



Food and Agriculture Organization
of the United Nations



Ecosystem Approach to Deep-sea Fisheries in ABNJ: Existing Guidance and Application

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OUTLINE

EAF: definitions and overall guidance & tools

Specific guidance for deep sea fisheries in ABNJ

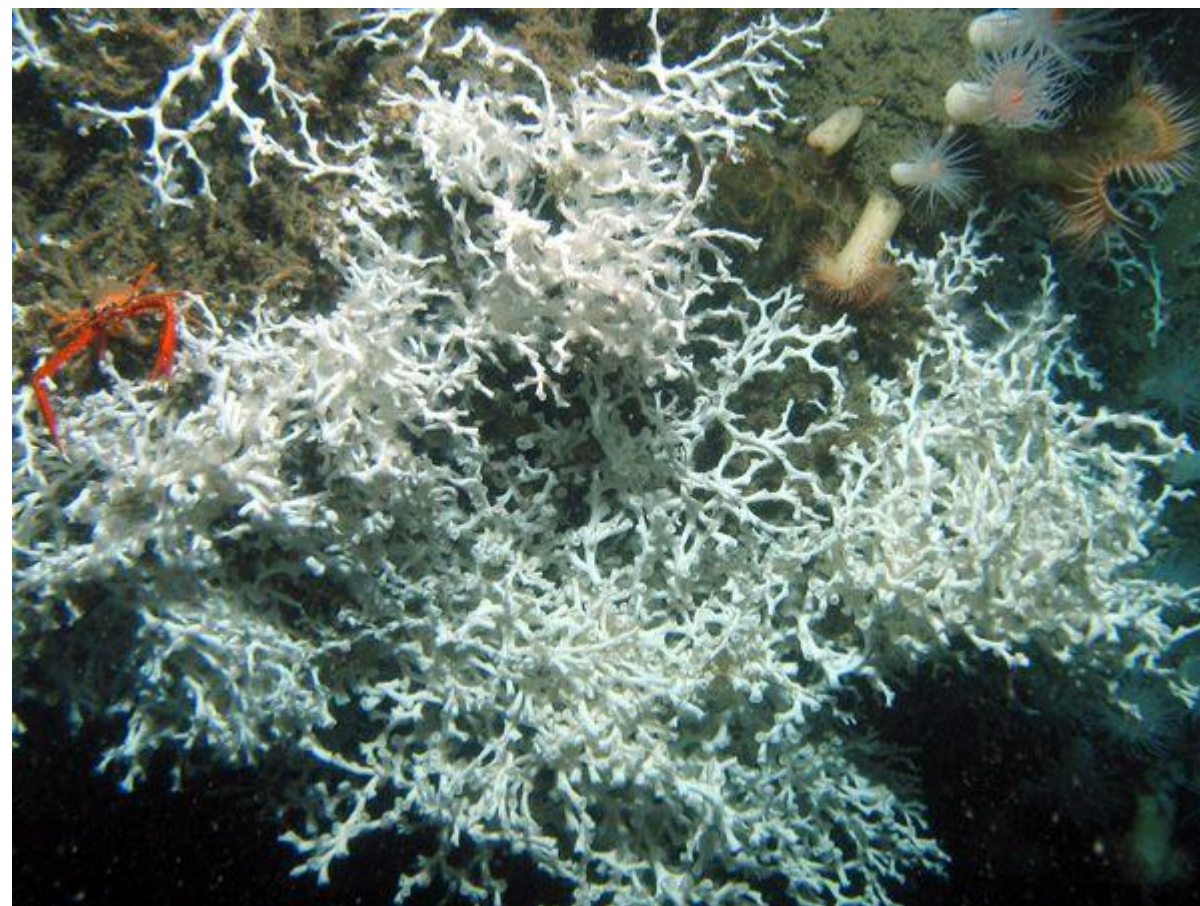
- DSF Fisheries
- DSF Guidelines

Application

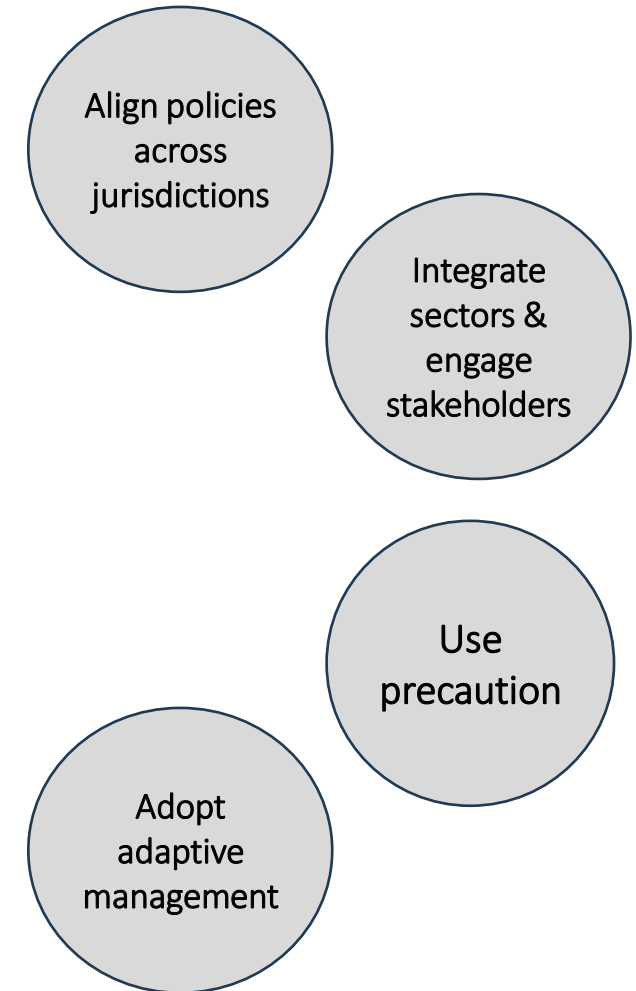
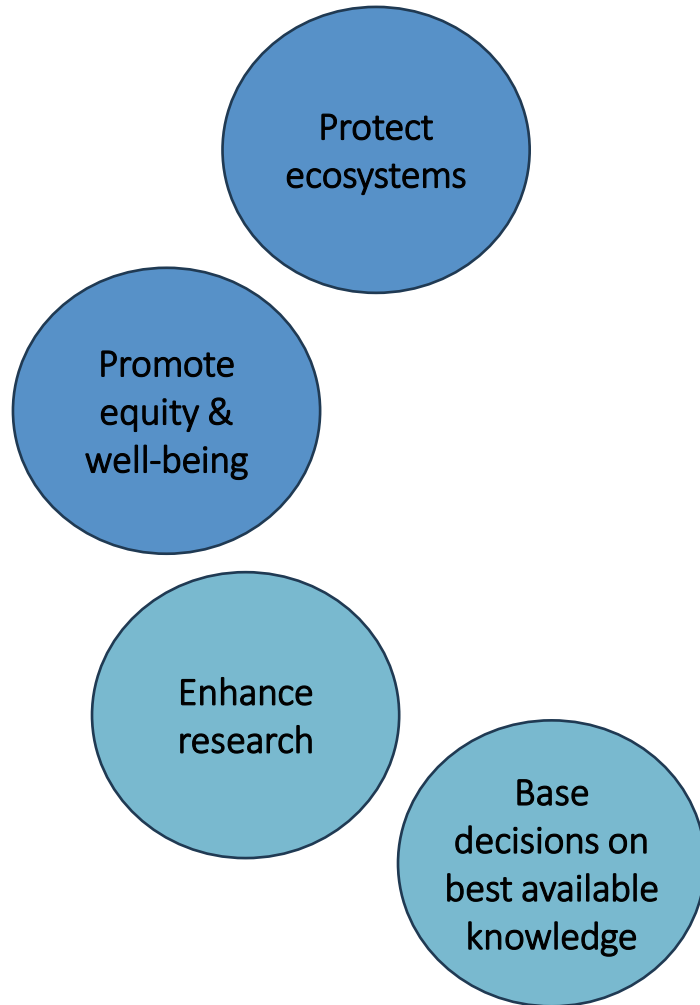
- SOFIA
- DSF Guidelines review
- EAF & DSF
- VMEs database

Conclusions

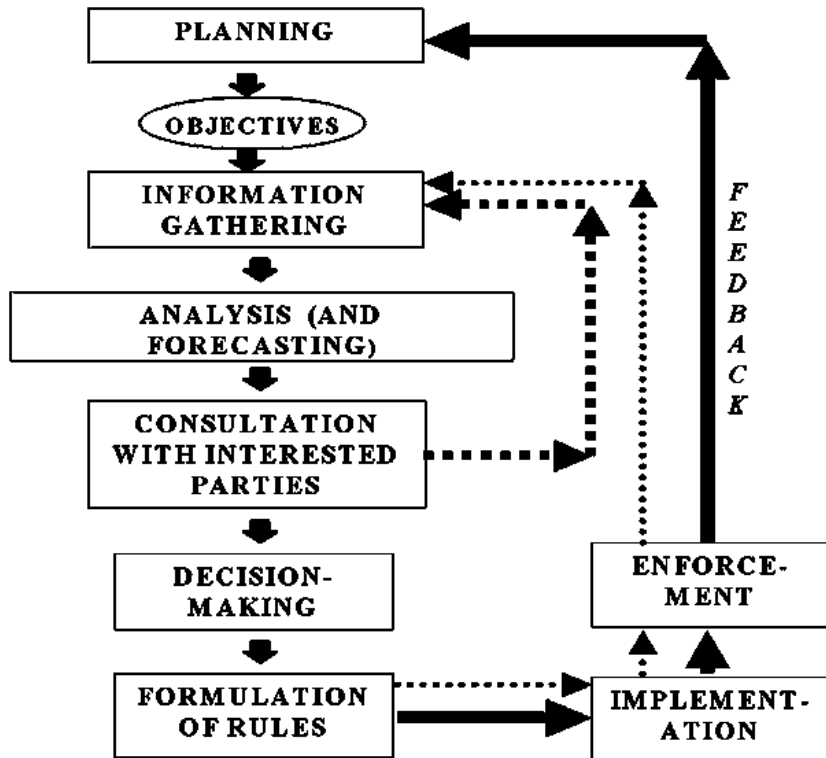
- Concluding remarks



BASIC GUIDING PRINCIPLES



EAF IS AN EXTENSION OF CONVENTIONAL FISHERIES MANAGEMENT

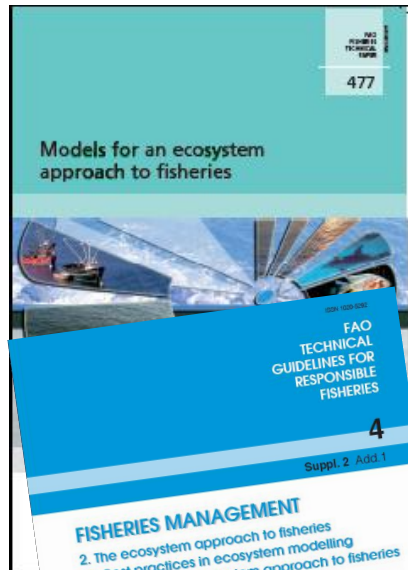


| Conventional approach | EAF |
|----------------------------|--|
| | <i>Extension</i> → |
| Few objectives (e.g., MSY) | Trade-offs among multiple objectives (ecologic, social and economic) |
| Target species | + non-target, biodiversity, environment |
| Scientific knowledge | Best available knowledge (scientific, LEK) as basis for precautionary measures |
| Predictive | Adaptive |
| Top-down | Interactive / Participatory |
| Sectoral | Interacting with other sectors |

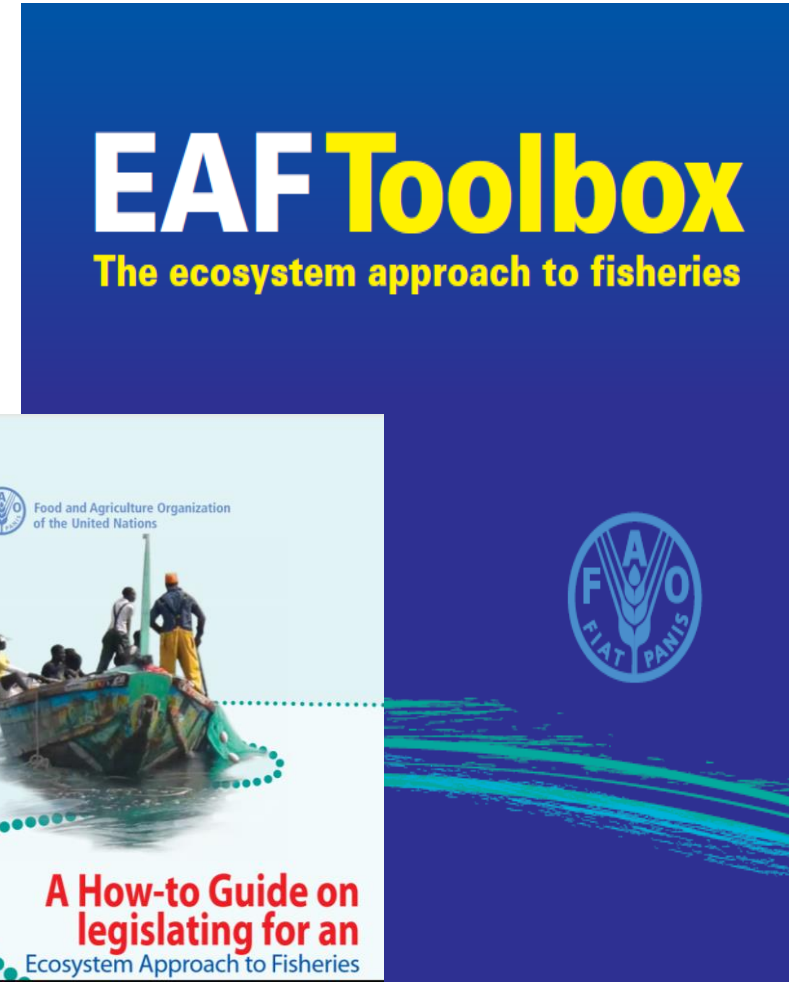
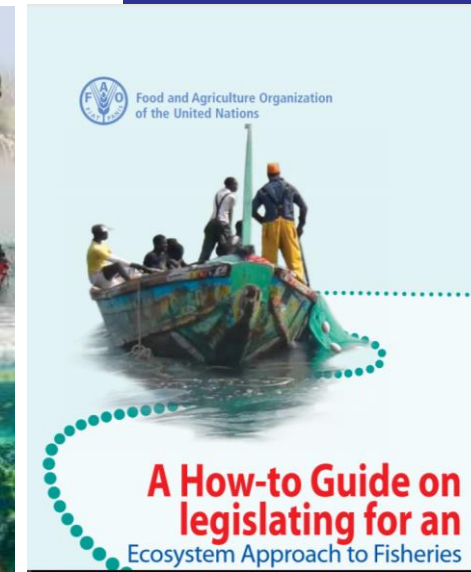
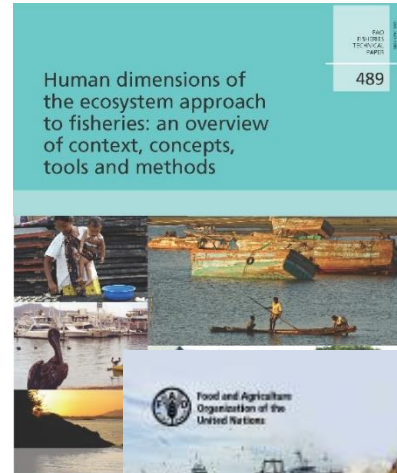
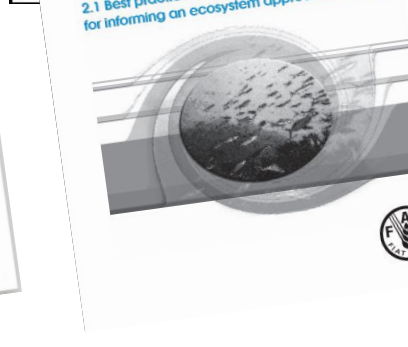
GLOBAL GUIDANCE



FISHERIES MANAGEMENT
2. The ecosystem approach
to fisheries



FISHERIES MANAGEMENT
2. The ecosystem approach to fisheries
2.1 Best practices in ecosystem modelling
for informing an ecosystem approach to fisheries



ELEARNING COURSES ON EAF



CERTIFIED COURSE



Ecosystem approach to fisheries - Introduction



Ecosystem approach to fisheries - Planning



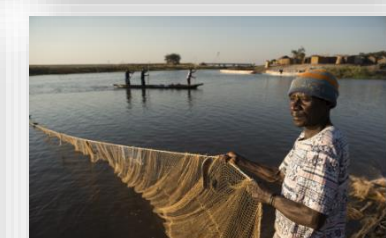
Ecosystem Approach to fisheries - Implementation



Ecosystem approach to fisheries - Monitoring and review

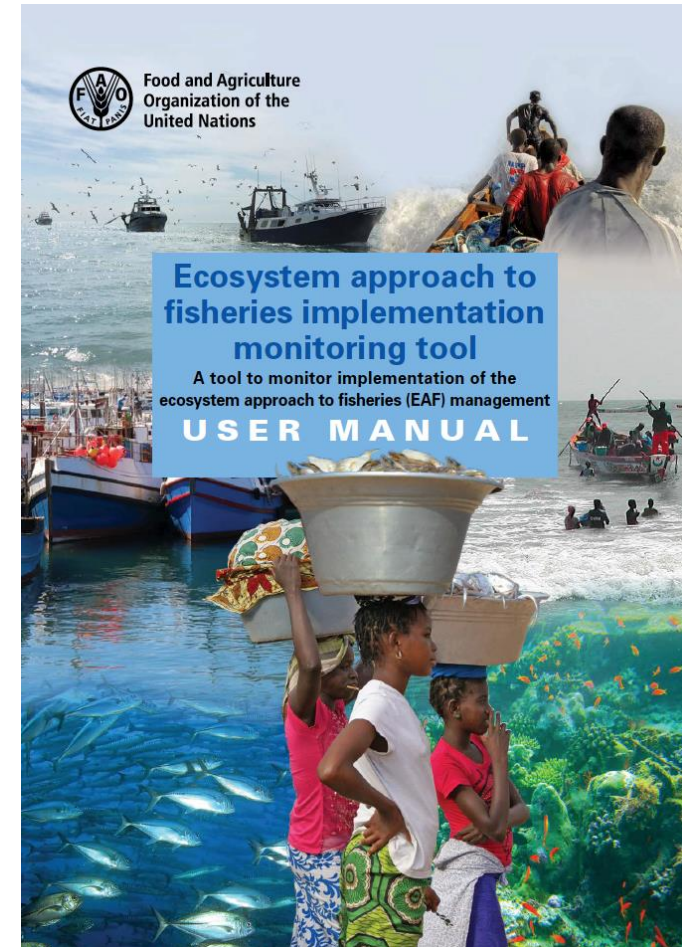
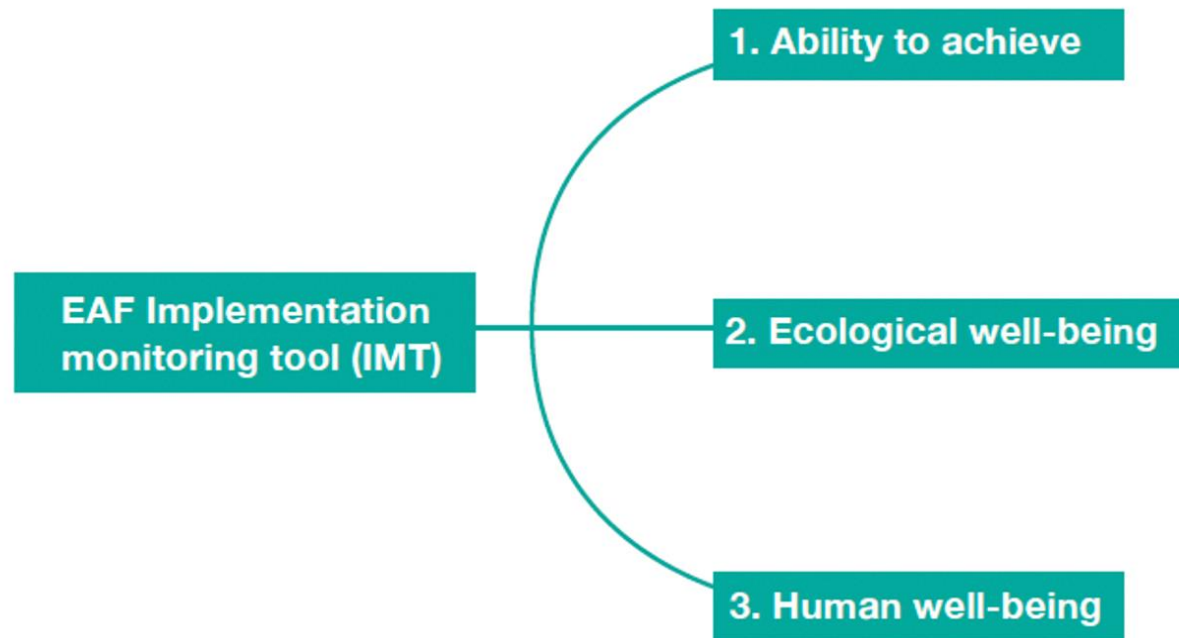


Ecosystem approach to fisheries - Implementation monitoring tool

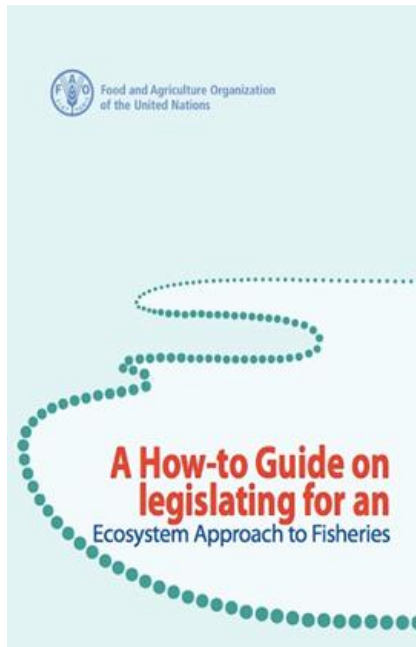


Ecosystem approach to fisheries - Policy and legal implementation

EAF IMPLEMENTATION MONITORING TOOL (EAF IMT)



LEGAL AND POLICY WORK



The guide:

- Identifies 17 EAF minimum components that should be included within national fisheries legislation and/or in the legislation of other sectors relevant to the EAF
- Offers legal drafting steps with examples of national legislation



The tool provides:

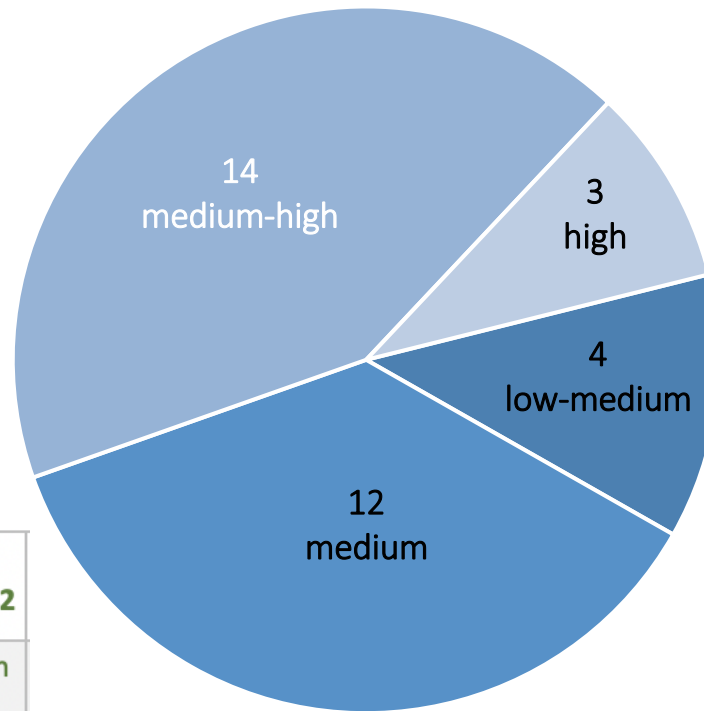
- Non-exhaustive list of selected international policy and legal instruments in support of the EAF (Appendix A)
- List of examples of selected national policy and legal instruments that reflect key EAF components (Appendix B)
- EAF Legal Checklist with 82 EAF legal requirements to be assessed in national fisheries policy and legal instruments, and other sectors legislation (Appendix C)



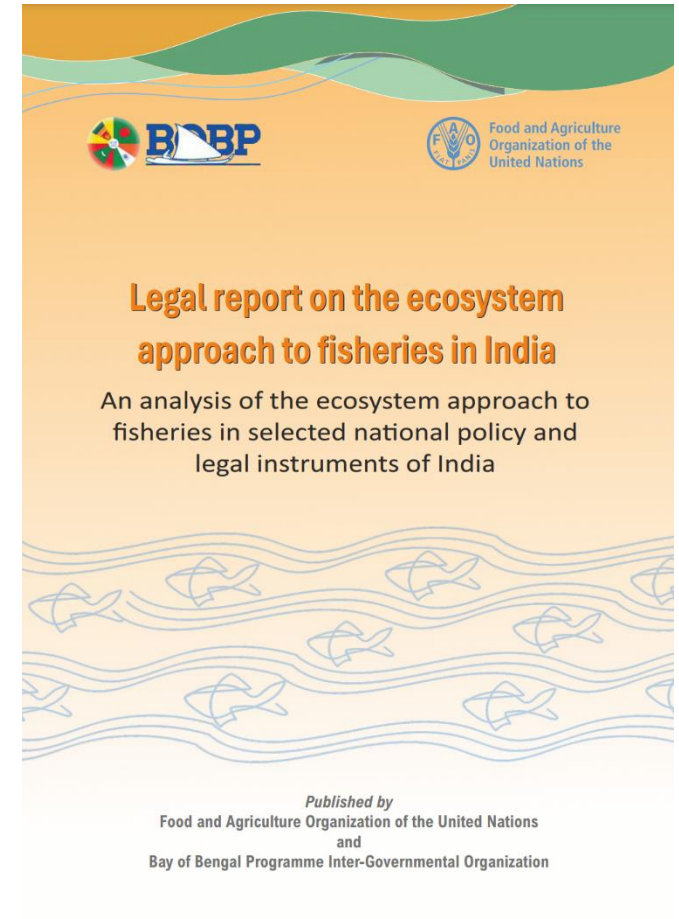
COUNTRIES' ASSESSMENTS APPLYING THE EAF LEGAL DIAGNOSTIC TOOL

33 COUNTRIES

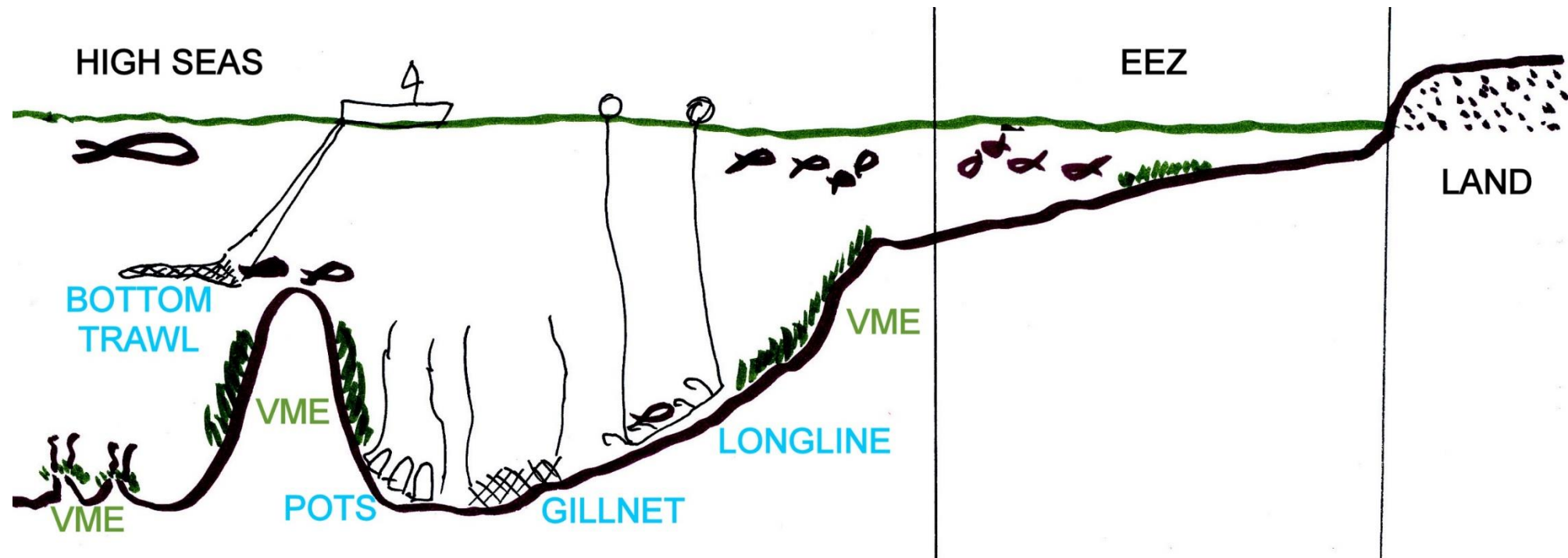
33 countries assessed, of which:



| Level of alignment with the EAF | | | | |
|---------------------------------|-------|--------|--------|-------|
| 0-30 | 31-50 | 51-61 | 62-72 | 73-82 |
| low | low-m | medium | m-high | high |



GUIDANCE FOR DEEP SEA FISHERIES IN ABNJ



THE TRIGGER: UNGA RES. 61/105 (2006)



General Assembly

Distr.: General
6 March 2007

Sixty-first session
Agenda item 71 (b)

Resolution adopted by the General Assembly

[without reference to a Main Committee (A/61/L.38 and Add.1)]

61/105. Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments

83. Calls upon RFMO/As with the competence to regulate bottom fisheries to adopt and implement measures, in accordance with the precautionary approach, **ecosystem approaches** and international law, for their respective regulatory areas as a matter of priority, but **not later than 31 December 2008**.

89 and others. Invite FAO to develop standards and criteria for use by States and RFMO/As in identifying VMEs and the impacts of fishing on such ecosystems and establishing standards for the management of deep sea fisheries.

THE TRIGGER: UNGA RES. 61/105 (2006)

- Adopted by FAO in 2008 after various workshops and consultations
- **Purpose:** assist States and RFMO/As implement UN GA 61/105 resolutions concerning responsible fisheries in marine ecosystems
- **Management objectives:** promote responsible fisheries that provide economic opportunities while ensuring the conservation of marine living resources and the protection of marine biodiversity
- **How:**
 - adopt and implement measures in accordance with the **precautionary and ecosystem approaches**,
 - identify areas where VMEs are known or likely to occur;
 - take action using the best information available



FAO DSF
Guidelines
(2008)

INTERNATIONAL GUIDELINES
FOR THE MANAGEMENT OF DEEP
SEA FISHERIES IN THE HIGH SEAS

DIRECTIVES INTERNATIONALES
SUR LA GESTION DE LA PÊCHE PR
EN HAUTE MER

DIRECTRICES INTERNACIONALES
PARA LA ORDENACIÓN DE LAS P
DE AGUAS PROFUNDAS EN ALTA

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| PREAMBLE | 1 |
| SCOPE AND PRINCIPLES | 2 |
| DESCRIPTION OF KEY CONCEPTS | 3 |
| Characteristics of species exploited by deep-sea fisheries | 3 |
| Vulnerable marine ecosystems | 4 |
| Significant adverse impacts | 4 |
| GOVERNANCE AND MANAGEMENT | 5 |
| General management considerations | 5 |
| Governance framework | 7 |
| MANAGEMENT AND CONSERVATION STEPS | 7 |
| Data, reporting and assessment | 7 |
| Identifying vulnerable marine ecosystems and assessing significant adverse impacts | 9 |
| Enforcement and compliance | 12 |
| Management and conservation tools | 14 |
| Assessment and review of effectiveness of measures | 19 |
| SPECIAL REQUIREMENTS OF DEVELOPING COUNTRIES | 19 |
| ADDITIONAL CONSIDERATIONS ON IMPLEMENTATION | 20 |
| ANNEX | |
| Examples of potentially vulnerable species groups, communities and habitats, as well as features that potentially support them | 21 |

FAO DSF GUIDELINES (2008)

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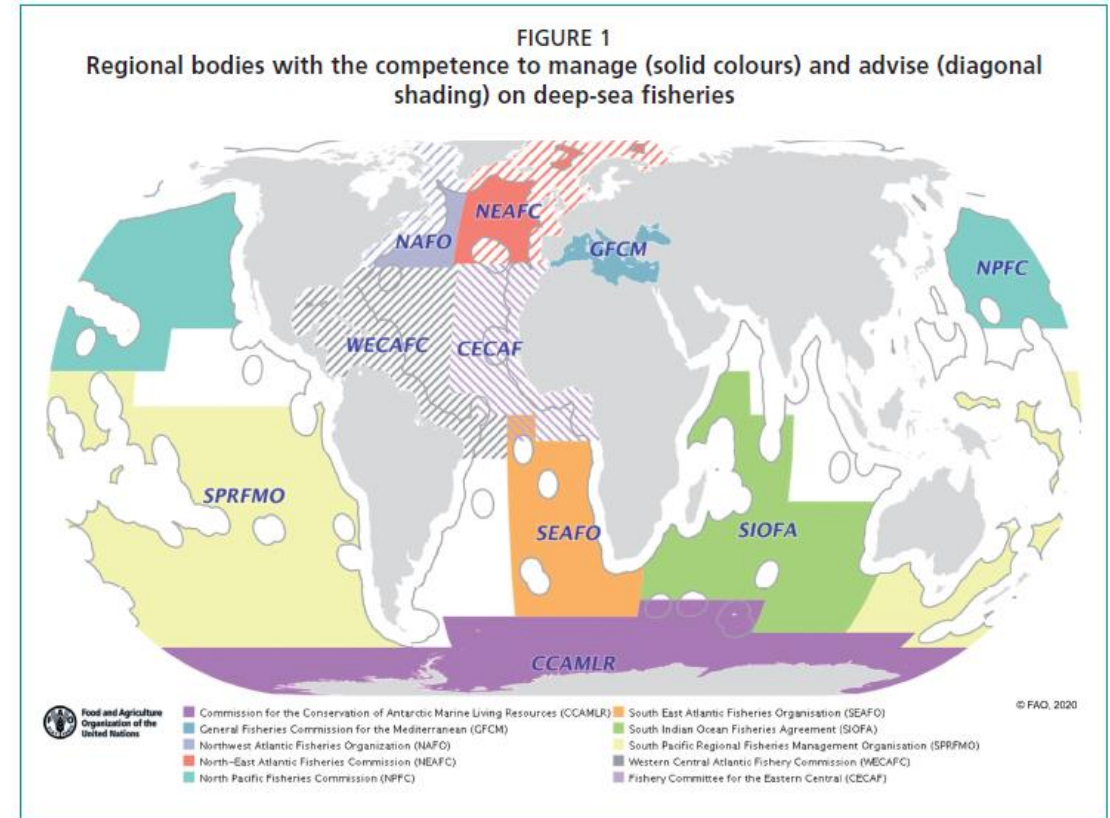
IMPLEMENTATION PROGRESS

FAO SOFIA (2018)

- Over 40 % of RFBs included in convention text specific reference to EAF as management principle.
- Some adopted policy texts or implemented projects aiming at using EAF in their science and management procedures.
- All RFBs are increasing use of multiple elements of EAF in their regular work: participation, use of best available science, precautionary approach, consideration of non-target species, etc.

- National governments reporting inclusion of EAF in management plans went from 69% (2011) to 79% (2015)

| Region | Percentage |
|---------------------------------|------------|
| Africa | 77% |
| Asia | 86% |
| Europe | 75% |
| Latin America and the Caribbean | 84% |
| Near East | 50% |
| Northern America | 100% |
| South West Pacific | 75% |

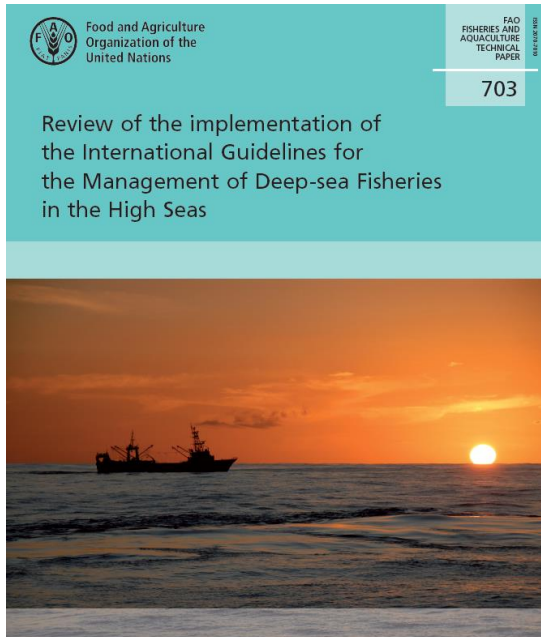


Source: FAO Fisheries and Aquaculture Department. Original drawing, 2020. FAO. Rome.

New deep sea RFMOs established between 2003 and 2015 (SEAFO, NPFC, SPRFMO, SIOFA)

Implementation of DSF Guidelines by RFMOs

Examined progress made in the implementation of the 2008 FAO DFS Guidelines by RFMOs, according to three main thematic areas:



Thompson
and Reid (2024)

Fishery stock status and assessments

- Target species
- Non-target species
- Existing fishing areas – footprint identification
- Exploratory fishing protocols
- Vulnerable marine ecosystems

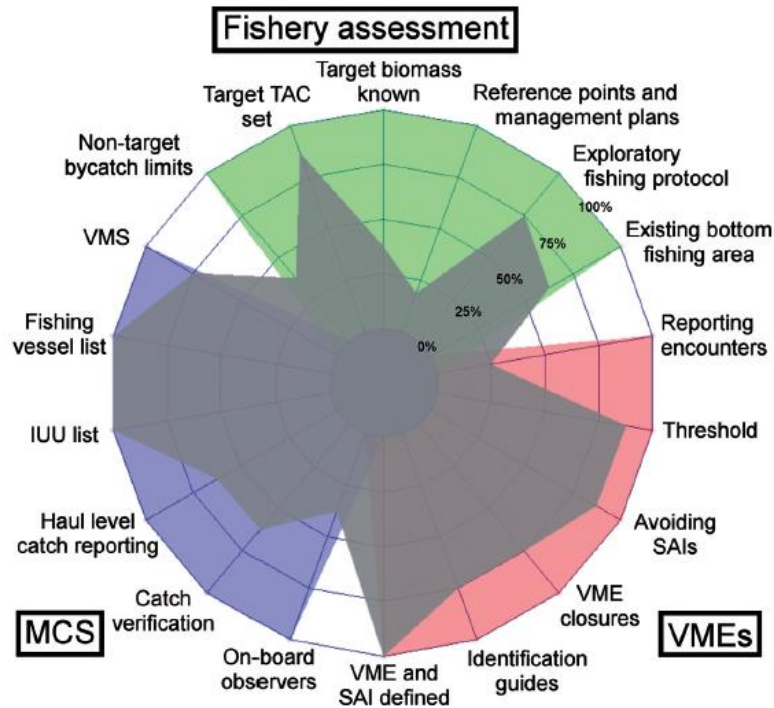
VME definition

- VME identification – indicator taxa and habitat
- VME mitigation – identified VMEs, closed areas and the assessment of SAI
- VME encounter protocol – VME taxa thresholds
- VME encounter protocol – reporting and response

Monitoring, control and surveillance

- Regulatory framework
- Vessel positions
- Illegal, unreported and unregulated (IUU) fishing
- Data reporting
- Observers

FIGURE 8
Radar plot of the implementation of DSF Guidelines



Note: The extent of overall implementation (grey) is overlaid on the three coloured segments for VMEs (red), fishery assessment (green) and MCS (blue). Percentage implementation by the RFMOs is indicated.

- Significant shift in awareness and management approaches since Guidelines adopted in 2008.
- Implementation mainly focused on VME protection, with less emphasis on DSF stock management
- Aspects requiring improved implementation:
 - non-target bycatch limits
 - reference points and management plans
 - reporting encounters
 - use of on-board observers.



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Vulnerable Marine Ecosystems Database

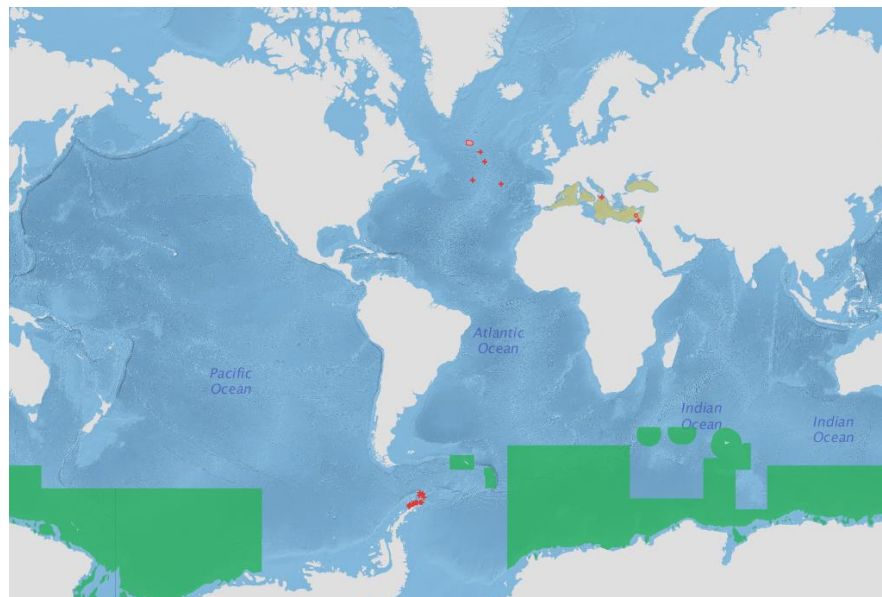
A global inventory of fisheries measures to protect vulnerable marine ecosystems in areas beyond national jurisdiction.

- UNGA Res. 61/105 (2006) Para 90. *Invites* the Food and Agriculture Organization of the United Nations to consider creating a global database of information on vulnerable marine ecosystems in areas beyond national jurisdiction ...

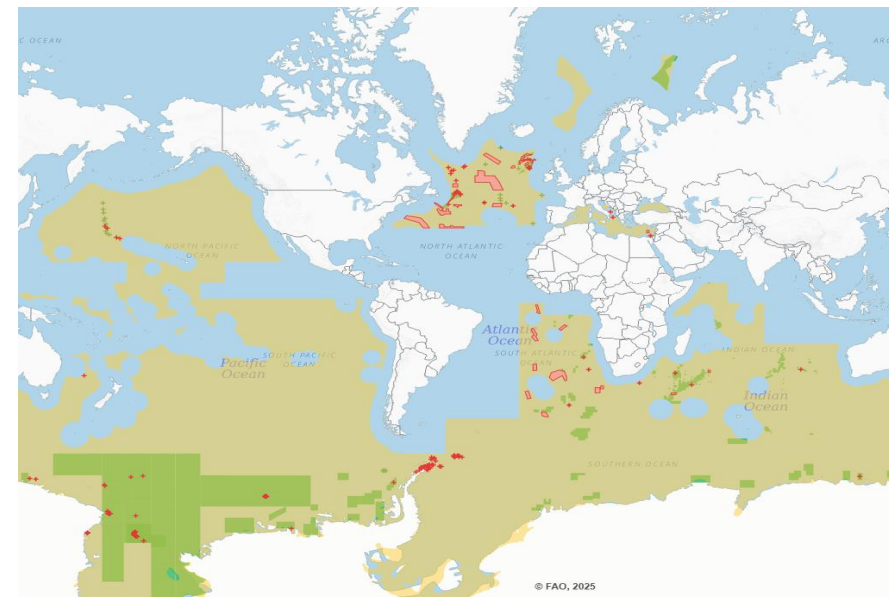
Bottom fishing areas

Other access regulated areas

VME closed areas



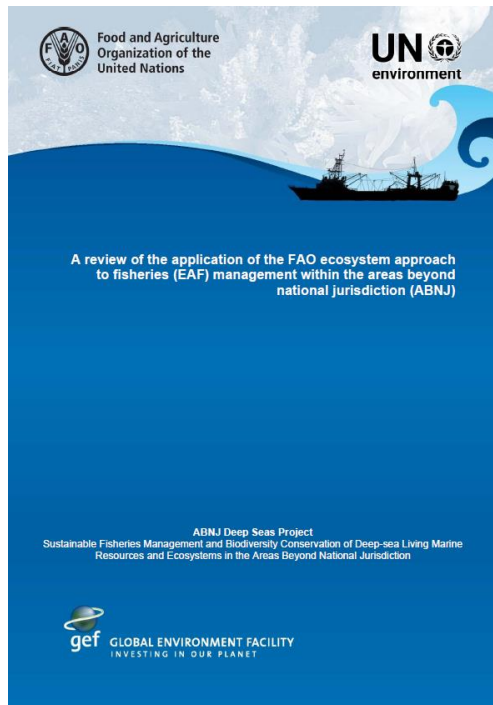
2006



2024

APPLICATION FOR DEEP SEA FISHERIES WITHIN ABNJ

- Examined the degree to which there has been formal consideration of each of main components on an EAF by main RFMOs (did not measure outcomes related to these components)



Fletcher (2020)

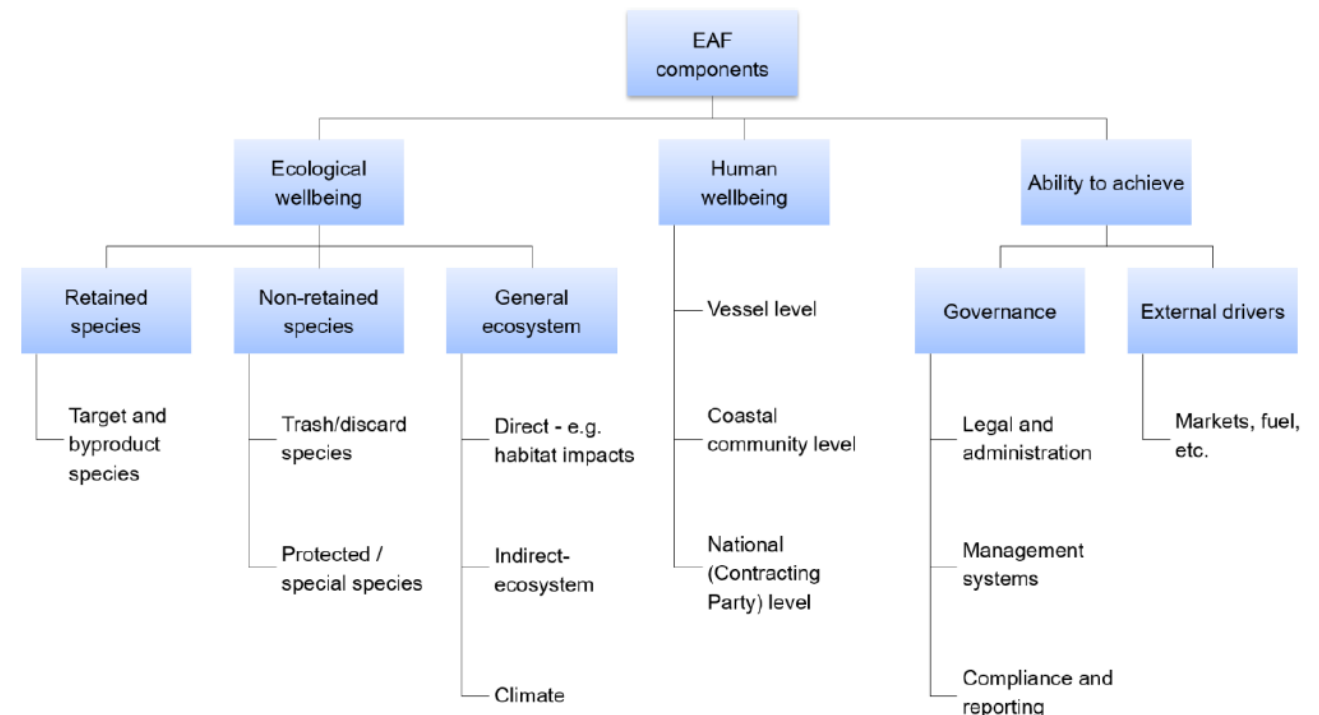


Figure E1: The thirteen key EAF components³

IMPLEMENTATION PROGRESS

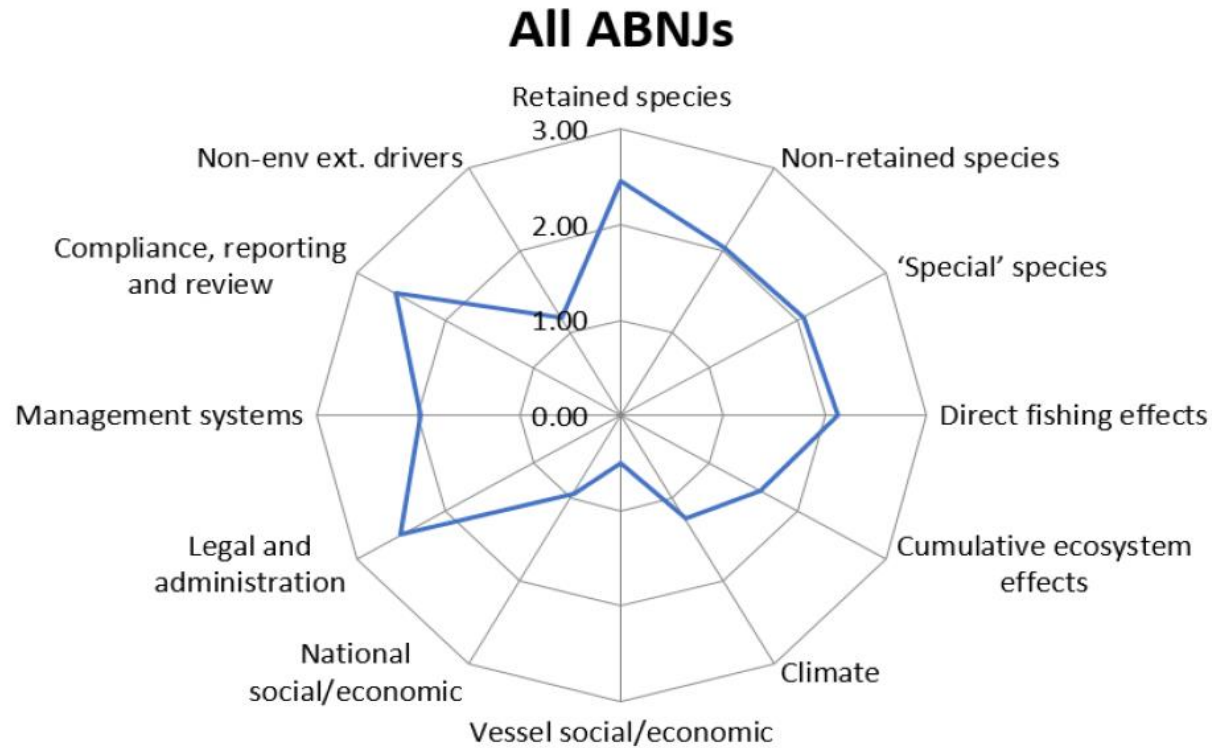


Figure E3: Average level of implementation for each EAF component across the eight RFMOs. *Note: climate refers to all environmental external drivers. The scores for each EAF component are: nil (0), partly (1), mostly (2), mostly/fully (2.5), or fully addressed (3)*

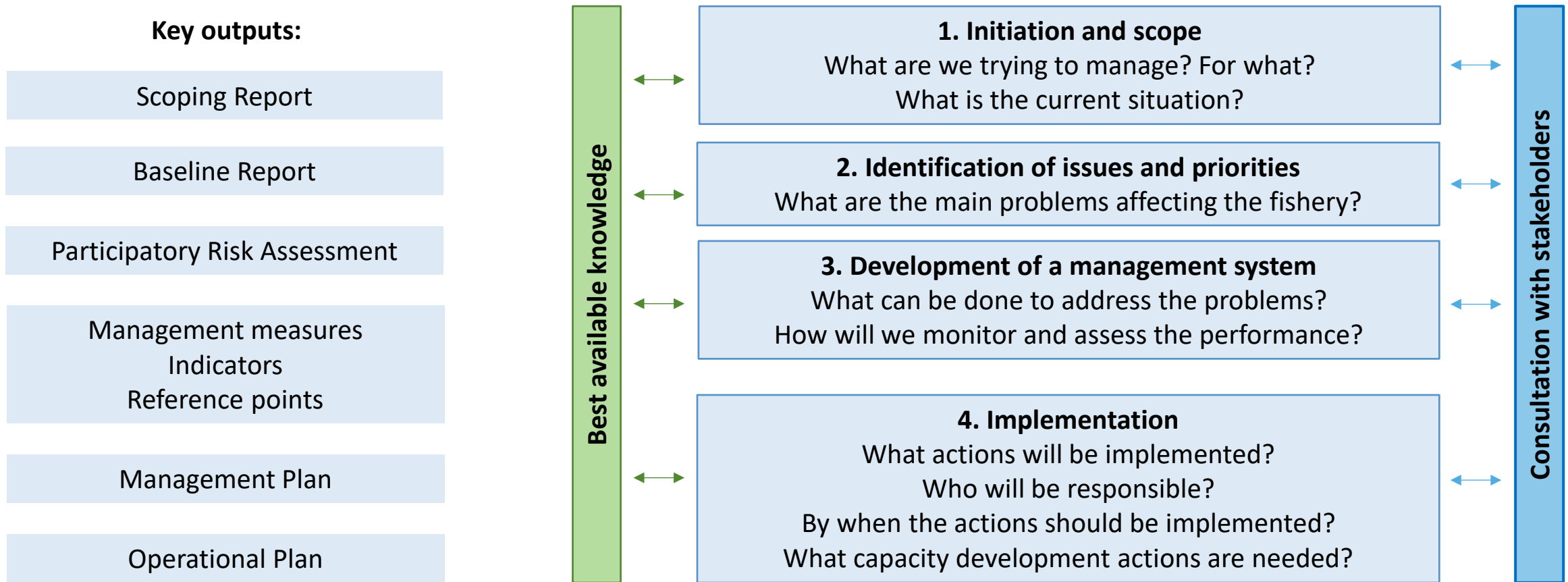
- High scores for ecological and governance components
- Limited focus on social and economic aspects. Despite challenges, further consideration of S&E issues crucial for effective fisheries management.
- EAF often delegated to science-based WGs, failing to apply it as a comprehensive, management-focused risk-based approach
- Despite current gaps, existing efforts can be integrated into a fully EAF-compliant system without significantly increasing management efforts

CONCLUDING REMARKS

- EAF is a risk-based management approach that expands on conventional fisheries management.
- Existing guidelines (*including the DSF Guidelines*) provide guidance on key elements for EAF-compatible management systems in ABNJ.
- Progress in implementation verified in different regions and thematic areas, particularly on ecological dimensions and more specifically on VMEs.
- Gaps requiring further attention :
 - Monitoring, assessment and precautionary measures (applicable to target, bycatch and VMEs)
 - More explicit consideration of socioeconomic dimensions
 - Increase use of multi-annual management plans at the level of RFMOs: more systematic decision making; explicit objectives; facilitate monitoring progress towards EAF goals.



EXAMPLES OF STEPS IN FORMULATION AND IMPLEMENTATION OF EAF-COMPATIBLE MANAGEMENT PLANS



Thank you

The background is a solid blue color. In the bottom right corner, there is a decorative graphic consisting of several thin, parallel, light blue diagonal lines that create a sense of movement and depth.