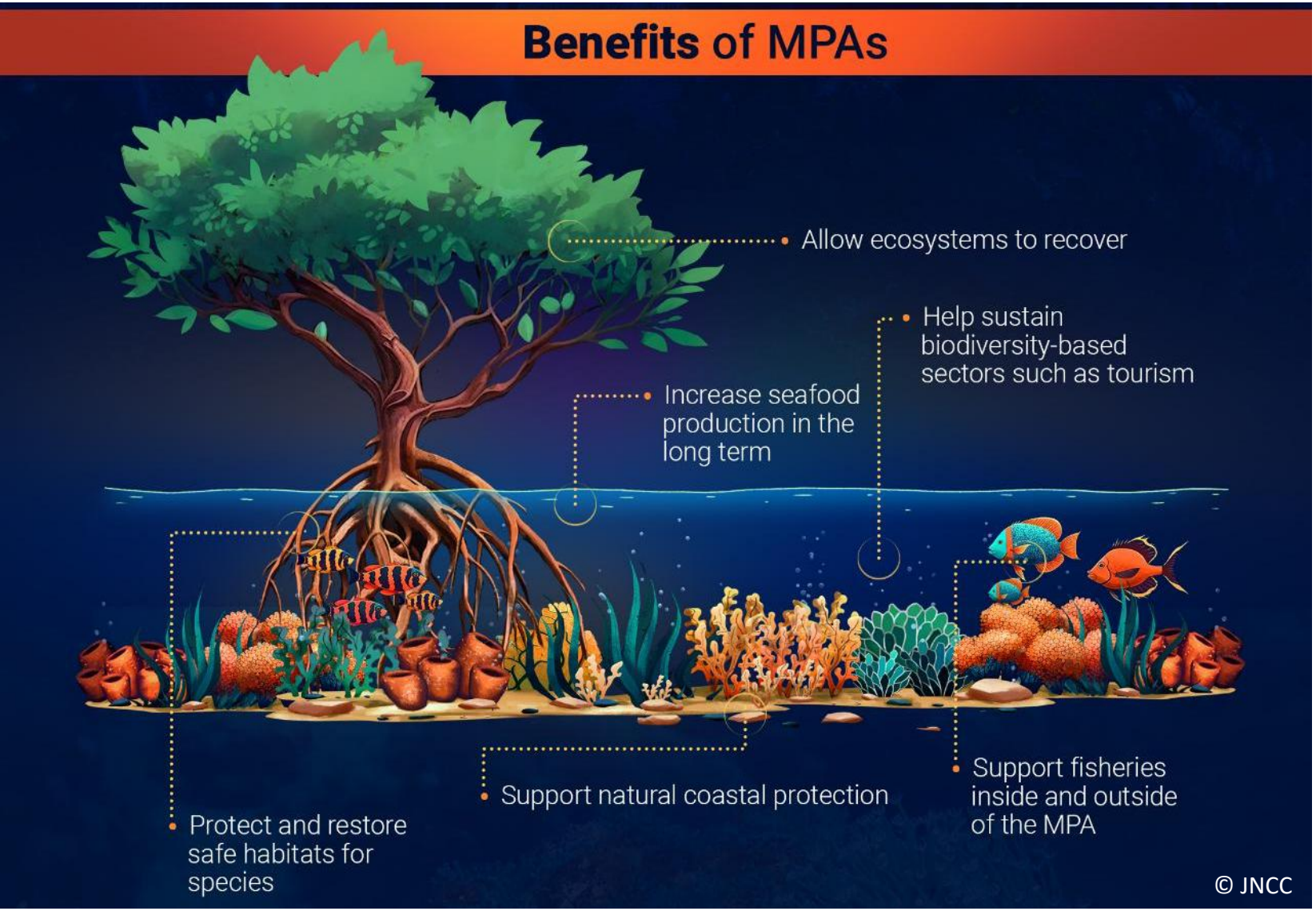
Learning Objectives

In this module you will learn about:

- Regional and international MPA drivers
- The different types / categories of MPAs around the world
- Standard characteristics of MPAs
- MPA networks and their importance in marine conservation
- Transboundary MPAs and regional sea programmes
- Examples from around the world



MPAs: a cornerstone for ocean recovery



- Many threats to ocean, including climate change, overexploitation of resources, pollution, etc.
- MPAs can help **rebuild**, **protect** and **sustain** marine life & associated activities.

MPAs: International & Regional Drivers

MPA Drivers: CBD

Convention on Biological Diversity (CBD)

3 main objectives:

1. **Conservation of biological diversity**
2. **Sustainable use of its components**
3. **Fair and equitable sharing of benefits arising from genetic resources**

Convention on Biological Diversity

Key supplementary agreements:

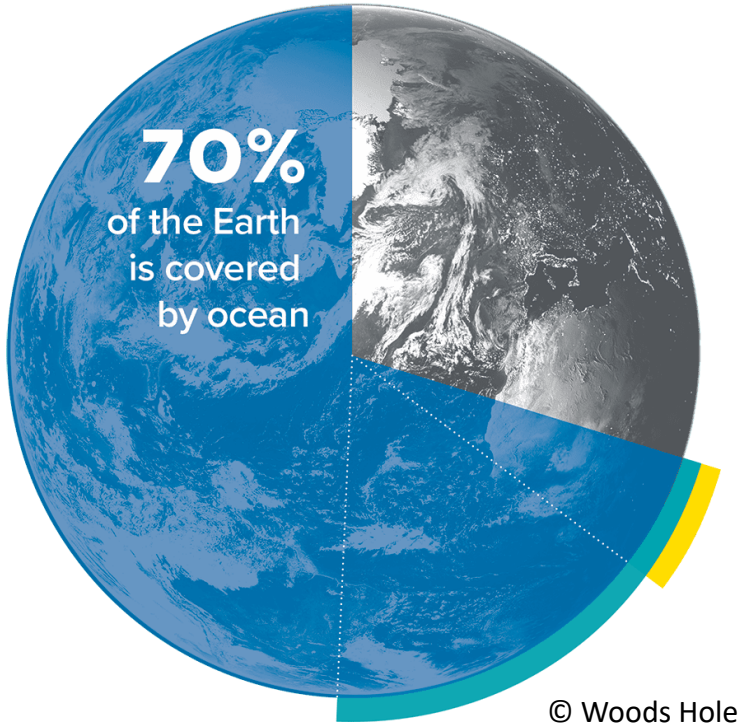
1. **Cartagena Protocol on Biosafety**
2. **Nagoya Protocol on Access and Benefit-Sharing**

MPA Drivers: GBF, 30 by 30

Kunming - Montreal
GLOBAL BIODIVERSITY FRAMEWORK

- Halt and reverse biodiversity loss by 2030
- 23 targets - central component of the GBF is **Target 3** (AKA 30 x 30 initiative)

30 x 30: effectively and equitably conserve at least 30% of the Earth (land and sea) by 2030



30%
of the ocean would be about 108 million square kilometers (41 million square miles), an area the size of Africa, Asia, Europe, and North America combined

<8% of the ocean is currently protected

The Global Ocean Alliance (GOA): 77-country strong alliance, championing ocean action (CBD, 30 x 30, GBF targets)

MPA Drivers: SDGs

MPA Drivers: CITES

Convention on International Trade in Endangered Species of Wild Fauna and Flora

AIM: To ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.

36,000 species of plants and animals are covered under CITES.

Species are covered under three Appendices, according to the degree of protection required:

- **Appendix I –** most endangered. International trade prohibited
- **Appendix II -** species not necessarily threatened, but that may become so unless trade is controlled.
- **Appendix III –** Species need international cooperation to ensure ongoing trade is sustainable

MPA Drivers: RAMSAR Convention

1. **Wise Use of Wetlands**: Promoting sustainable utilization to maintain their ecological character.
2. **Designation of Wetlands of International Importance**: Encouraging member countries to identify and manage significant wetlands.
3. **International Cooperation**: Fostering collaboration among nations for wetland conservation.

Ramsar
Convention
on Wetlands

MPA Drivers: CMS

Convention on the Conservation of Migratory Species of Wild Animals (CMS), (AKA **Bonn Convention)**

The Convention focuses on:

1. **Conservation of Migratory Species**
2. **Habitat Preservation**
3. **International Cooperation**

CMS

MPA Drivers: Convention d'Abidjan

Convention for Cooperation in the Protection, Management, and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central, and Southern Africa Region

Key Objectives:

1. **Protection of the Marine Environment**
2. **Sustainable Management**
3. **Regional Cooperation**

UNEP

ABIDJAN CONVENTION
CONVENTION D'ABIDJAN

MPA Drivers: WAA

West African Alliance on Carbon Markets and Climate Change

Objectives:

1. **Capacity Building**
2. **Policy Development**
3. **Regional Cooperation**
4. **Access to Finance**

Activities:

- **Workshops and Training**
- **Partnerships**
- **Technical Assistance**

Types of MPAs:

IUCN Protected Areas categories

Ia	Strict Nature Reserve
Ib	Wilderness Area
II	National Park
III	Natural Monument or Feature
IV	Habitat or Species Management Area
V	Protected land- / seascape

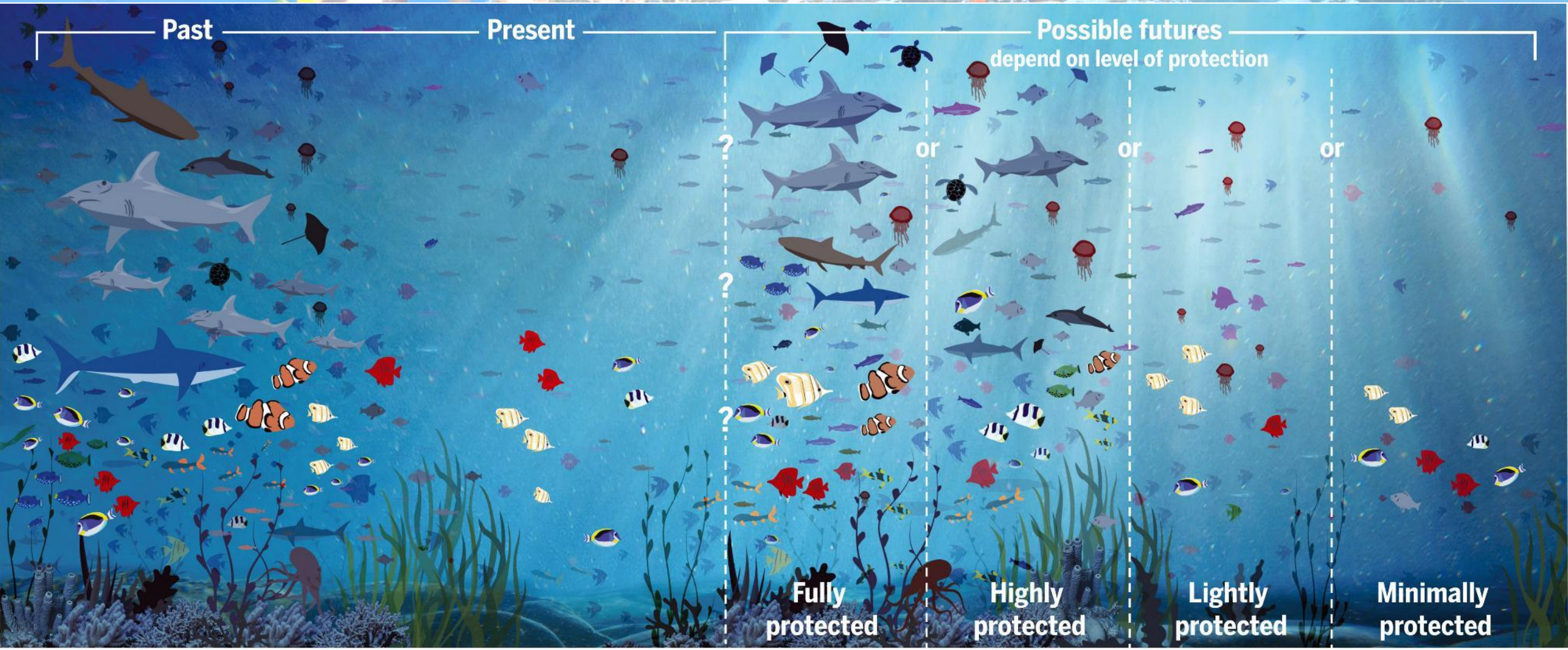
Types of MPAs: Protection & Impact

Maximum allowed impact of activities

	Mining	Dredging & Dumping	Anchoring	Infrastruc-ture	Aquaculture	Fishing	Non-Extractive Activities
Fully Protected							
Highly Protected							
Lightly Protected							
Minimally Protected							

Grorud-Colvert *et al.*, 2021.
DOI: 10.1126/science.abf0861

Impact to marine environment based on levels of protection



Grorud-Colvert *et al.*, 2021. DOI: 10.1126/science.abf0861

Zonation *within* MPAs

No-Use Zone

No activities permitted

No-Take Zone

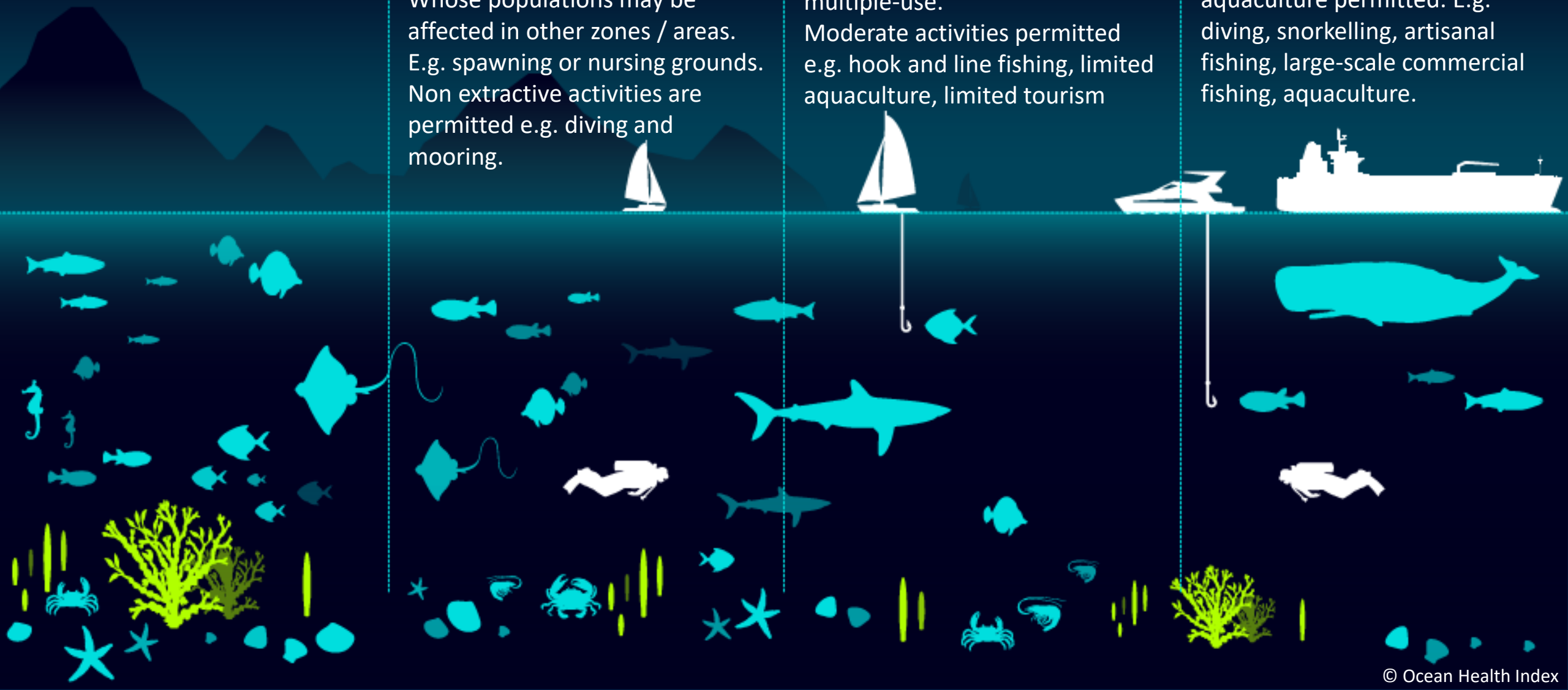
Measures taken to protect spp. Whose populations may be affected in other zones / areas. E.g. spawning or nursing grounds. Non extractive activities are permitted e.g. diving and mooring.

Buffer Zone

Transitional zones from no-take to multiple-use.
Moderate activities permitted e.g. hook and line fishing, limited aquaculture, limited tourism

Multi-Use Zone

All tourism, fishing and aquaculture permitted. E.g. diving, snorkelling, artisanal fishing, large-scale commercial fishing, aquaculture.



Other Effective Area-based Conservation Measures (OECMs)

Definition under the Convention of Biological Diversity (CBD):

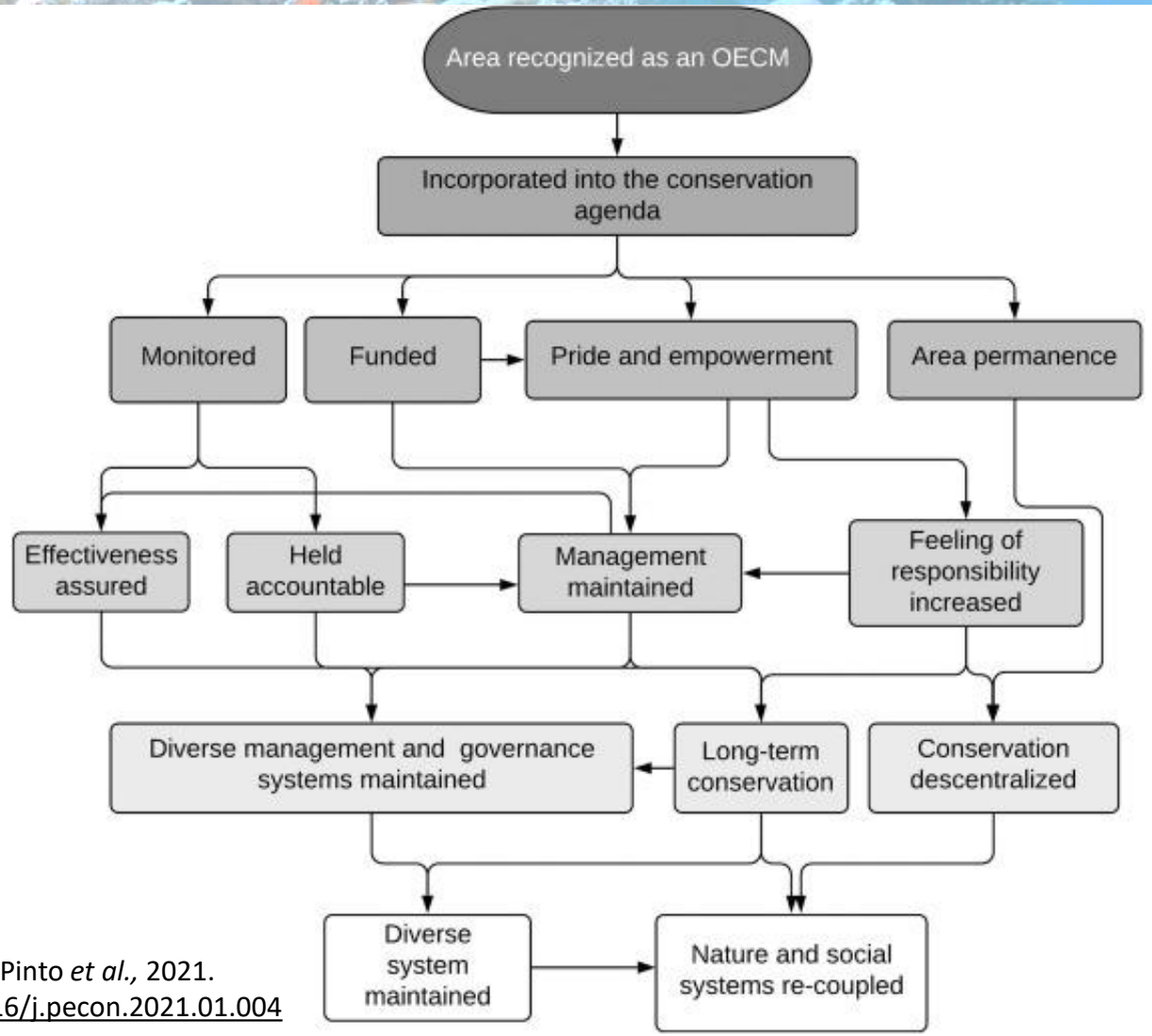
"a geographically defined area **other than a Protected Area**, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ* conservation of biodiversity, with associated ecosystem functions and services and, where applicable, cultural, spiritual, socioeconomic, and other locally relevant values"

*"the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties"

Other Effective Area-based Conservation Measures (OECMs)

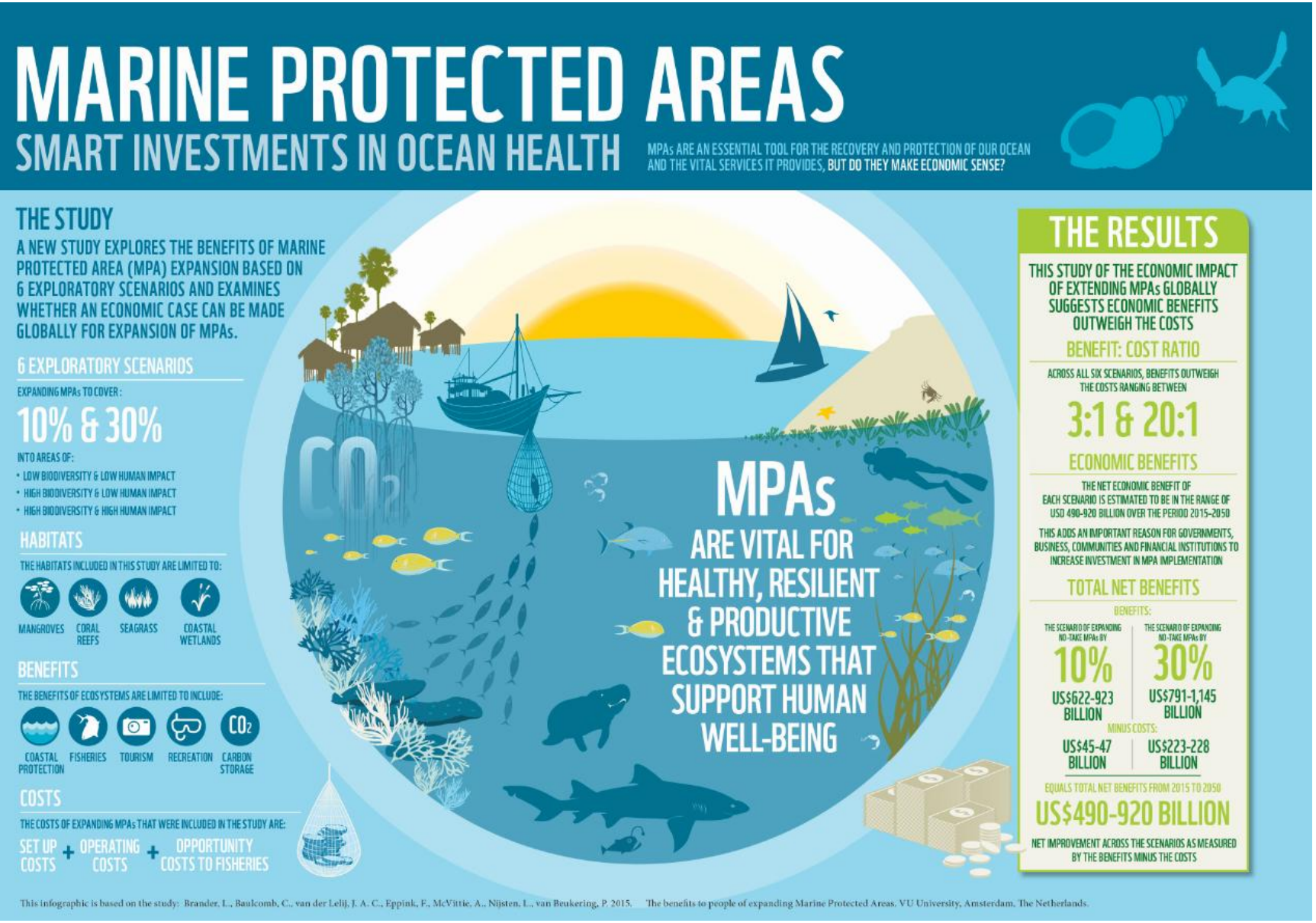
Main differences between MPAs and OECMs:

- MPAs are designated and managed to achieve a primary conservation objective
- OECMs deliver effective conservation of biodiversity regardless of whether that is their primary goal
- Collectively, MPAs and OECMs are referred to as Protected and Conserved Areas (PCAs)



Alves-Pinto *et al.,* 2021.
DOI: 10.1016/j.pecon.2021.01.004

MPA Networks: More is more!



- A collection of individual MPAs operating together, at various spatial scales, with a range of protection levels.
- Fulfil ecological aims more effectively than individual sites could alone.
- Harnessing the power of nature for people and planet.

Why do we need MPA networks?

Deliver a conservation benefit that is greater than the sum of its parts.

Conservation impact – Safeguards critical habitats of vulnerable species, e.g. breeding ground, feeding areas and migration routes.

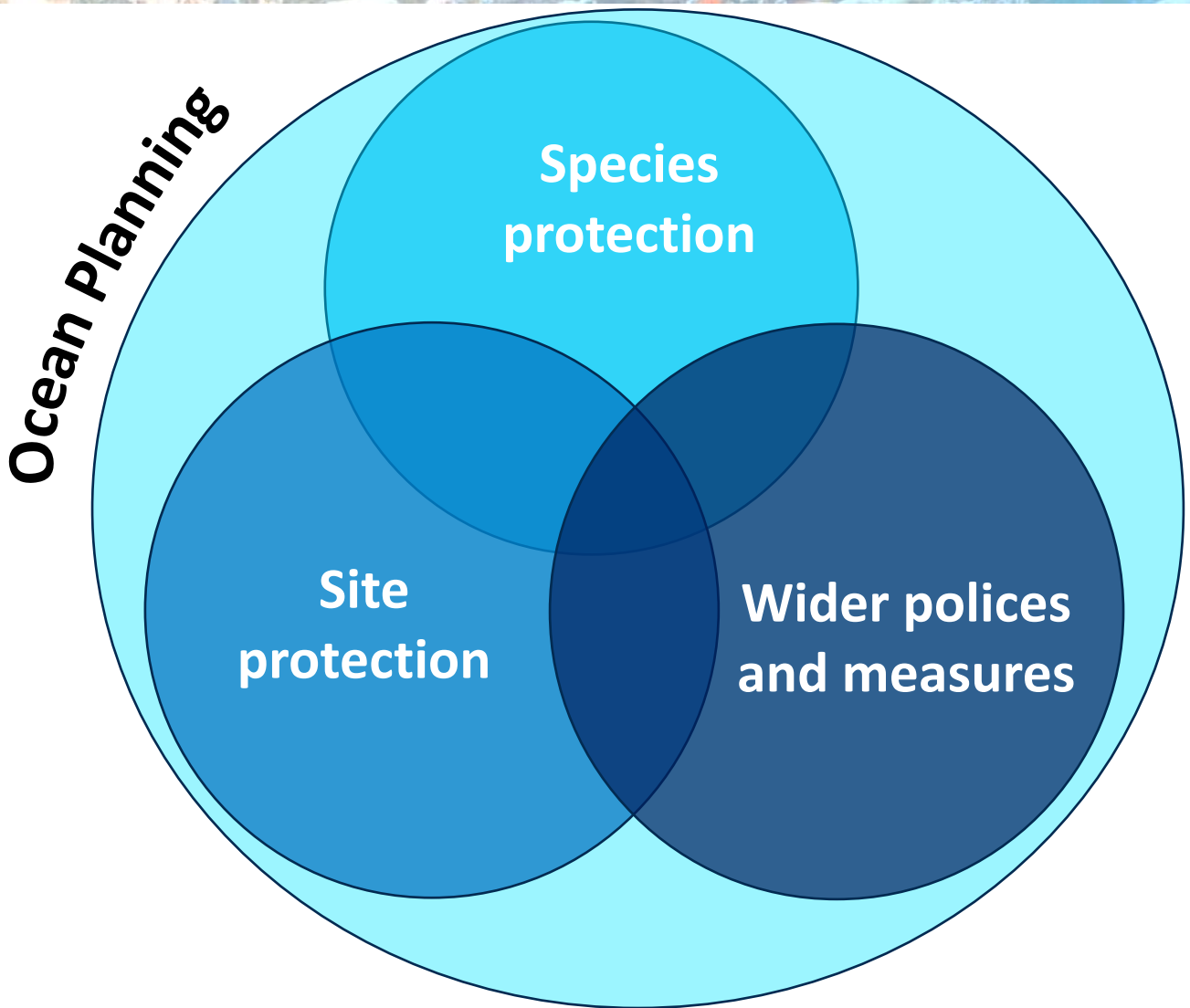
Ecological Resilience and connectivity – Maintains connectivity between ecosystems, better adapted to environmental disturbances and climate change.

Collaboration and Knowledge sharing – Promotes collaboration among different stakeholders and provides a platform for sharing knowledge, best practice and data.

Social and Economic benefits – Supports sustainable development of activities, provides opportunities to local communities, promotes economic advancements and cultural values.

How do MPAs and MPA networks fit into wider marine conservation?

The marine conservation ‘toolbox’



Transboundary MPAs (TBMPAs)

TBMPAs: regions that span across the boundaries of **multiple countries** and are **collaboratively managed** to conserve biodiversity and promote sustainable use of natural resources.

E.g. The Eastern Tropical Pacific Marine Corridor (CMAR)

- Voluntary, non-binding collaboration between Colombia, Costa Rica, Ecuador, and Panama
- Focussed on the conservation and sustainable use of marine resources.

Transboundary MPAs

Benefits

- Enhance biodiversity conservation
- Improved ecological connectivity
- Shared resources and expertise
- Strengthened political and cultural relations

Challenges

- Legal and jurisdictional complexities
- Coordination and governance issues
- Resource allocation disparities
- Sociopolitical tensions

UNEP Regional Seas Programme

18 regional seas conventions and action plans (RSCAPs), covering >143 countries

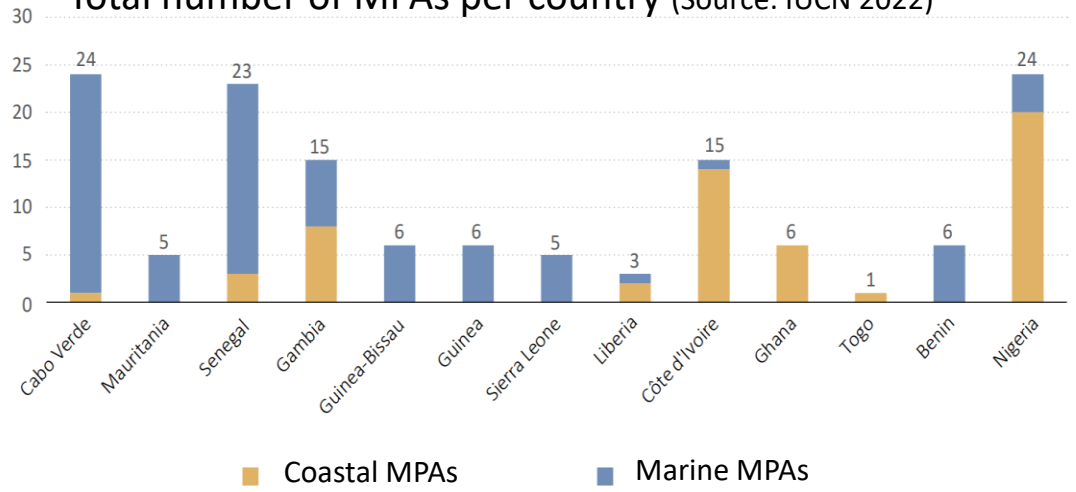
AIM: using a “shared seas” approach, strengthen regional capacity to enable implementation of action plans and work programmes, through education, training, communication and institution-building.

cdn.unenvironment.org

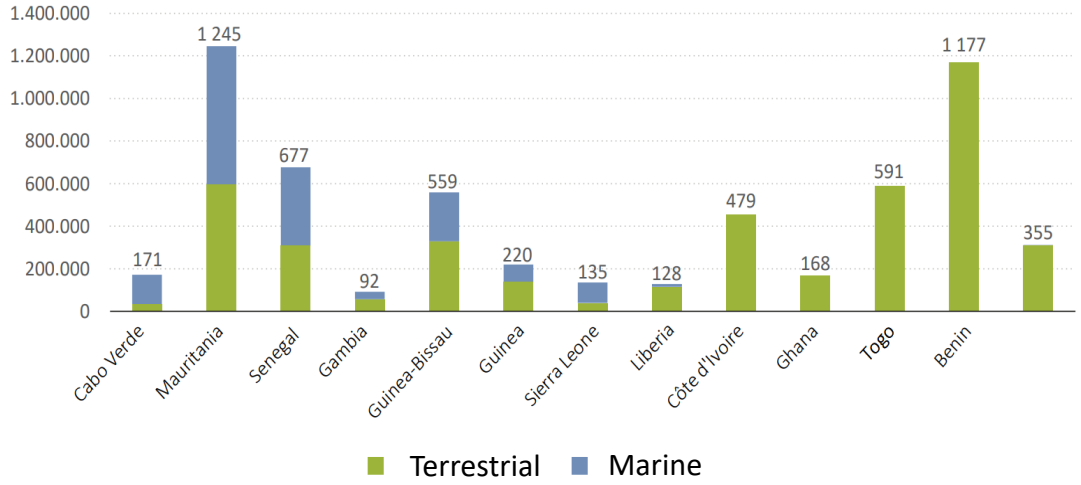
MPAs in West Africa

Map of Wetland, Coastal and Marine Protected Areas in West Africa

Total number of MPAs per country (Source: IUCN 2022)



Land and sea surfaces of MPAs by country (ha) (Source: IUCN 2022)



MPAs in West Africa - RAMPAO

The Regional Network of Marine Protected Areas in West Africa

'le reseau regional d'aires marines protégées (AMP) en Afrique de l'Ouest'

9 member countries covering ~50 PAs / MPAs (as of 2023):

- Mauritania
- Cabo Verde
- Senegal
- Gambia
- Guinea Bissau
- The Republic of Guinea
- Sierra Leone
- Ivory Coast
- Benin

rampao

(Selkani, 2022)

In summary

1. The importance of marine ecosystems is recognised globally which has led to multiple international and regional drivers for marine protection.
2. MPAs are designated and managed to achieve a primary conservation objective.
3. There are many different types of MPA, based on the levels of protection and types of impacts allowed.
4. OECMs deliver effective conservation of biodiversity regardless of whether that is their primary goal.
5. MPA networks fulfil ecological aims more effectively than individual sites could alone.
6. Regional collaboration e.g. RAMPAO is key to strengthen conservation capacity.