



Food and Agriculture Organization
of the United Nations

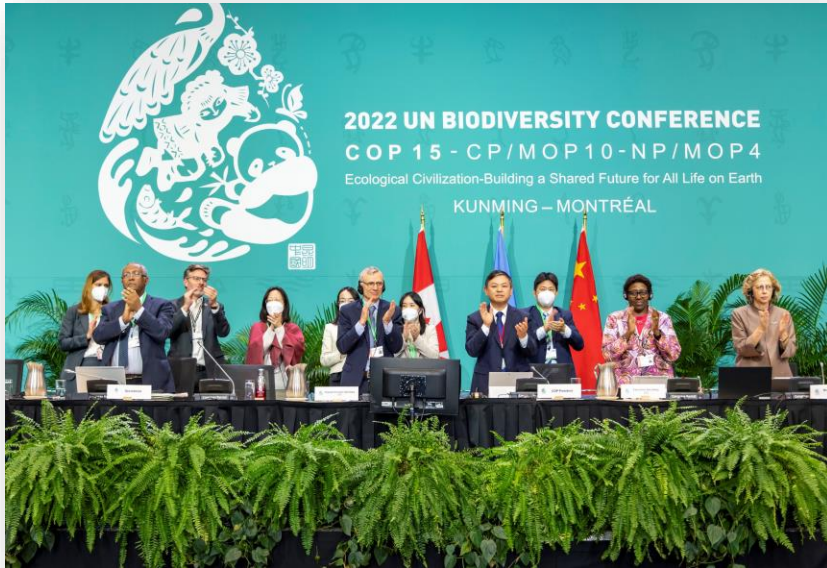


Understanding the role of fisheries management in delivering Target 3 of the GBF: A biodiversity outcome framework

**Amber Himes-Cornell
Kristin Hoelting
Tundi Agardy**

MSEAS 2024

30x30 and OECMs



THE BIODIVERSITY PLAN
For Life on Earth

Target 3 (the short version)

“...by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas...are effectively conserved and managed through... systems of protected areas and **other effective area-based conservation measures...**”



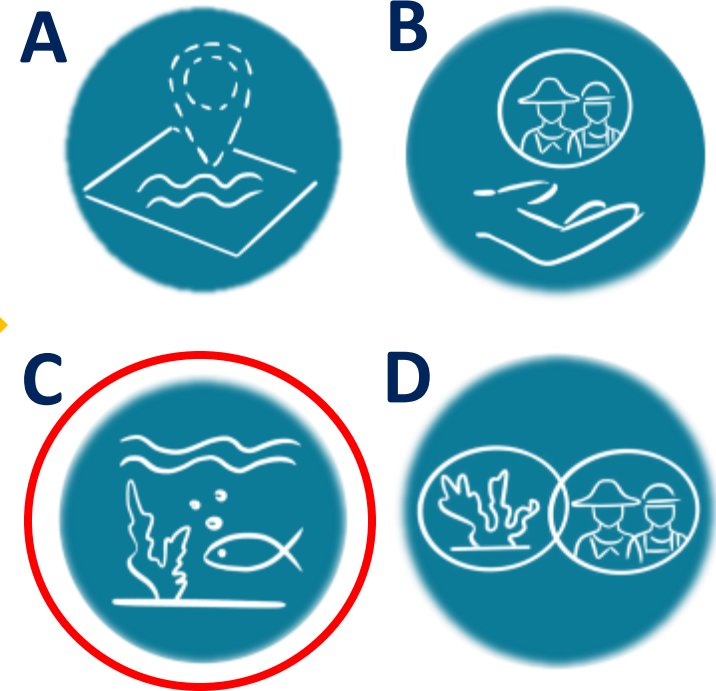
OECD Definition

“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, socio-economic, and other locally relevant values”



Where do we (FAO) fit in?

34th COFI requested that **FAO produce and disseminate practical guidelines** to support Members in **OECM identification and implementation**



Help member countries interpret the four OECM criteria to their fisheries managed areas

Criterion C & the need for supplemental guidance



Achieves sustained and effective contribution to in situ conservation of biodiversity

1. What does it mean to make an effective contribution to in situ conservation of biodiversity?
2. What kinds of biodiversity outcomes might we expect to see as a result of area-based fisheries management?





Criterion C & the need for supplemental guidance

Important Biodiversity Attributes (CBD Decision 14/8)

- rare, threatened or endangered species and ecosystems
- ecosystems underrepresented in protected area networks
- high level of ecological integrity or intactness
- significant populations of range-restricted species or ecosystems
- important species aggregations, e.g., spawning, breeding, feeding areas
- important sites for ecological connectivity

Potential biodiversity outcomes from area-based fisheries management

- Sustained increases in productivity
- Maintenance of threatened populations or endangered species
- Ecosystem protection, measured by changes to:
 - Habitat diversity
 - Species richness
 - Delivery of ecosystem services

Gathering information on biodiversity can be challenging...

Biodiversity Outcomes Framework overview

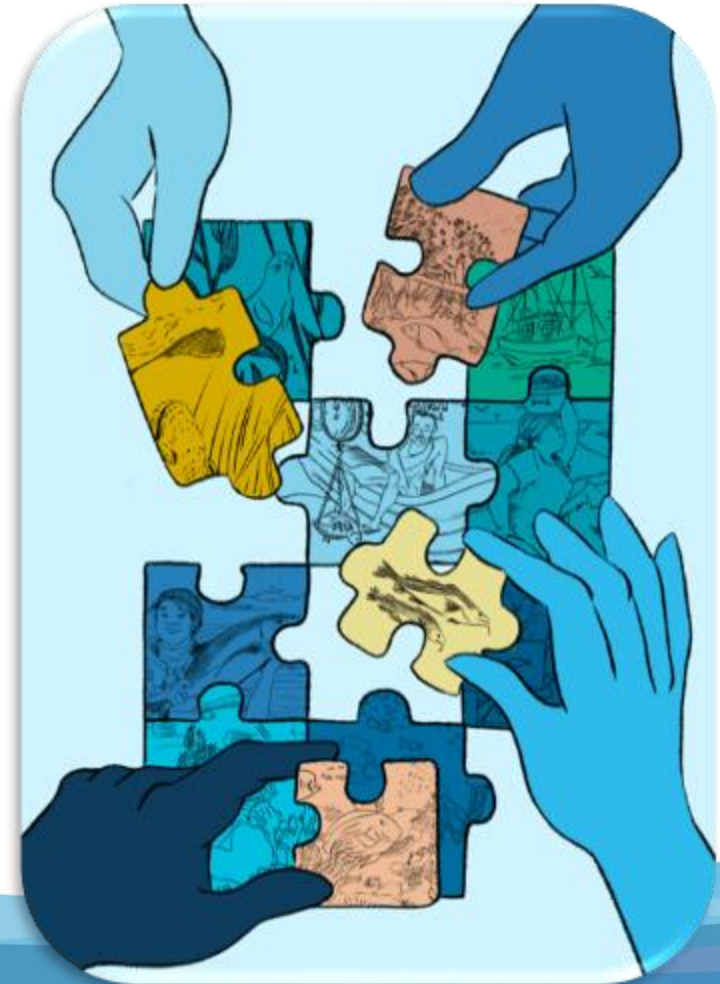
Purpose: To provide a launch point for determining biodiversity outcomes in area-based fisheries management

Conservation

How looking at biodiversity outcomes for fisheries compares to other sectors

Fisheries

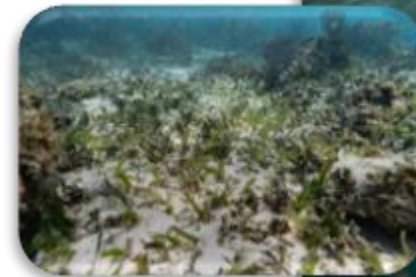
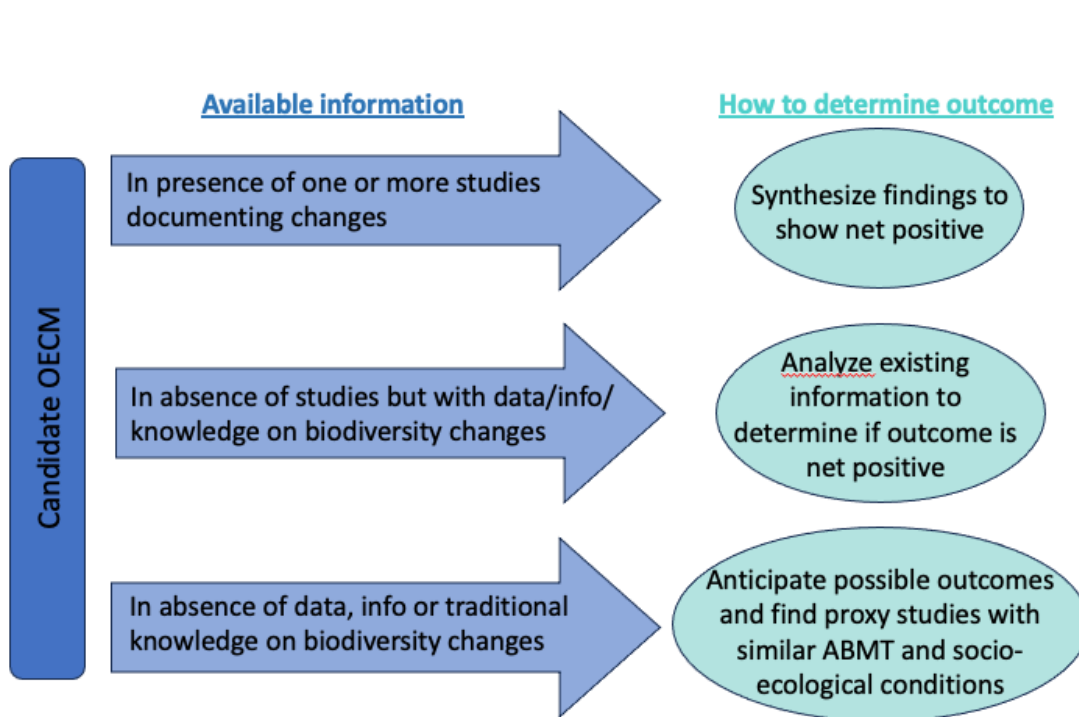
How to get started in thinking about what ABFM is doing for biodiversity



Biodiversity Outcomes Framework overview

Part 1: Framework

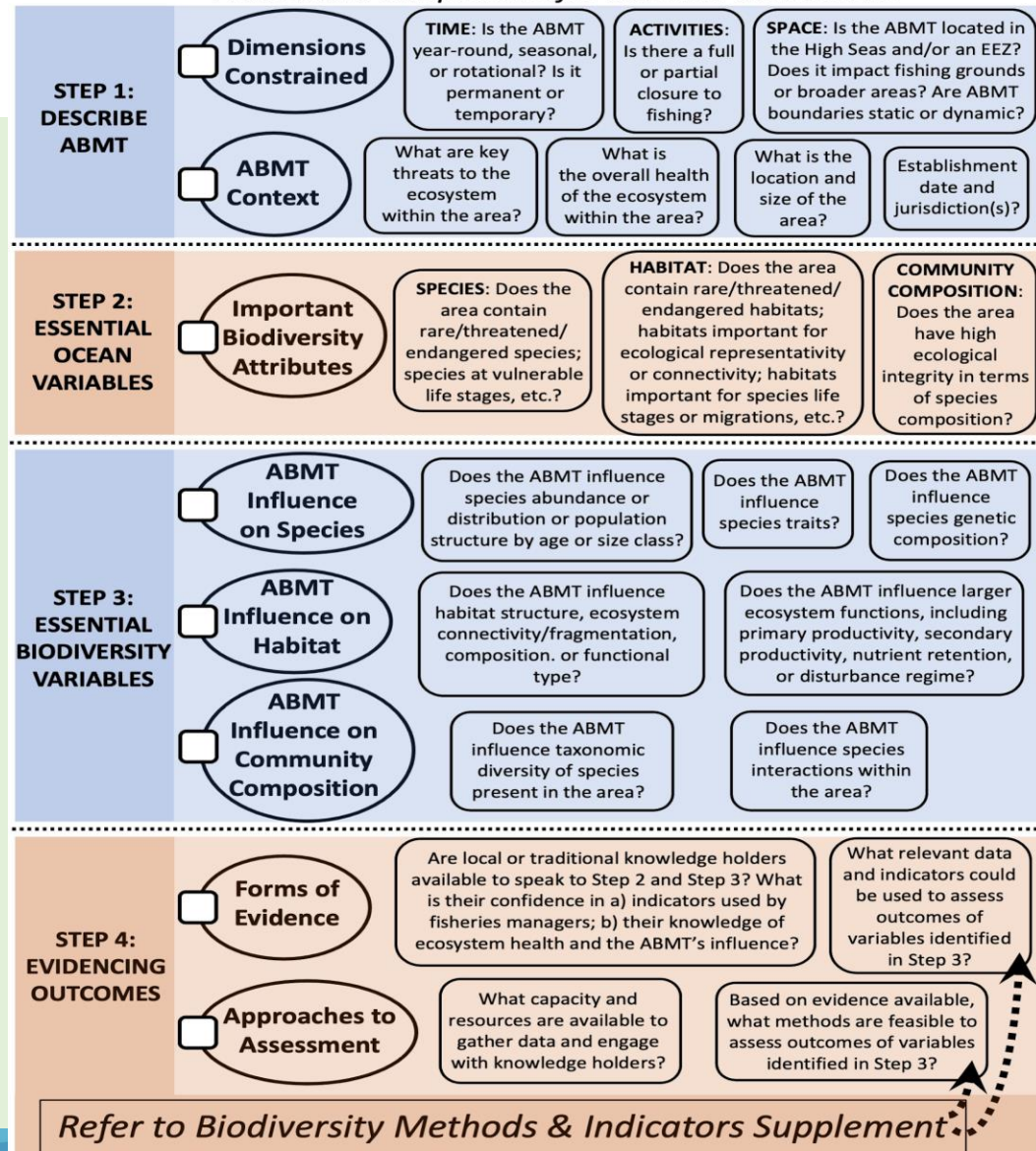
Part 2: Case study examples



Part 1: Overarching framework

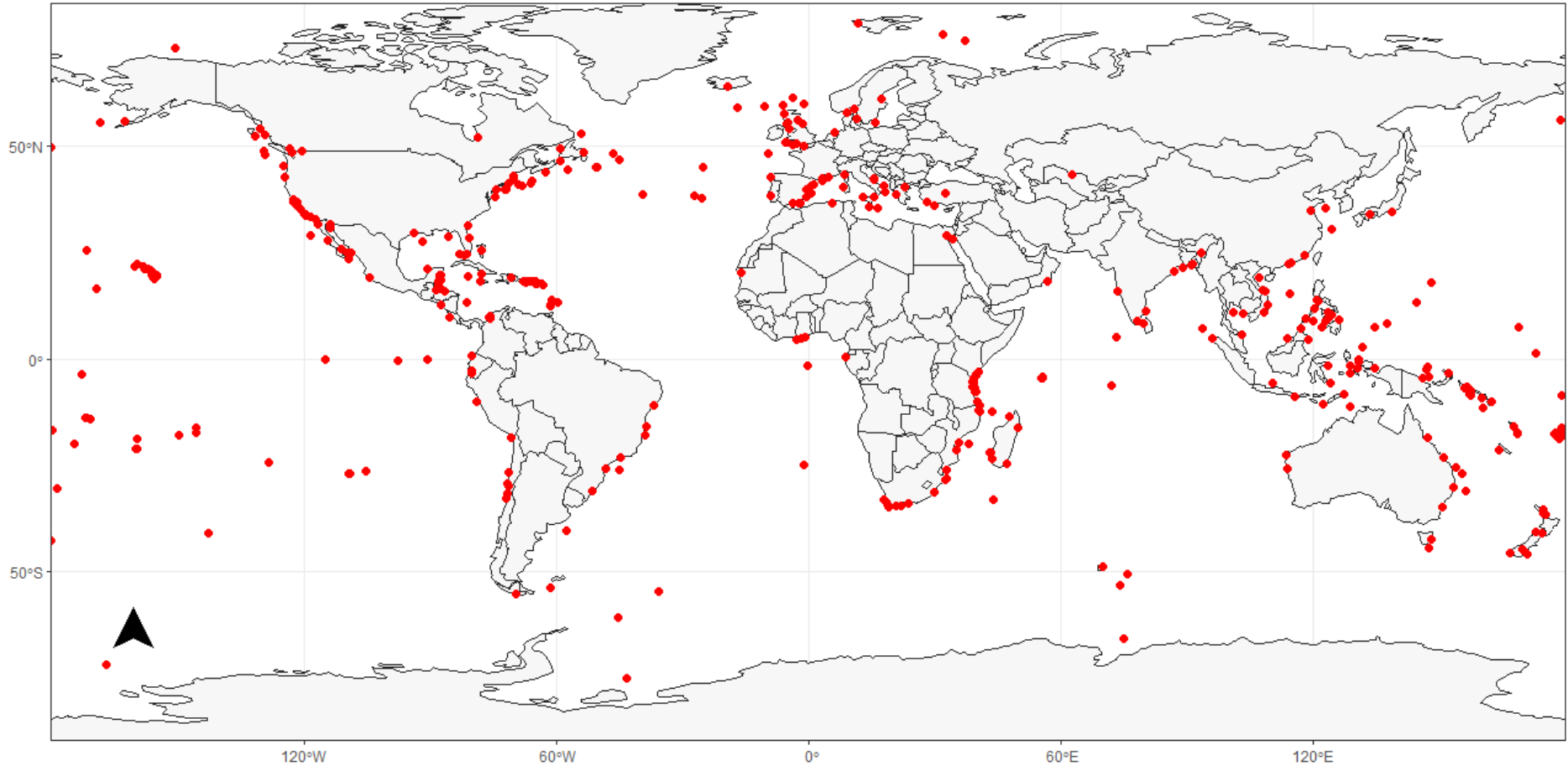
- Supports defining biodiversity features
- Notes methods and metrics available to document biodiversity changes
- Suggests a simplified approach for gathering evidence of biodiversity outcomes
- Links to typologies of ABFMs and marine ecosystems

☑ Fisheries ABMT Biodiversity Outcomes Checklist *Framework components for outcome assessment*



Part 2: Real world examples in fisheries

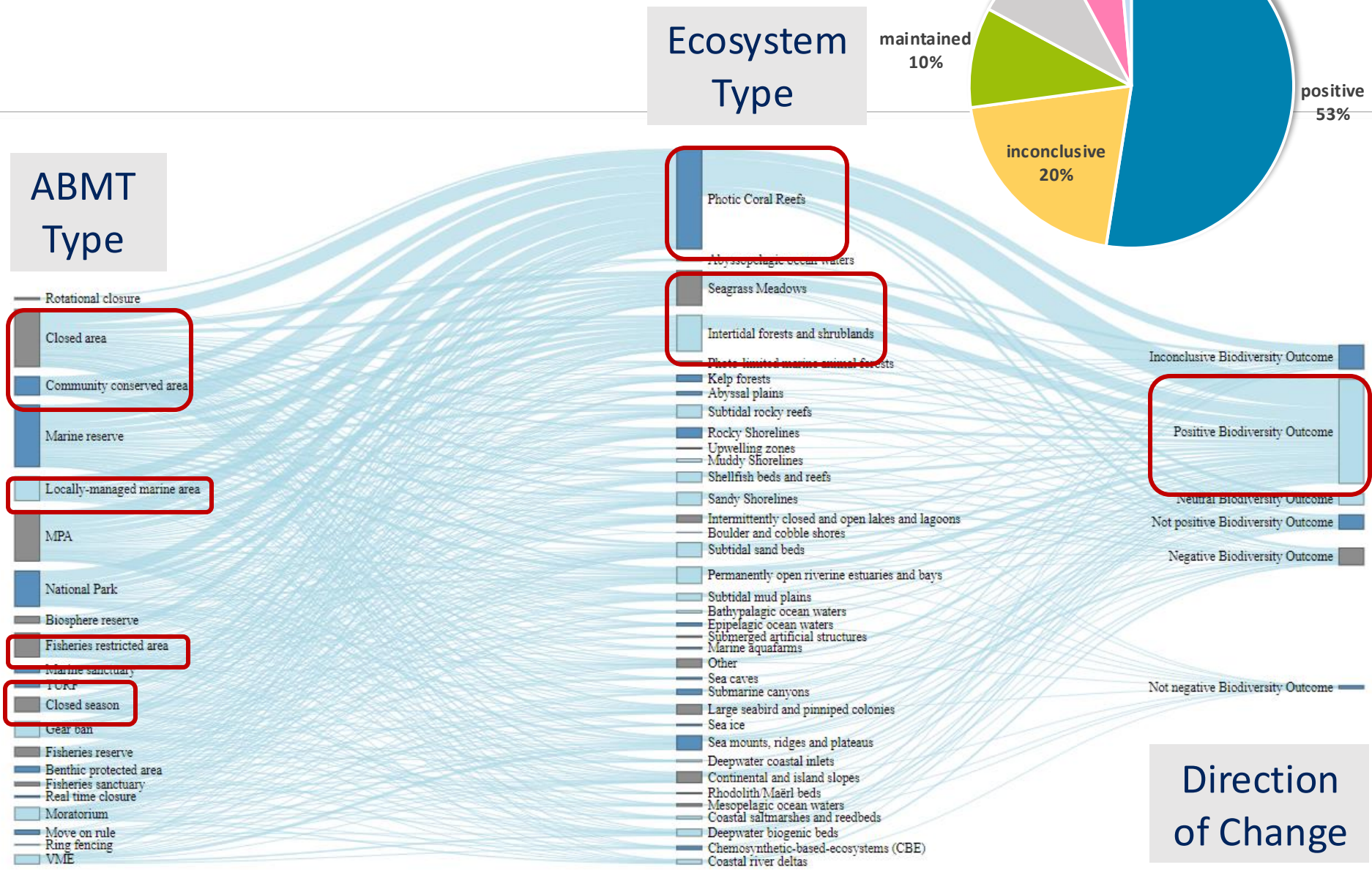
Putting it into context...





469 unique case studies



What are we finding?



Examples of Positive Biodiversity Outcomes

Ecosystem Types	Area-based Management Tool Type	Biodiversity Outcome Example	Biodiversity Outcome Class
	Rotational Closure	Higher biomass of select functional fish groups (i.e., grazers, scrapers/excavators) & increase in overall coral cover (Cinner et al., 2019)	Species Diversity & Richness
	Locally managed marine area & Closed season	Improved ecological condition of the coastal area (Egli et al., 2010)	Ecosystem & Food Webs
	Locally managed marine area	"The community reported other positive effects including improvements in the seagrass habitat and the return of species that had disappeared such as sea hares and stingrays." (Cakacaka, A., 2008)	Species Diversity & Richness and Habitats

Framework features & Next steps

① Goal of FAO's Framework: help fisheries managers evaluate OECM Criterion C

② Outlines simple approaches for identifying biodiversity attributes, predicting how fisheries ABMTs may influence them, and gathering evidence

③ Literature review results offer insight into which biodiversity outcomes can be expected from different fisheries ABMTs, across ecosystem types





Food and Agriculture Organization
of the United Nations



Thank you!

For more information, contact:
amber.himescornell@fao.org