Food and Agriculture Organization of the United Nations

FAO and the marine biological diversity beyond national jurisdiction (BBNJ) process

Information package for BBNJ delegates

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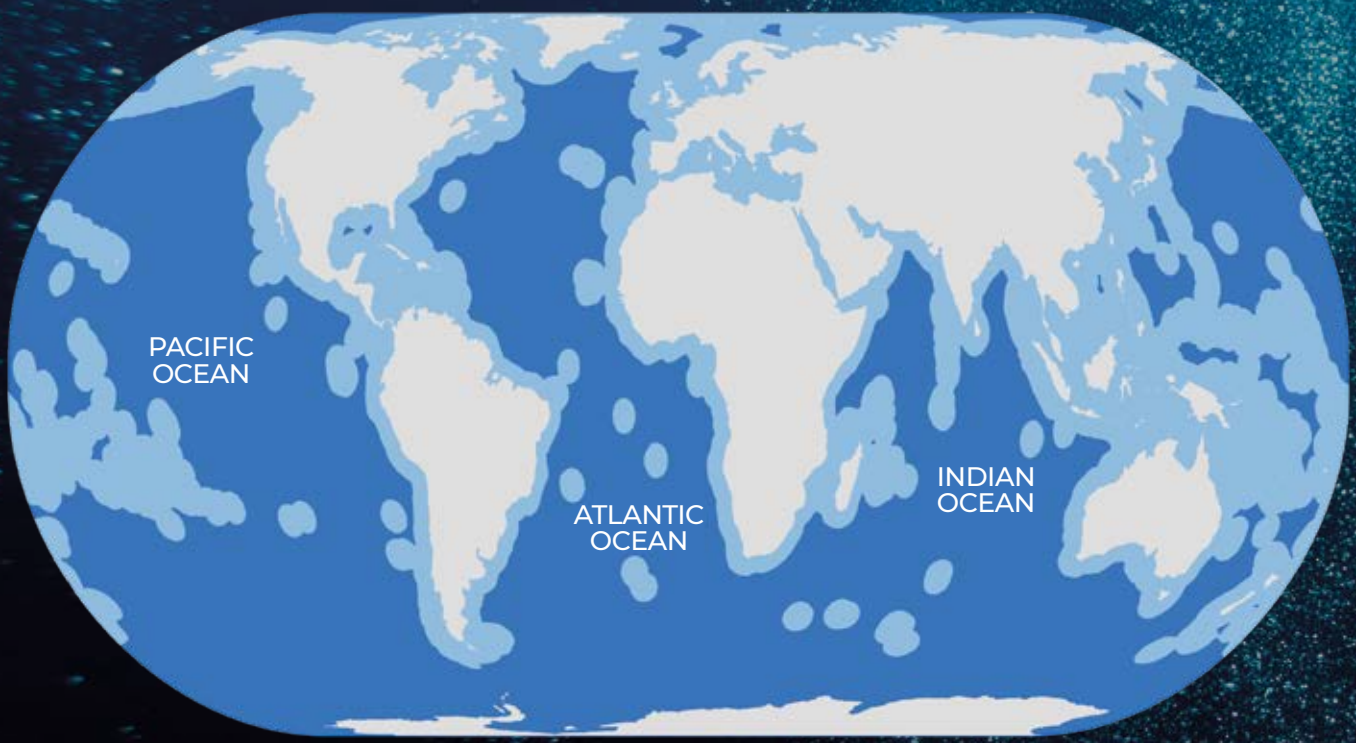


Source: Elaborated by FAO/Fisheries and Aquaculture Division. Map conforms to UN. 2020. Map of the World. www.un.org/geospatial/content/map-world

About this document

The purpose of this document is to provide information on the activities of the Food and Agriculture Organization of the United Nations (FAO) that are relevant to the biological diversity beyond national jurisdiction (BBNJ) process.

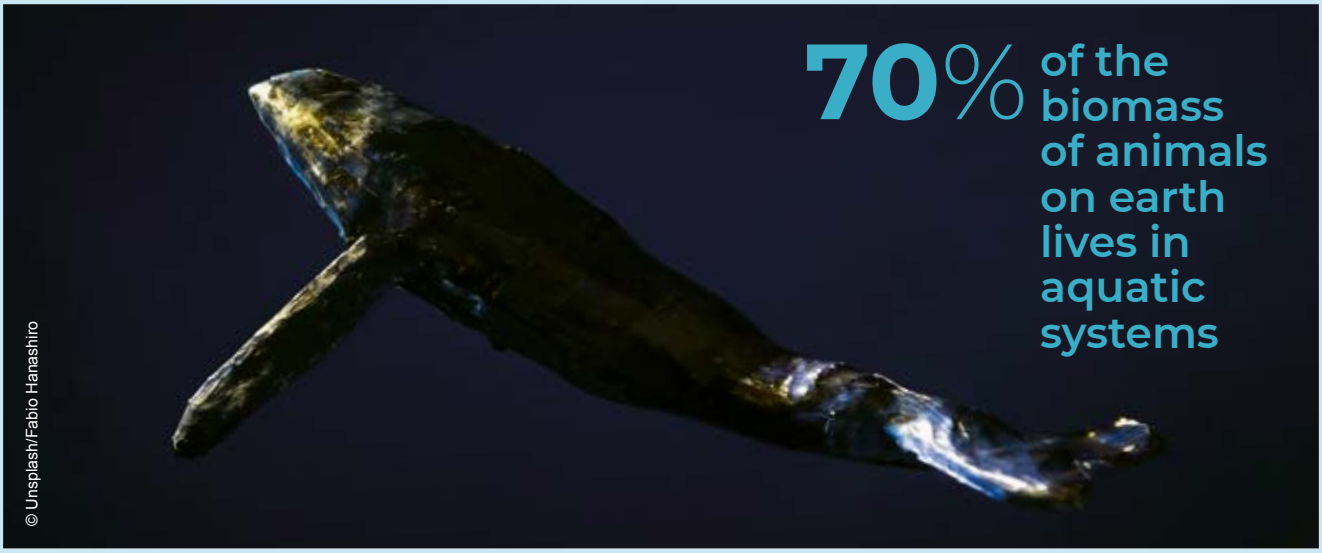
FAO is actively engaged in areas beyond national jurisdiction (ABNJ) through projects and initiatives for which it provides assistance to Member Nations and relevant international organizations. This document presents information on the work of FAO that is relevant to the BBNJ process, including ongoing processes and initiatives, and lessons learned, which may be informative and useful for BBNJ Delegates and others. This information may also be a useful indication of areas where FAO may assist Member Nations in the implementation of the future international legally binding instrument (ILBI).

FAO's mandate in relation to BBNJ

FAO is an intergovernmental organization within the United Nations System with competence to take all necessary and appropriate action to implement the purposes of the Organization set forth in the Preamble and article I of its Constitution including raising levels of nutrition and standards of living of the peoples under their respective jurisdictions.

Necessary and appropriate action includes conservation of natural resources such as fisheries, biodiversity and genetic resources for food and agriculture. The importance of aquatic resources is evident: fish and other aquatic organisms are major components of global biological diversity, with 70 percent of the biomass of animals on earth living in aquatic systems (FAO, 2021). In the context of the conservation and management of fisheries and living marine resources, FAO is responsible for assisting Member Nations and relevant organizations in implementing international instruments, including the 1982 United Nations Convention on the Law of the Sea and 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 (UNFSA).

FAO provides a global forum, in particular the Committee on Fisheries (COFI) and other processes, where Member Nations discuss fisheries and aquaculture issues, negotiate and adopt international instruments to promote global cooperation, and foster global, regional and national sustainable development initiatives to secure responsible fisheries and aquaculture worldwide, including in the ABNJ.



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Selected areas of FAO's work of relevance to the BBNJ process

Data

FAO works extensively with data related to ABNJ (FAO, 2021a). Furthermore, as the only intergovernmental organization formally mandated to undertake the worldwide collection, compilation, analysis and diffusion of data and information on fisheries and aquaculture (FAO, 1994), FAO can provide unique *ad hoc* information and technical advice to support the BBNJ process.

FAO has been effective in performing its vital functions as a data repository and knowledge dissemination organization. FAOSTAT (FAO, 2022a) - the world's most comprehensive statistical database on food, agriculture, fisheries, forestry, natural resources management, and nutrition – can inform the BBNJ process, as well as assist in the implementation of the future ILBI on BBNJ.

FAO provides regular reliable information and statistics to support fisheries management and effective policy-making and sectoral planning, through the Coordinating Working Party on Fishery Statistics (CWP), the Fisheries Global Information System (FIGIS), and the Fisheries and Resources Monitoring System (FIRMS) (FAO, 2022b).

Furthermore, digital innovation, hand-in-hand with fisheries and ecosystems scientific monitoring, is a FAO action under the UN Decade on Ocean Science (Ocean Decade, 2021). This initiative aims to support scientific monitoring of fisheries and ecosystems by offering a multidisciplinary atlas of fisheries and environment, while implementing open data and open science principles.

Regional fishery bodies (RFBs)

The BBNJ process may additionally benefit from FAO's work in regional fisheries governance, through the regional fishery bodies (RFBs), particularly regional fisheries management organizations and arrangements (RFMOs) (Box 1).
FAO provides the Secretariat for 11 RFBs which have been established within the FAO framework (i.e. under article VI or article XIV of the FAO Constitution). FAO is actively committed to bolstering exchange of information among Secretariats through the Regional Fishery Body Secretariats' Network (RSN) that has 58 member organizations and international partners.

RFMOs provide a forum for the adoption of fisheries conservation and management measures for marine areas, and on matters within their regulatory competence that may be legally binding on their members.

The collective areas within the regulatory competence of RFMOs include more than 90 percent of the ABNJ, and the vast majority of the fishing operations in that area are subject to regulation by the relevant RFMOs. Flag States have the obligation to regulate the activities of the vessels entitled to fly their flag, in accordance with UNCLOS/ UNFSA, in the minority of ABNJ not covered by RFMOs.

Box 1. **RFABs and RFMOs**

Regional Fishery Bodies (RFBs) may be classified as regional fisheries advisory bodies (RFABs) or regional fisheries management organizations or arrangements (RFMOs).

RFABs (Figure 3) have an advisory mandate, and provide advice, decisions or coordinating mechanisms that are not binding on their members.

RFMOs have a management mandate, and adopt fisheries conservation and management measures that may be legally binding on their members or cooperating non-contracting parties or cooperating non-members. They are intergovernmental organizations or arrangements, referred to under UNCLOS and UNFSA, through which States and other entities cooperate in, inter alia, developing and implementing measures on the conservation and management of fisheries and related issues. The area of competence of most RFMOs is the ABNJ, although some also encompass areas of the Exclusive Economic Zones (EEZ).

A total of 16 RFMOs and the International Whaling Commission have the regulatory competence to conserve and manage fisheries in ABNJ[1] (Figures 1, 2).

FAO promotes and supports RFMOs (FAO, 2016a), including participating directly in the establishment of a number of them, formalizing opportunities for sharing experiences within a given region, and/or implementing the processes needed for the sustainable management of shared resources.

State experts and sectoral agreements: Many RFMOs have scientific and compliance committees comprised of State experts and representatives that provide advice to the governing bodies of the RFMOs. Encouraged by FAO, RFMOs have developed ground breaking arrangements whereby non-parties to an RFMO, and other entities, can cooperate including participating in the work of the RFMO and implementing measures agreed to by such a RFMO.

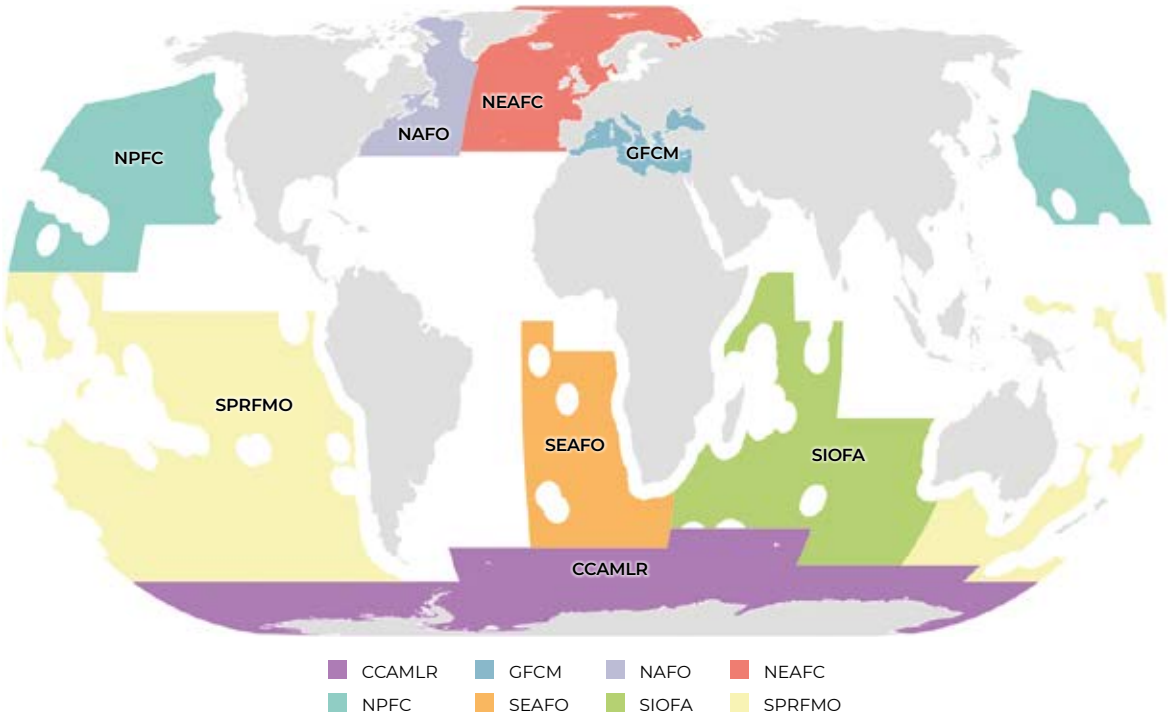
Arrangements in-place: The BBNJ process could benefit from the institutional and regional fisheries regulatory frameworks in place which enable sectors and States, to implement the principles, requirements and measures established under such frameworks.

[1] In total 16 RFMOs, have legal mandates in ABNJ:
- five tuna organizations: CCSBT, IATTC, ICCAT, IOTC, WCPFC;
- two anadromous fish organizations: NASCO, NPAFC;
- eight generic organizations (all species except tuna, anadromous fish and whales): CCAMLR, GFCM, NAFO, NEAFC, NPFC, SEAFO, SIOFA, SPRFMO;
- One for whales: IWC.

Furthermore, FAO provides technical information, guidance and international standards to support States Members of RFMOs that have regulatory competence for ABNJ or parts thereof, to harmonize practices and policies, and foster regional fisheries governance. FAO also supports RFMOs' secretariats by providing capacity development support.

Performance reviews: FAO strongly encourages performance reviews of RFMOs (FAO, 2015), which encompass, inter alia, the review and enhancement of the constitutive agreements of RFMOs, and the process for adopting and implementing effective conservation and management measures.

Figure 1: **Generic RFMOs**



Source of Figure 1, 2 and 3 (next page):

Terje Løbach, T., Petersson, M., Haberkon, E. & Mannini, P. 2020. Regional fisheries management organizations and advisory bodies. Activities and developments, 2000–2017. FAO Fisheries and Aquaculture Technical Paper No. 651. Rome, FAO. https://doi.org/10.4060/ca7843en. Map conforms to UN. 2020. Map of the World. www.un.org/geospatial/content/map-world

Figure 2: **Species-specific RFMOs**

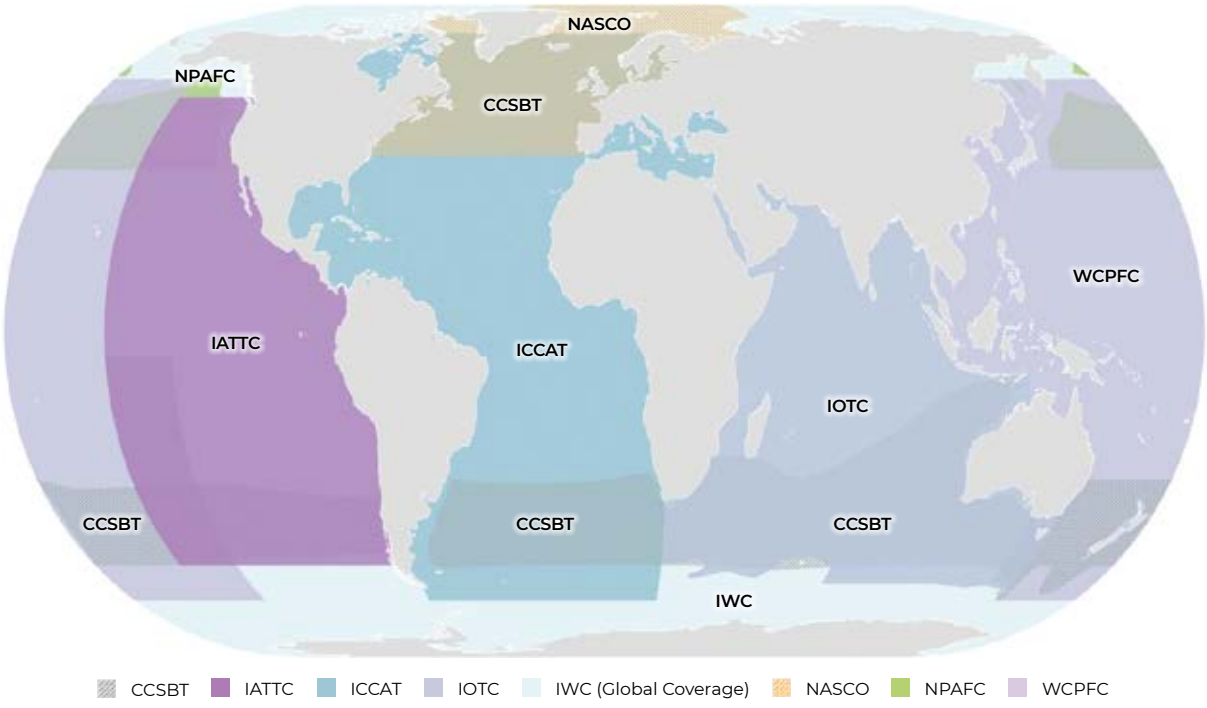
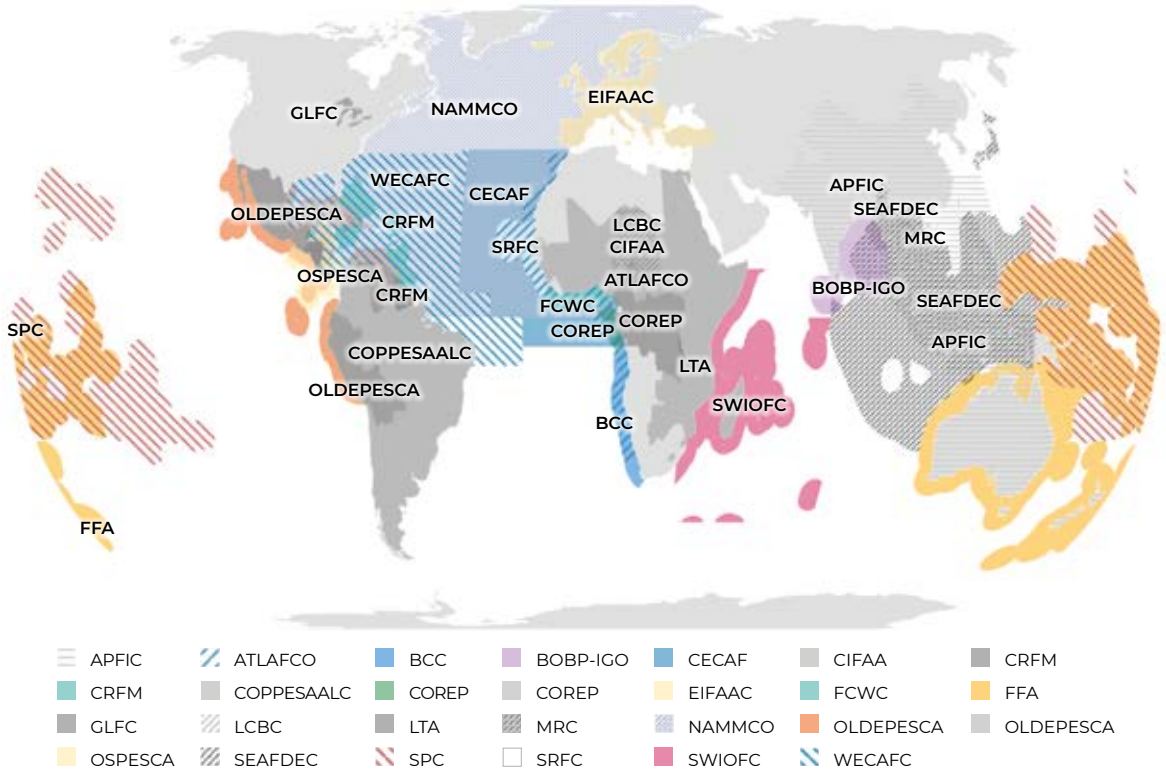


Figure 3: **RFABs**



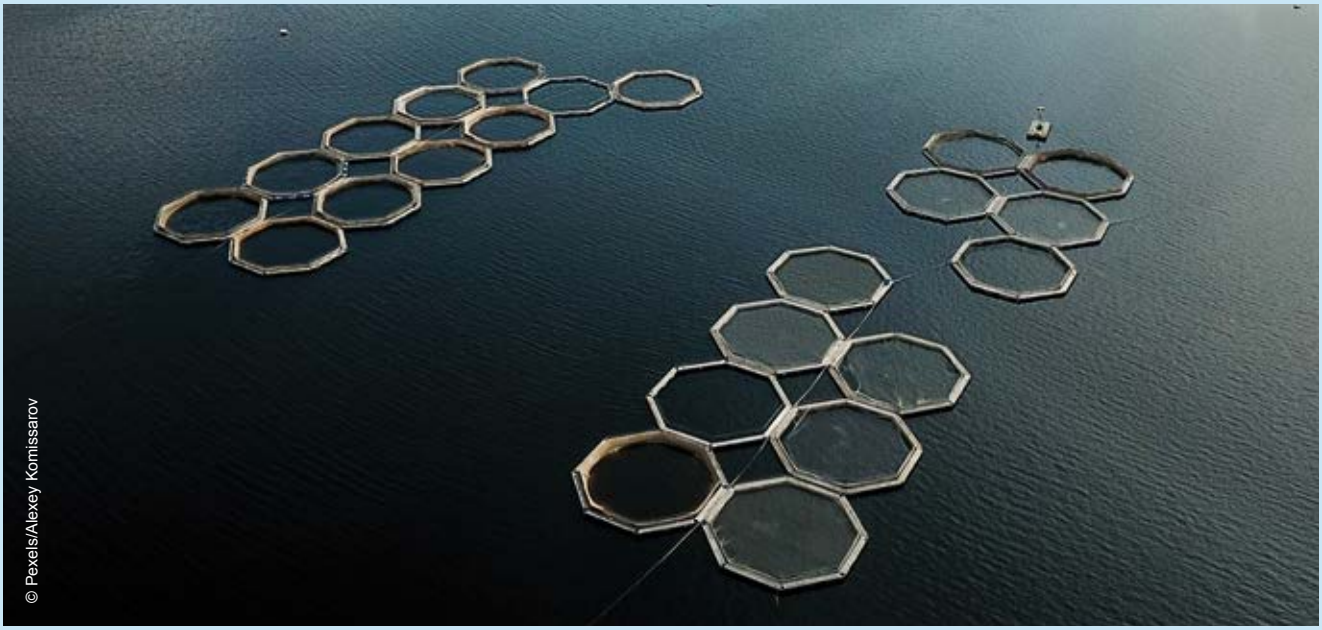
FAO and marine genetic resources (MGR)

Genetic resources for food and agriculture

FAO is the competent international organization for genetic resources for food and agriculture (FAO, 2022c). The FAO Commission on Genetic Resources for Food and Agriculture (the Commission) is the only permanent intergovernmental body that specifically addresses biological diversity for food and agriculture. FAO also establishes and approves specialized international normative instruments, such as the FAO 2001 International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Consequently, FAO has extensive experience and expertise in initiating, overseeing, and guiding the preparation of global sectoral and cross-sectoral assessments of genetic resources.

The Commission aims to reach international consensus on policies for the conservation and sustainable use of genetic resources for food and agriculture, and the fair and equitable sharing of benefits derived from their use.

The Commission focuses on terrestrial animal, aquatic, forest, plant, microbial and invertebrate genetic resources for food and agriculture, as well as biodiversity for food and agriculture. It also deals with cross-sectoral matters, such as access and benefit-sharing, biotechnology and climate change.



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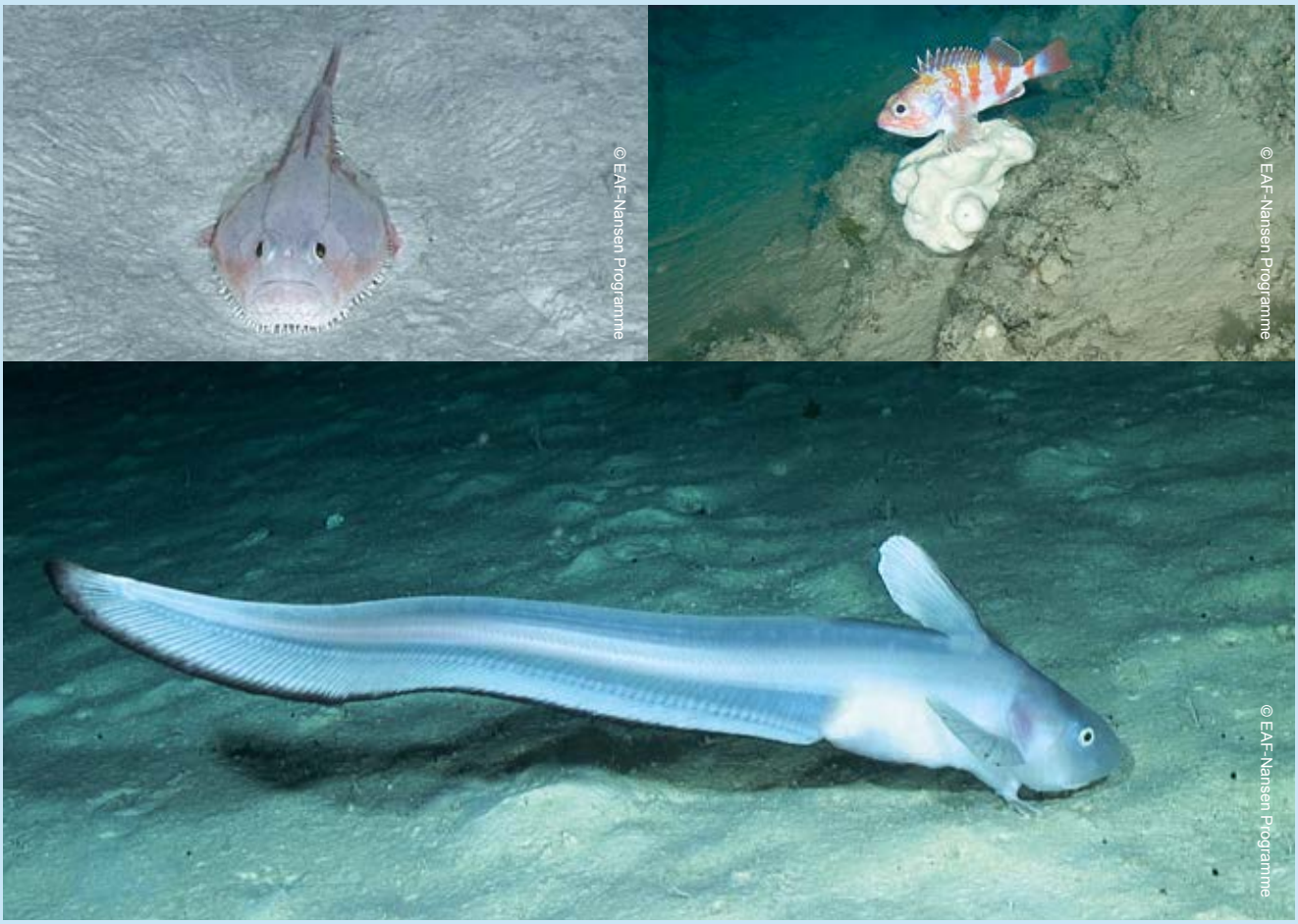
The focus on aquatic genetic resources (AqGR) is on the genetic resources of around 700 farmed species, and their wild relatives, under national jurisdiction. However, many of these resources cross over or interact with wild relative genetic resources beyond national jurisdiction, thus impacting their genetic status.

FAO published its first global assessment of AqGR (FAO, 2019) in 2019 (Box 2), and in 2021 the FAO Council adopted the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture (FAO, 2022d).

Implementation of the Global Plan of Action requires accurate information on the status of AqGR, a central component of which will be a global information system on AqGR (AquaGRIS) that is currently under development by FAO (FAO, 2022e), with a prototype having been released in May 2022.

FAO also monitors developments in genetic technologies for fisheries and aquaculture, and their implications for marine and aquatic genetic resources including transboundary stocks.



Access and benefit-sharing

The ITPGRFA might be considered as a source of valuable experiences for the current BBNJ discussions in that it combines the recognition of sovereign rights of States over genetic resources with a global, functioning system under multilateral governance. This treaty is a comprehensive legally binding international agreement that, in harmony with the Convention on Biological Diversity, recognizes the sovereign rights of States over their plant genetic resources for food and agriculture. In the exercise of these rights, parties to the ITPGRFA have agreed to create a multilateral system to facilitate access to plant genetic resources on a global basis, under standard conditions, and ensure for the sharing of benefits arising from the utilization of the resources (FAO, 2022f).

The Multilateral System of Access and Benefit-Sharing of the FAO ITPGRFA constitutes a global pool of genetic resources that are conserved and made available worldwide to breed new plant varieties for food security and sustainable agriculture. The Treaty sets out the terms and conditions under which materials in the Multilateral System may be accessed, and benefits arising from their use have to be shared. Access is provided through a Standard Material Transfer Agreement (SMTA) (FAO, 2022g), which was adopted by the

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Governing Body of the Treaty. The SMTA requires recipients of materials from the Multilateral System, that commercialize plant genetic resources incorporating material from the Multilateral System, to share the monetary benefits arising from the commercialization of products, via payment at standard rates into the Benefit-Sharing Fund (FAO, 2022h) established by the Governing Body. The Fund finances projects to support farmers in developing countries. Non-monetary benefits are also shared, e.g., through plant information systems, capacity building and technology transfer.

Box 2. **Global assessments of genetic resources for food and agriculture**

FAO, through the Commission, publishes reports representing its comprehensive global assessment:

- **The State of the World's Animal Genetic Resources for Food and Agriculture – 2007**
- **The State of the World's Aquatic Genetic Resources for Food and Agriculture – 2019**
- **The State of the World's Biodiversity for Food and Agriculture – 2019**
- **The State of the World's Forest Genetic Resources – 2014**
- **The State of the World's Plant Genetic Resources for Food and Agriculture – 1998, 2009**

These global assessments, prepared with active participation of Member Nations, and public and private sectors, provide a comprehensive picture of the global situation and trends of biodiversity, including genetic resources, for food and agriculture (including fisheries and aquaculture).

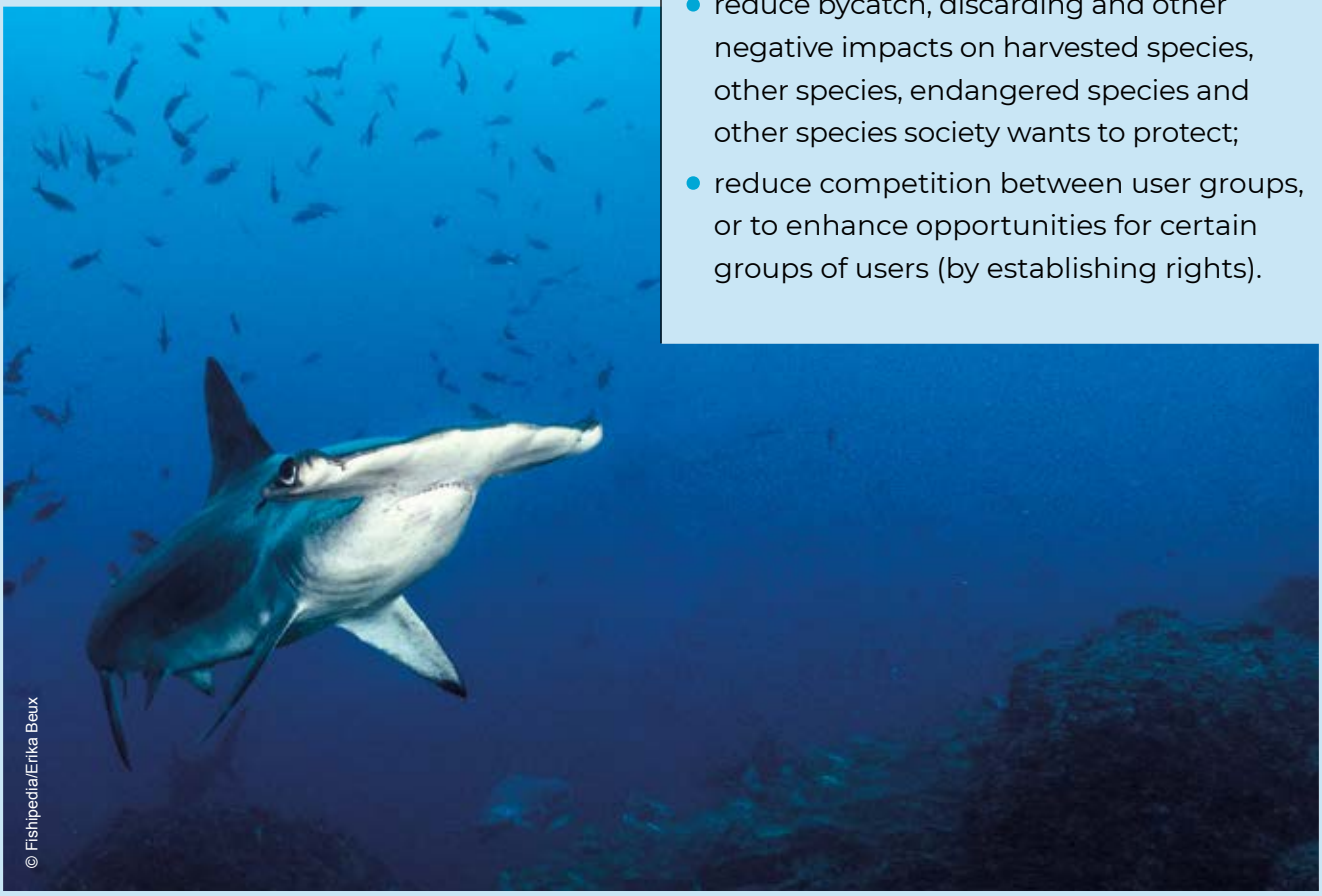
FAO supports Members in their response to the needs and challenges identified in these global assessments, through implementation of the Global Plan of Action for AqGR, which was adopted by FAO Member Nations in 2021.

FAO and area-based management tools (ABMTs)

FAO supports the establishment, adoption and implementation, by RFMOs, of a wide variety of area-based management tools (ABMTs) in ABNJ. Such ABMTs may serve to conserve and manage fish stocks (both target and non-target), and protect specific habitats including vulnerable marine ecosystems (VMEs) (FAO, 2016b), from undesired impacts of fishing operations. In the ABNJ, the implementation of ABMTs has primarily occurred through RFMOs (FAO, 2016c).

ABMTs may be used for fishery management to:

- conserve rare, threatened or endangered species;
- conserve a specific life history stage;
- control fishing mortality, particularly in areas of high catchability;
- manage the spillover effect of fish migrating across the boundaries of an MPA so they can be fished;
- conserve habitat, food web integrity and biological diversity;
- reduce bycatch, discarding and other negative impacts on harvested species, other species, endangered species and other species society wants to protect;
- reduce competition between user groups, or to enhance opportunities for certain groups of users (by establishing rights).



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Commonly used ABMTs in the ABNJ comprise both static and dynamic area-based approaches to include gear limitations, closed areas, and bycatch limits. Collectively, these measures can be used to create a comprehensive network of managed areas that complement and support other management tools, such as catch limits, to achieve sustainable resource management objectives.

Marine protected areas have commonly been used as a tool for conserving marine biological diversity, and are advanced under diverse global and regional instruments, including the Convention on Biological Diversity (CBD), the declaration on sustainable development adopted at Rio +20 "The Future We Want", several Regional Seas Conventions and Action Plans, as well as RFMOs and RFABs. Extensively used since the early 1990s, MPAs are usually focused on limiting or prohibiting extractive activities, including fishing, to meet the primary objective of conservation. FAO promotes the use of MPAs through its FAO Technical Guidelines on MPAs and Fisheries (FAO, 2011).

There are many other types of ABMTs used in the fisheries sector that conserve biodiversity. FAO and key partners recently published a paper that summarizes the biodiversity outcomes that fisheries ABMTs produce (Himes Cornell *et al*., 2022), information which can inform decisions on the use of new ABMT.

The type of AMBT to be used should be determined by the type of fishery being managed, and its governance structure.

Some ABMTs, such as benthic protected areas and static fisheries closures, are generally more easily applied to sedentary species than to highly migratory species. However, in ABNJ where tuna and tuna-like species are being managed, RFMOs have used both dynamic and static ABMTs over a range of spatial and temporal scales, based on the migratory nature of those species.


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Further description and assessment of the suitability of dynamic and static ABMTs, as well as categories of ABMTs and examples that are relevant for RFMOs, are further described in a recent paper on blue water area-based management (Hiborn *et al.* 2022).

The status of ABMTs is monitored by control and enforcement schemes in ABNJ, using Vessel Monitoring Systems (VMS), Vessels Detection Systems (VDS) and other international monitoring control and surveillance (MCS) systems.

The FAO VME Database (FAO, 2022i) is an online repository and interactive map of all current VME closures and other managed areas in the ABNJ, as managed by the deep-sea RFMOs and other multilateral bodies. The criteria for identifying VMEs are outlined in the FAO Deep-Sea Fisheries Guidelines (FAO, 2009).

Several FAO policy and legal instruments address ABMTs in fisheries management. For example, FAO assists in the identification and promotion of best practices and integrated approaches to ABMTs, including in the Code of Conduct for Responsible Fisheries, Deep-sea Fisheries Guidelines, and the Technical Guidelines on MPAs and Fisheries.

In addition, FAO supports the identification, assessment and reporting of other effective area-based conservation measures (OECMs) by RFMOs and their respective Member States. A definition, suite of criteria, and guiding principles for OECMs were formally adopted at the 14th Conference of Parties (COP) to the Convention on Biological Diversity (CBD) in November 2018. The Decision (14/8) defines OECMs by the outcomes produced by the area:

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"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."

Following the request of COFI 34 (FAO, 2021c), FAO's Fisheries and Aquaculture Division began to develop the practical guidance to support Members in the identification and implementation of OECMs. The guidance aims to explain the role of OECMs in mainstreaming biodiversity, provide both a general and technical understanding of OECMs and the CBD Decision 14/8, and outline a process by which governments and rights holders can identify areas in which ABMTs used in fisheries have led to positive and long-term positive biodiversity outcomes (FAO, 2022j).

A number of RFMOs have already begun looking at their spatial fisheries measures to assess their contribution to biodiversity contribution through OECM recognition. Many RFMO implemented ABMT may already aim to meet sustainability goals, and are well poised to meet the OECM criteria. Such measures are widely included in fisheries management plans and processes (Diz *et al*. 2018).

FAO and environmental impact assessments (EIA)

International instruments

Mandate of the 1995 United Nations Fish Stocks Agreement (UNFSA)

FAO implements provisions of international instruments relating to EIAs including the UNFSA. Three key articles in the UNFSA related to EIA provide the basis for FAO EIA interventions:

Article 5 (d) - States are required to cooperate to assess the impact of fishing on target stocks and species belonging to the same ecosystem, or associated with, or dependent upon, target stocks;

Article 6 – States are required to apply the precautionary approach widely to conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks in order to protect the living marine resources and preserve the marine environment and take into account uncertainties and the impact of fishing activities on non-target and associated or dependent species, as well as existing and predicted oceanic, environmental and socio-economic conditions; and

Article 7 (f) – In determining compatible conservation and management measures, States are required to ensure that such measures do not result in harmful impact on the living marine resources as a whole.

FAO has developed international and regional instruments containing provisions and guidance on impact assessments. The Code of Conduct for Responsible Fisheries (FAO, 1995) Article 1,3, provides

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"principles and standards applicable to the conservation, management and development of all fisheries." In the implementation of the Code, including through the ecosystems approach to fisheries (EAF), the fisheries sector is expected to reduce the impact of fishing in ways that are also compatible with its own sustained existence (Staples and Funge-Smith, 2009).

One of the major contributions of FAO to EIA are the International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (FAO, 2009). Paragraph 47 of the Guidelines provides that Flag States and RFMOs should conduct assessments to ascertain whether deep-sea fishing activities are likely to produce significant adverse impacts in a given area, providing information on what the impact assessment should address. Thus, a framework is laid out in these Guidelines for data collection, assessments and monitoring, and control and surveillance. The Guidelines have been used for guidance to develop regional protocols relating to impacts from deep-sea bottom fisheries.

Under the umbrella of the Code of Conduct, FAO developed the FAO Technical Guidelines for Responsible Fisheries: The ecosystem approach to fisheries (FAO, 2003a). These Guidelines focus on the EAF, which translates the aspirations of sustainable development into operational objectives, indicators and performance measures.

Ecosystem approach to fisheries (EAF) and the FAO EAF framework

The purpose of an EAF is to plan, develop and manage fisheries in a manner that addresses the multiplicity of societal needs and desires, without jeopardizing the options for future generations to benefit from a full range of goods and services provided by marine ecosystems (the Reykjavik FAO Expert Consultation [FAO, 2003b]). The EAF is a risk-based approach, whereby key issues related to ecological, human and governance aspects of sustainability for a given fishery are identified and prioritized in a participatory manner, and necessary action agreed. In this way, the potential environmental impacts of fishing activities are identified.

The FAO EAF framework is a set of binding and non-binding FAO policy instruments which provide the main reference for managing fisheries, and implementing the principles of sustainable development (FAO, 2021d).

The FAO EAF framework also provides guidance on how to deal with data poor situations, when there is lack of scientific information from which to establish measures.

FAO contributes to implementation of the EAF policy instruments for fisheries operating in the ABNJ through initiatives and projects, including the Common Oceans ABNJ Programme (FAO, 2022k) (see Box 3) in particular through the Tuna and Deep-Seas project (Harrison *et al.*, 2019).

The Tuna Project has promoted the implementation of the precautionary approach via the adoption of harvest strategies and has contributed significantly to reduce the impact of fishing operations on the environment, reducing bycatch and addressing the incidental mortality of species such as seabirds and marine turtles.

The Deep-Sea Project has made a significant contribution to a better management of fisheries and sustainability in national, regional and international governance, by helping advance the governance of deep-sea fisheries and lessen their impact on VMEs. The project has assisted RFMOs and their Members to improve consistency with the FAO Guidelines for Deep-Sea Fisheries on the High Seas.

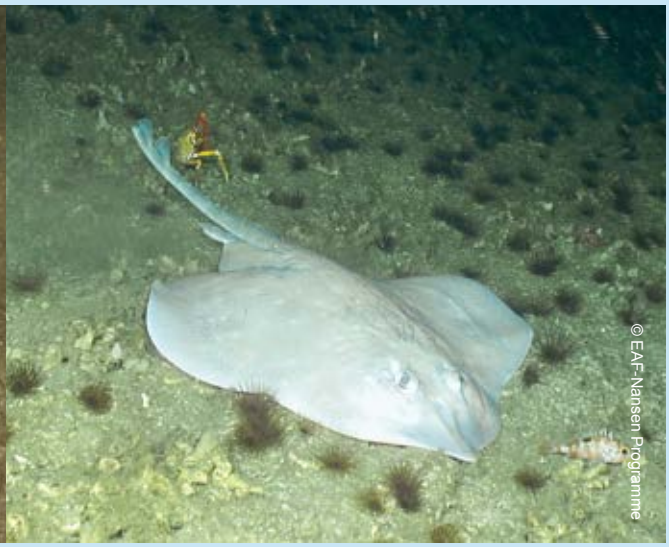
FAO and capacity-building – Transfer of marine technology (TMT)

Capacity and institution building are core functions of FAO, and key to ensuring the conservation and sustainable use of marine biological diversity in ABNJ.

The Fisheries and Aquaculture Division of FAO undertakes capacity building activities for marine and inland fisheries, as well as for aquaculture. These activities include provision of training materials and courses on a wide range of topics (FAO, 2021e), raising awareness and promoting dissemination of best practices and exchange of experiences through training and workshops, and providing financial and technical support to existing training programmes carried out by partner institutions.

FAO, through its Common Oceans ABNJ Programme (see Box 3) implements a number of activities aimed at strengthening global capacity to effectively manage ABNJ and promote effective global and regional coordination on ABNJ. The Programme also includes a project, led by Global Ocean Forum to develop capacity building for prospective participants in the BBNJ process.

Furthermore, FAO has recently launched a Capacity and Institution Building Portal (FAO, 2022l) to provide structured access to information on FAO capacity and institution building services, and learning resources, relevant to ABNJ stakeholders.



Box 3. **Common oceans ABNJ programme:**

This Programme funded by the Global Environment Facility (GEF) is composed of four projects all relevant to the future implementation of the provisions of the BBNJ Agreement: two fisheries projects on tuna and deep-sea fisheries, led by FAO; a cross-sectoral project, led by UNEP; and a project on multisectoral management in the Sargasso Sea, led by UNDP.

These projects, bring together a broad range of partners working on sustainable use and conservation issues in the ABNJ globally. The partnerships include the RFBs responsible for the management of fisheries and other intergovernmental organizations, civil society, private sector, and academic initiatives. The Projects support efforts to enhance the sustainable use of deep-sea living resources, and biodiversity conservation, in the ABNJ, through the systematic application of the EAF.

FAO has organized workshops and has also contributed to specific projects on VME indicator species, such as the Horizon2020 SponGES Project (www.deepseasponges.org). FAO was responsible for the work package on the science-policy interface, and several information brochures and policy briefs have been developed to inform the public on issues related to deep-sea sponges.

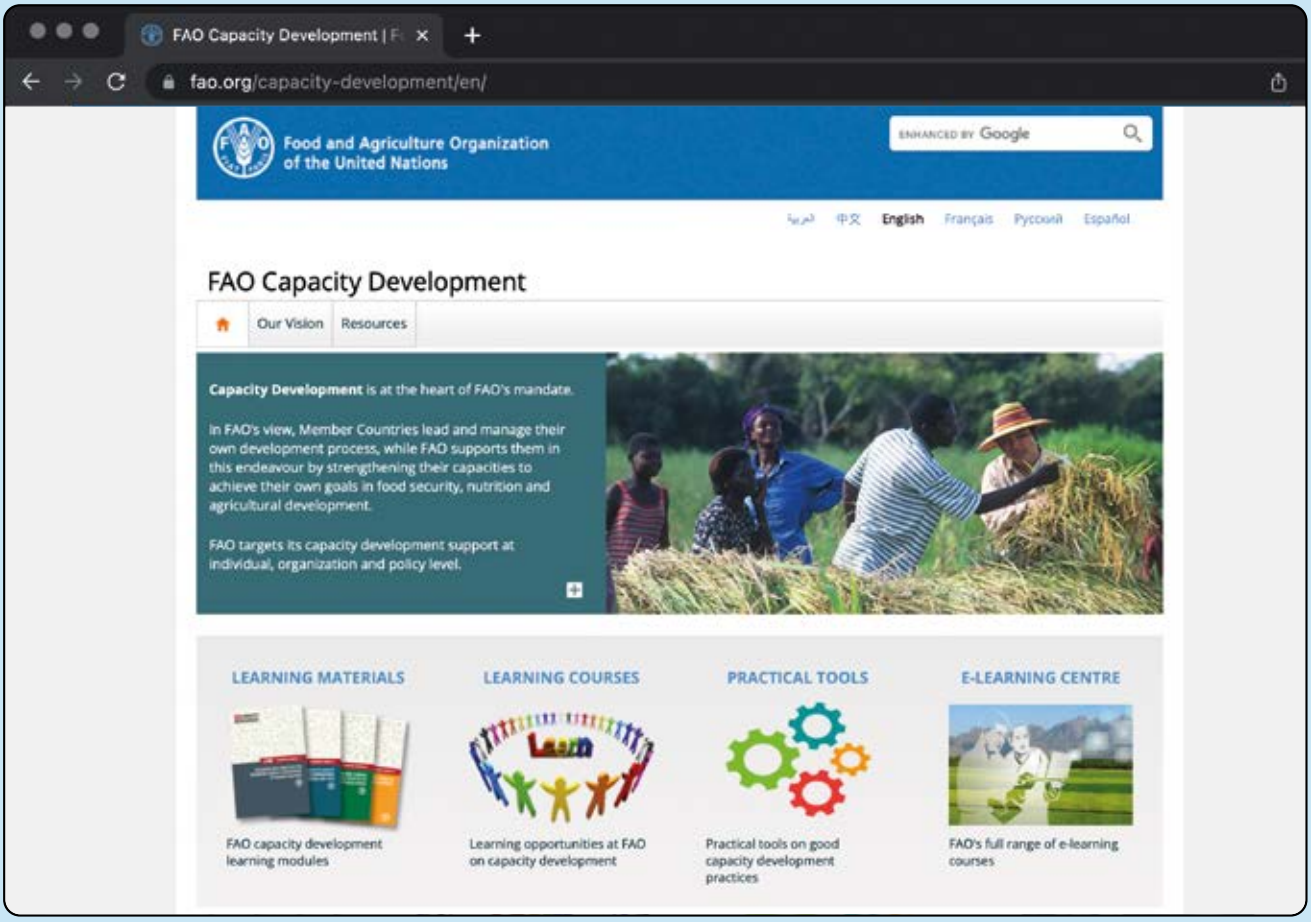
Assistance Fund as specified under Part VII of UNFSA (DOALOS, 2019): FAO is the implementing office of this fund in collaboration with the United Nations Division for Ocean Affairs and the Law of the Sea (UNDOALOS). The Fund plays an important role in assisting developing State Parties to UNFSA on the implementation this instrument in accordance with its Part VII (assisting with travel costs, building capacity for activities, facilitating exchange of information etc.).

FAO Global Port State Measures Agreement (PSMA) Capacity Development Programme: FAO also supports the implementation of the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA) with programme activities on the development or strengthening of national capacity in developing countries seeking to block catch from illegal, unreported and unregulated (IUU) fishing, including from

the ABNJ, from entering global markets and the implementation of other complementary international instruments and regional mechanisms. Since the creation of the Global Port State Measures Agreement Capacity Development Programme in 2017, FAO has extended its technical assistance support to 55 countries, including Small Island Developing States (SIDS).

To coordinate activities and various actors around the globe, FAO's Global Capacity Development Portal (FAO, 2022m) provides information on capacity development projects, initiatives and resource materials carried out and developed by governmental, non-governmental and international organizations to strengthen States' capacity to combat IUU fishing, so that activities can build on each other, synergies can be found, and duplications can be avoided.

FAO/EAF-Nansen Programme: This programme is executed by FAO in close collaboration with the Institute of Marine Research (IRM) in Bergen, Norway, and is funded by the Norwegian Agency for Development Cooperation (Norad).



The programme supports partner countries, and regional organizations in Africa and the Bay of Bengal, to improve their capacity for sustainable management of their fisheries and other uses of marine and coastal resources, through implementation of EAF, taking into consideration the impacts of climate change and pollution.

A specific topic is dedicated to enhancing knowledge and building capacities on deep-sea fisheries and VMEs in the ABNJ, working with RFBs and their members. The research vessel Dr. Fridtjof Nansen is a key tool in marine scientific research and capacity development. Since 2017, 8 surveys have been conducted in the ABNJ (5 Deep-sea and 3 mesopelagic transects). FAO recognizes that correct species identification is essential for fishery and environmental research and management as well as biodiversity assessments.

Recent marine species identification guides of importance to ABNJ, include three volumes focussing on deep-sea cartilaginous fishes and one on mesopelagic fishes (FAO, 2021f).

The FAO e-learning Academy (FAO, 2020) offers access to over 500 multilingual e-learning courses, including on topics related to ABNJ, free of charge, as a global public good (Box 4). The Academy is the result of a collaborative effort involving over 300 partners throughout the world.

The overall objective of the FAO elearning Academy is to strengthen human capital, through the transfer of knowledge, skills and multidisciplinary and transdisciplinary competencies, to generate competent professionals, able to face the global challenges. The Academy is adopting the Digital Badges Certification System to certify the acquisition of competencies.

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Box 4.

Portfolio of existing multilingual fisheries-related courses

Bivalve mollusc sanitation

- Bivalve mollusc sanitation: growing area assessment and review
  https://elearning.fao.org/course/view.php?id=629 (French and Spanish available soon)
- Bivalve mollusc sanitation: growing area risk profile
  https://elearning.fao.org/course/view.php?id=481 (French and Spanish available soon)

Climate

- Climate change adaptation and mitigation in fisheries and aquaculture
  https://elearning.fao.org/course/view.php?id=544
- Climate-smart fisheries and aquaculture
  https://elearning.fao.org/course/view.php?id=579

Ecosystem approach to fisheries

- Ecosystem Approach to Fisheries - Introduction
  https://elearning.fao.org/course/view.php?id=784
- Ecosystem Approach to Fisheries - Policy and Legal Implementation
  https://elearning.fao.org/course/view.php?id=753

Food loss and waste

- Food loss and waste in fish value chains
  https://elearning.fao.org/course/view.php?id=567

Health

- Monitoring and preventing ciguatera poisoning
  https://elearning.fao.org/course/view.php?id=648 (French and Spanish available soon)
- Understanding antimicrobial resistance in food and agriculture
  https://elearning.fao.org/course/view.php?id=783

Performance assessment

- The Fisheries Performance Assessment Toolkit
  https://elearning.fao.org/course/view.php?id=530

Response to emergencies

- Fisheries and aquaculture response to emergencies (FARE)
  https://elearning.fao.org/course/view.php?id=789

Rules of the road at sea

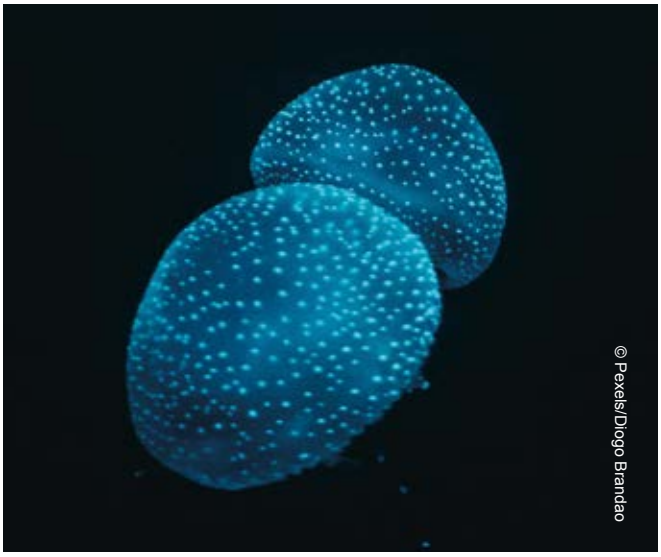
- Rules of the road at sea for small-scale fishers
  https://elearning.fao.org/course/view.php?id=704 (French and Spanish available soon)

Sustainable Development Goals (SDGs): Indicator 14.b.1

- Indicador 14.b.1 de los ODS - Lograr la pesca sostenible en pequeña escala
  https://elearning.fao.org/course/view.php?id=433
- Indicateur ODD 14.b.1 - Assurer la durabilité de la pêche artisanale
  https://elearning.fao.org/course/view.php?id=434
- SDG Indicator 14.b.1 - Securing sustainable small-scale fisheries
  https://elearning.fao.org/course/view.php?id=348
- SDG Indicator 14.b.1 - **أكاديمية التعلم الإلكتروني لمنظمة الأغذية والزراعة (الفاو)**
  https://elearning.fao.org/course/view.php?id=560
- SDG Indicator 14.b.1 - 保障小规模渔业的可持续发展14.b.1
  https://elearning.fao.org/course/view.php?id=548
- SDG Indicator 14.b.1 - Академия электронного обучения ФАО
  https://elearning.fao.org/course/view.php?id=556

Sustainable Development Goals (SDGs): Indicator 14.4.1

- Indicador 14.4.1 de los ODS - Sostenibilidad de las poblaciones de peces
  https://elearning.fao.org/course/view.php?id=745
- Indicateur 14.4.1 des ODD - Durabilité des stocks de poissons
  https://elearning.fao.org/course/view.php?id=735
- SDG Indicator 14.4.1 - Fish stocks sustainability
  https://elearning.fao.org/course/view.php?id=502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We added «j» next to the year 2022 as requested for reference on pag. 15. Please confirm

Invitation

FAO stands ready to assist and work with Member Nations to provide technical advice and support in the implementation of this long-awaited legal instrument. FAO has ongoing processes, projects and initiatives related to fisheries sustainability, including conservation of biodiversity, in the ABNJ over the past decades, so it has the knowledge, experience and mandate to provide reliable and highest quality technical advice.

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