

A review of impact assessments for deep-sea fisheries on the high seas

against the FAO Deep-sea Fisheries Guidelines

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UN Bottom Fisheries Workshop, 2-3 August 2022 NY

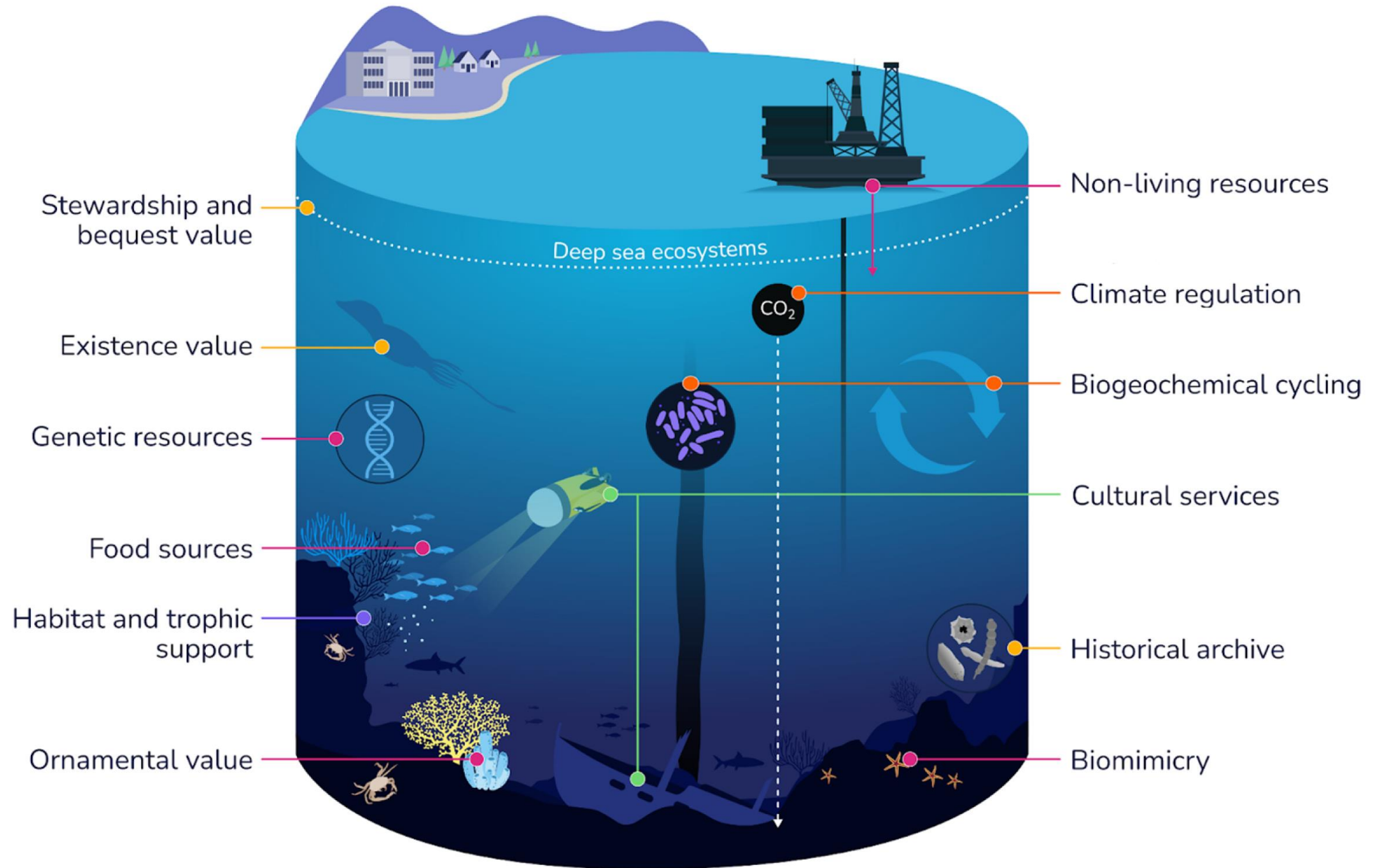


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“Uniting international experts to guide science-based policy for the preservation of our deep ocean ecosystems”



BIODIVERSITY

A deep-sea fish, possibly a lanternfish, is shown swimming over a dark, sandy seabed. The seabed is covered with numerous small, yellowish, irregular patches, likely sponges or other benthic organisms. The lighting is dim, highlighting the fish and the patches against the dark background.

Deep-sea fish

3500 species

Carbon capture and storage

Trophic role

Genetic resources

VMEs

Diverse

Survival and function

Spawning/reproduction/
nursery/ rearing grounds

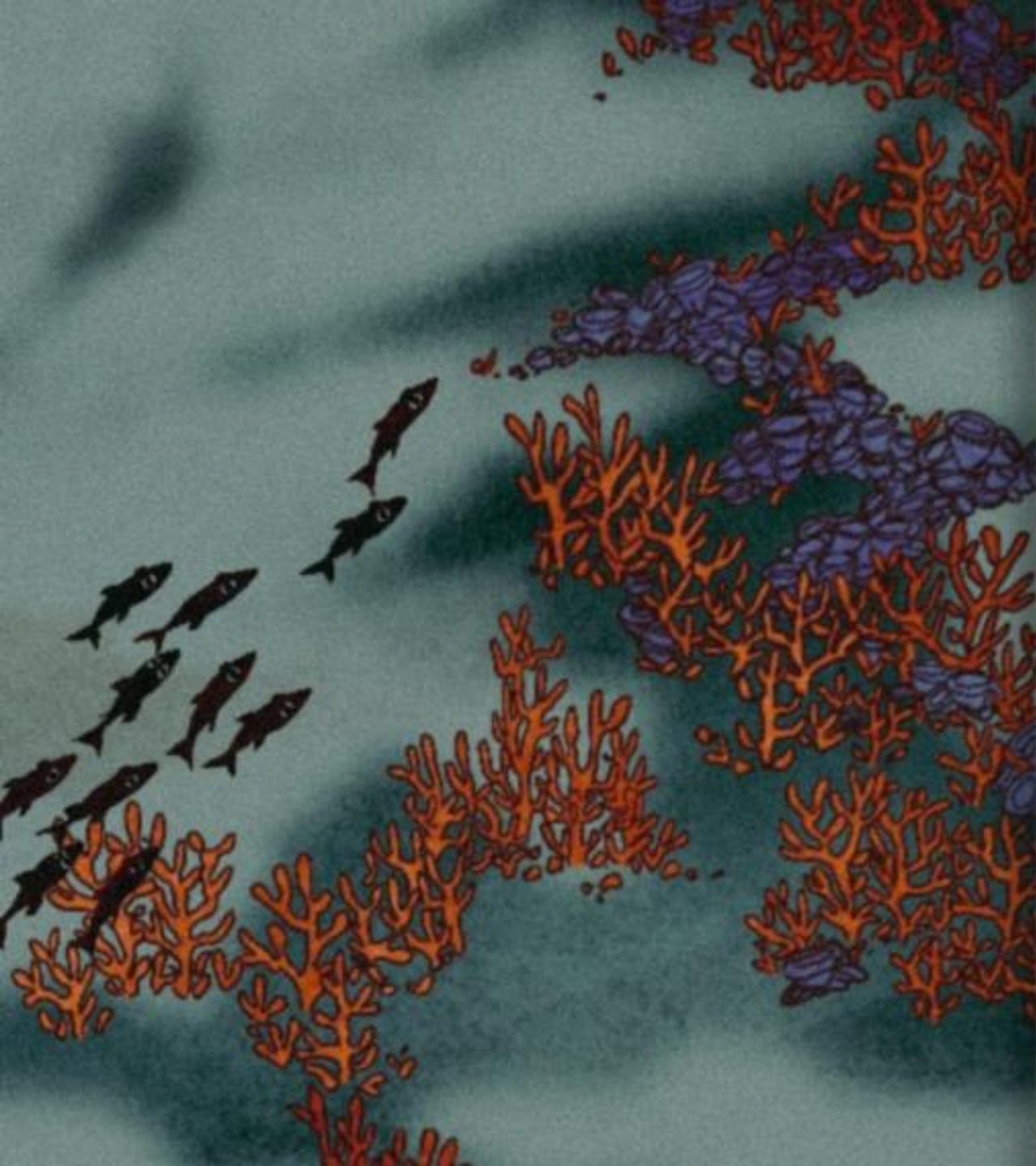
Feeding areas

Refuge

Recovery of fish stocks

Benthic-pelagic coupling

Genetic resources



In order to effectively implement the UNGA resolutions, the IAs must comprehensively evaluate the impacts fishing activities are having or are likely to have on the environment



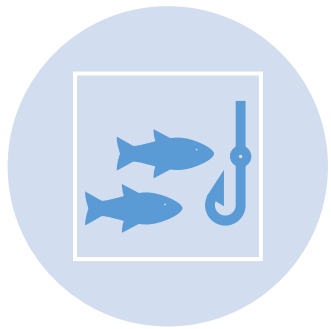
Criteria for IAs in para. 47 of International Guidelines for the Management of Deep-sea Fisheries in the High Seas (the FAO Guidelines, 2009)

Objective

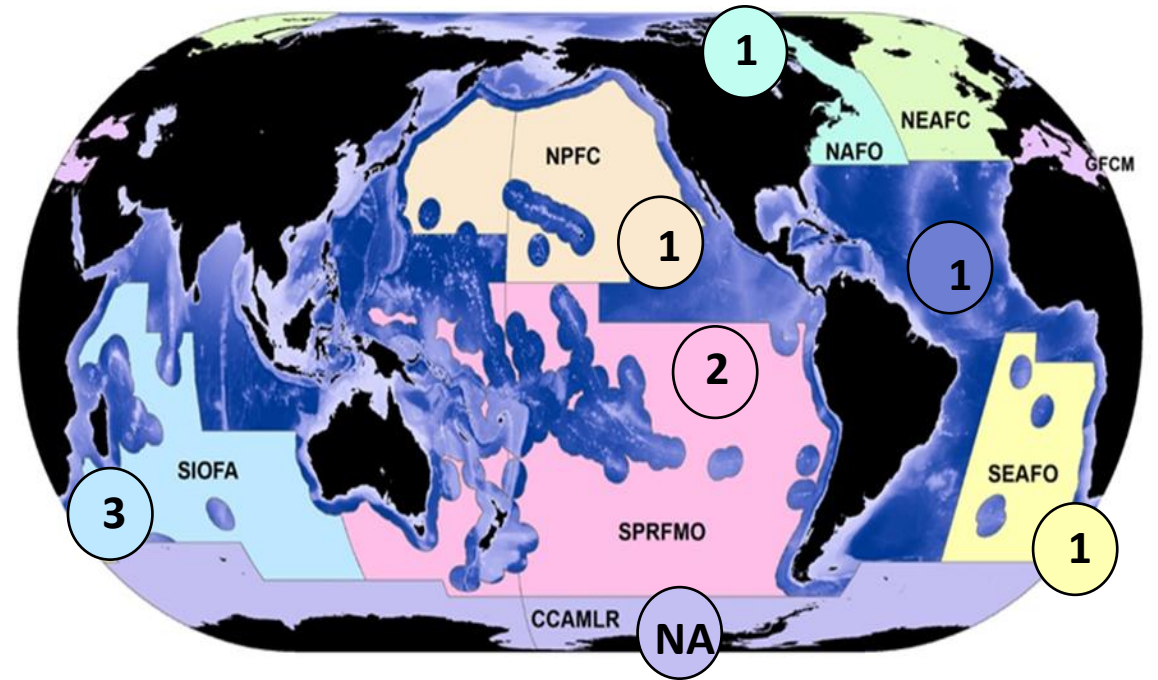
Are the selected IAs compliant with the criteria established in the para. 47 of the FAO Guidelines?

Key finding

The reviewed IAs are only partly in compliance with paragraph 47 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas adopted in 2009.



9 publicly available
IAs representing
different types of
fishing in different
regions





A questionnaire based on IA criteria in the FAO Guidelines



Each IA reviewed by 2-3 members of the WG

Table 2. Questionnaire used to evaluate the impact assessments based on the impact assessment criteria in the FAO Guidelines (2009).

Criterion number and topic under paragraph 47 of the FAO Guidelines	Question
iii. identification, description and mapping of VMEs known or likely to occur in the fishing area;	What definition and criteria of VMEs is/are used (e.g., are existing definitions from literature cited, list of taxa/topographical features or other areas e.g., where “rare” species are known or likely to occur?)
	What methods are used to identify potential VMEs?
	If modelling studies or acoustic mapping is used, have the findings been validated ?

Results

! Baseline data

! VME identification

! Assessing impacts

Majority of criteria are only **partially** or **not addressed in the IAs**

Impact assessment	Description of fishing activity	Baseline information	Identification of VMEs	Description of used data and methods	Assessment of potential impacts	Risk assessment	Mitigation measures and monitoring
Cook Islands SIOFA	Partially	No	Acoustic mapping = No	Partially	No	No	Partially
Australia SIOFA	Partially	No	Bathymetry, trawl catches = Partially	Partially	Partially	Partially	Partially
Japan SIOFA	Partially	No	Trawl catches = Partially	Partially	No	No	No
Australia-NZ SPRFMO 2020	Partially	Partially	SDMs, trawl catches = Partially	Yes	Partially	Yes	Partially
Japan NPFC	Partially	Partially	Visual surveys = Partially, small spatial coverage	Yes	Partially	No	Partially
Spain SW Atlantic (no RFMO)	Partially	Yes	Visual surveys, trawl catches, topographical features = Yes	Yes	No	No (N/A)	Partially
NAFO 2021	Yes	Yes	Trawl catches, SDMs = Partially	Yes	Partially	Yes	Partially
Japan SEAFO	Partially	No	Longline catches = No	No	No	No (N/A)	Partially
Spain Gillnet SPRFMO	Partially	No	Bycatch from gillnets = No	No	No	No (N/A)	Partially

Baseline information
(criteria ii)



VME Identification
(criteria iii)



Limited evidence for preventing Significant Adverse Impacts

Bycatch of VME indicator taxa is often the main method used to identify VMEs



VME indicator bycatch
undersamples benthic biomass

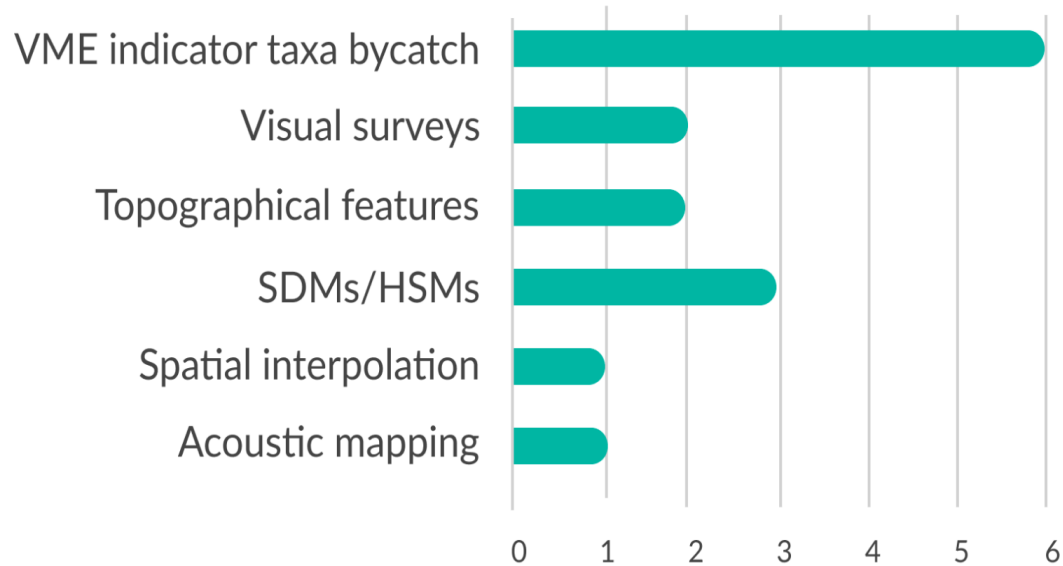


Not representative of the benthic community or the impacted individuals

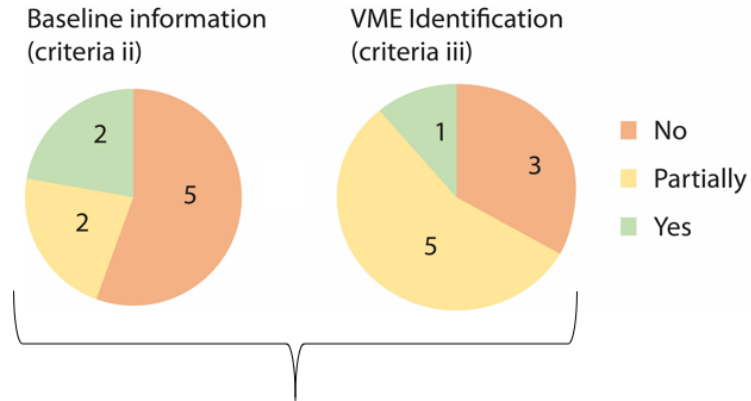


Destructive

VME identification methods

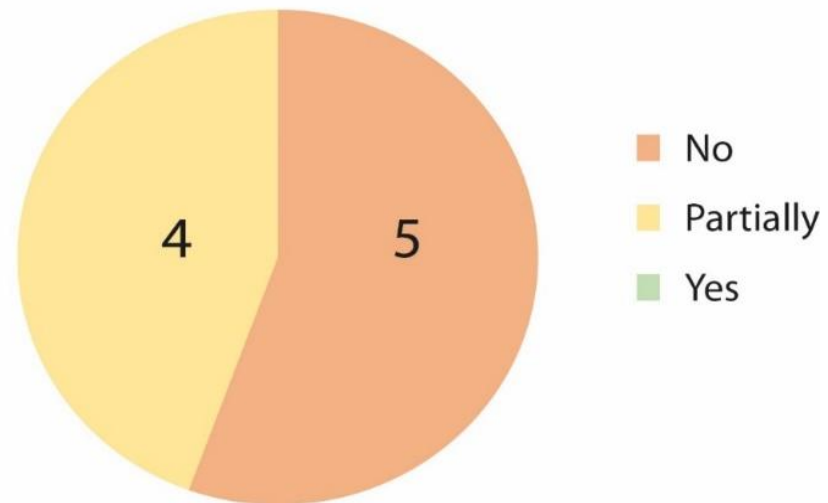


Lack of data and evidence



Limited evidence for preventing Significant Adverse Impacts

Assesment of potential impacts (criteria v)



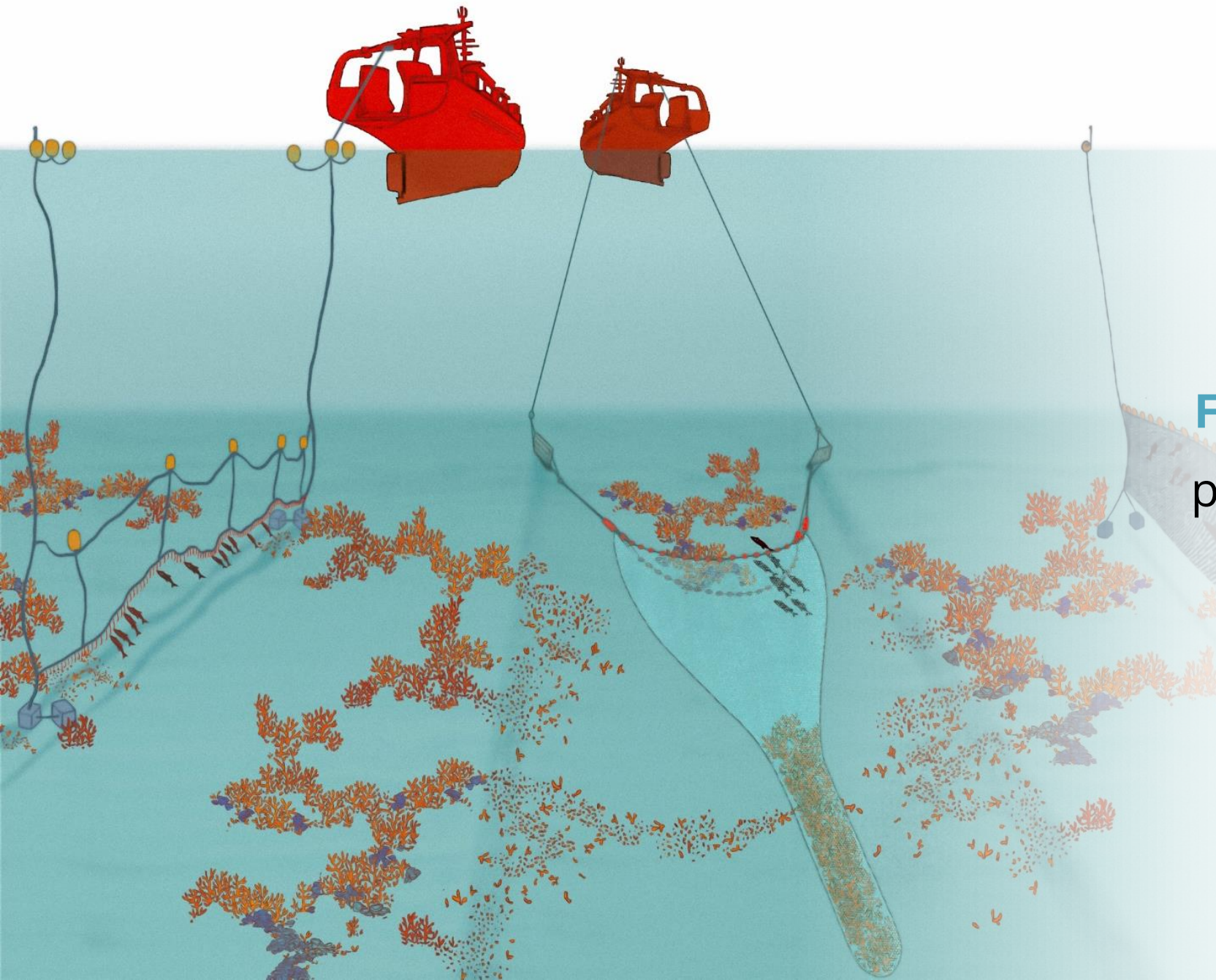
Significant adverse impacts

The IAs claim that SAIs do not occur

VME taxa are long-lived and their recovery from disturbance often takes longer than the 20 years limit for SAI

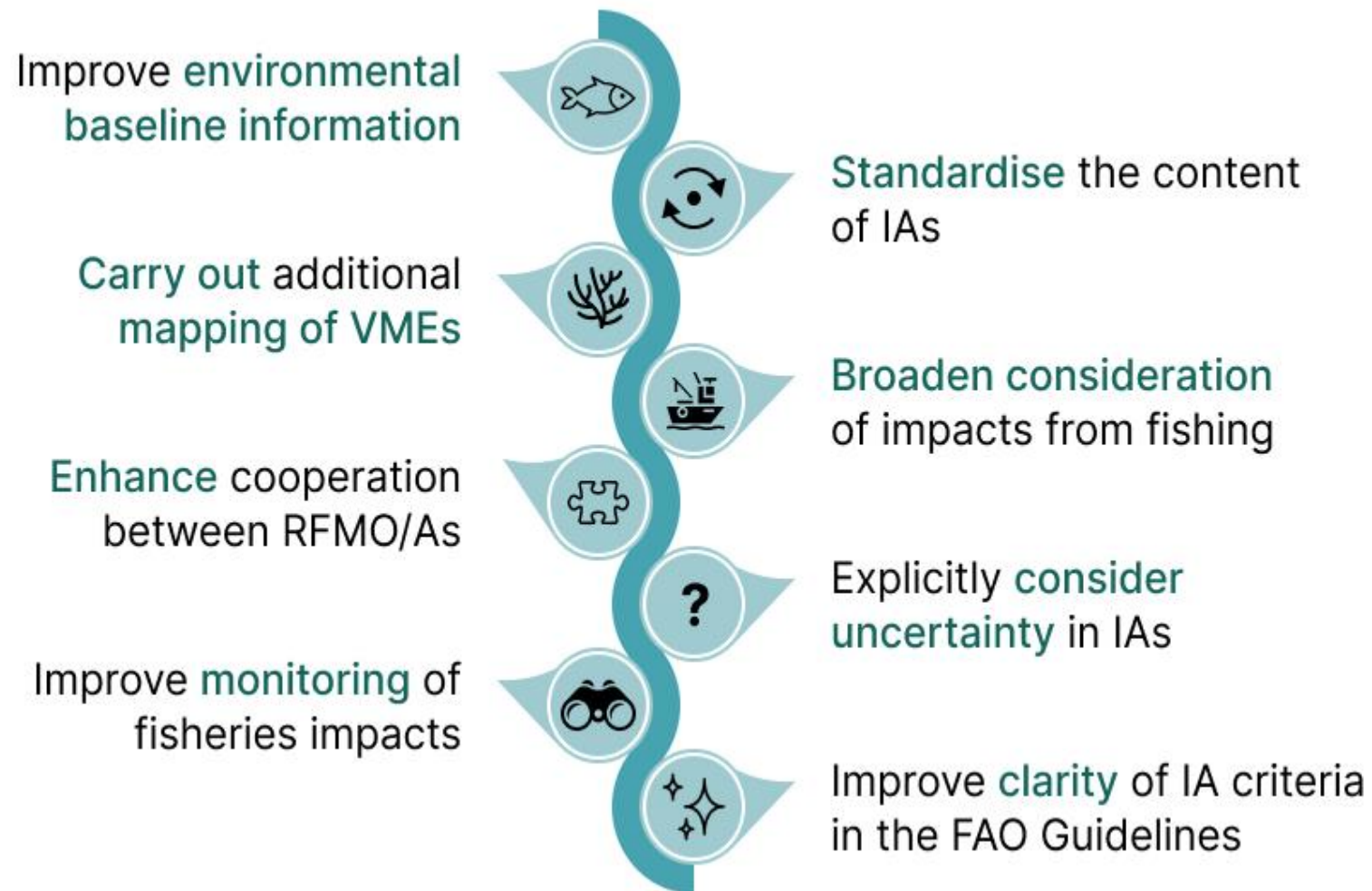


At least 7 studies showing **no recovery** in the temporal limit of 5-20 years defined by the criteria (Goode et al., 2020)



Conducting **IAs that are in full compliance with the FAO Guidelines** is crucial for protecting the deep sea from the harmful impacts of bottom fishing and for **conserving biodiversity**

Recommendations for improving IAs



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Against the FAO Deep-Sea Fisheries Guidelines



Thank you!

Full report available at:

<https://www.dosi-project.org/fisheries-review-2022/>

Acknowledgements

Laura Kaikkonen, University of Helsinki, Finland (lead author and coordinator)

Teresa Amaro, Centre for Environmental and Marine Studies (CESAM), University of Aveiro, Portugal, Sofia Graça Aranha, CCMAR, University of Algarve, Portugal

Peter J. Auster, Mystic Aquarium and University of Connecticut, USA

David M. Bailey, School of Biodiversity, One Health and Veterinary Medicine, University of Glasgow, UK

James Bell, Centre for Environment, Fisheries, and Aquaculture Science, UK

Angelika Brandt, Senckenberg Research Institute and Natural History Museum & Goethe University, Germany

Malcolm R. Clark, National Institute of Water & Atmospheric Research, New Zealand

Cherisse Du Preez, Deep-Sea Ecology Program, Fisheries and Oceans Canada, Canada

Elegbede, Isa Olalekan, Brandenburg University of Technology, Germany, Lagos State University, Nigeria, IUCN CEESP-TGER, Switzerland

Elva Escobar-Briones, Universidad Nacional Autónoma de México, Instituto de Ciencias del Mar y Limnología, Mexico

Eva Giacomello, Institute of Marine Sciences - Okeanos, University of the Azores, Portugal

Kerry L. Howell, School of Biological and Marine Sciences, University of Plymouth, UK

Andrew F. Johnson, MarFishEco Fisheries consultants Ltd, Edinburgh | MarineSPACE group, The Lyell Centre, Heriot-Watt University, UK

Lisa Levin, Center for Marine Biodiversity and Conservation and Integrative Oceanography Division, University of California San Diego, USA

Lucien Maloueki, Institut National de Recherches en Sciences Exacte et Naturelles, Congo Brazzaville

Rosanna J. Milligan, Guy Harvey Oceanographic Center, Nova Southeastern University, USA

Tina N. Molodtsova, Shirshov Institute of Oceanology RAS, Russia

Stephen Oduware, Health of Mother Earth Foundation (HOMEF) and FishNet Alliance, Nigeria

Tabitha R R Pearman, South Atlantic Environmental Research Institute, Falkland Islands

Christopher K. Pham, Institute of Marine Sciences - Okeanos, University of the Azores, Portugal

Sofia P. Ramalho, Centre for Environmental and Marine Studies (CESAM), University of Aveiro, Portugal

Ashley A. Rowden, National Institute of Water & Atmospheric Research, New Zealand

Tracey T. Sutton, Guy Harvey Oceanographic Center, Nova Southeastern University, USA

Les Watling, University of Hawaii at Manoa, USA

Patience Whitten, Blue Growth Law and Governance Initiative, Environmental Law Institute, USA

