Written Statement of the Food and Agriculture Organization of the United Nations (FAO)

INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA (CASE NO. 31)

REQUEST FOR AN ADVISORY OPINION SUBMITTED BY THE
COMMISSION OF SMALL ISLAND STATES ON CLIMATE
CHANGE AND INTERNATIONAL LAW
(REQUEST FOR ADVISORY OPINION SUBMITTED TO THE
TRIBUNAL)

WRITTEN STATEMENT OF THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

16 June 2023

IN RESPONSE TO THE INVITATION CONTAINED IN ORDER 2022/4
OF 16 DECEMBER 2022, AND IN THE ORDER 2023/1
OF 15 FEBRUARY 2023

The views, if any, expressed in this statement do not necessarily reflect the official views of FAO Members.

I. Introduction

1. On 26 August 2022, the Commission of Small Island States on Climate Change and International Law (the "Commission") decided, pursuant to article 3(5) of the Agreement for the Establishment of the Commission,¹ to submit a request for an advisory opinion from the International Tribunal for the Law of the Sea (the "Tribunal") on the following questions (the "Commission's questions"):

"What are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea (the "UNCLOS"), including under Part XII:

- (a) to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere?
- (b) to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?"
- 2. This Statement responds to the Tribunal's invitation, in its Order 2023/1 (of 15 February 2023),² to certain international organizations³ including the Food and Agriculture Organization of the United Nations ("FAO"), to present written statements on the Commission's questions.
- 3. This statement (the "Statement") is intended to be factual in nature.⁴ It addresses the Commission's question from the perspective of FAO's mandate and the instruments adopted under FAO's legal and constitutional framework. It provides technical information aimed at assisting the Tribunal in its consideration of the Commission's questions. These technical inputs herein are based on studies published by FAO concerning or relating to climate change in the context of food security, fisheries and aquaculture (see **Annex**).
- 4. This Statement does not interpret provisions of treaties nor States' obligations under international law. The authority to definitively interpret treaties and obligations thereunder lies with the Parties to those treaties.

II. Aspects of FAO's mandate relevant to the Commission's questions

5. FAO's mandate is to combat hunger and promote global food and nutrition security.⁵ FAO realizes its mandate by supporting its Members to achieve inclusive, efficient, functioning and sustainable agrifood systems.⁶ These agrifood systems include those undertaken in, or

Agreement for the establishment of the Commission of Small Island States on Climate Change and International Law (adopted 31 October 2021, entered into force 31 October 2021) (56940 UNTS).

² ITLOS. Order 2023/1 of 15 February 2023, available at https://www.itlos.org/fileadmin/itlos/documents/cases/31/C31 Order 2023-1 15.02.2023 Readable.pdf.

Listed in the annex to the Order 2022/4, namely: the United Nations Environment Programme (UNEP), the United Nations Framework Convention on Climate Change (UNFCCC), the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO), the International Maritime Organization (IMO), the International Union for Conservation of Nature (IUCN) and the World Meteorological Organization (WMO).

⁴ The views, if any, expressed herein do not necessarily reflect the official views of FAO Members.

⁵ FAO. 2017. *Basic Texts of the Food and Agriculture Organization of the United Nations*. 2017 edition. Constitution, Preamble.

⁶ FAO. 2021. FAO Strategic Framework 2022-31 (endorsed at the 42nd Session of the FAO Conference, held from 14 to 18 June 2021, Rome) available at https://www.fao.org/3/cb7099en/cb7099en.pdf (accessed 6 May 2023). The agrifood system covers the journey of food from farm to table - including when it is grown, fished, harvested,

interacting with the marine environment.⁷ FAO is concerned with current and potential marine environmental impacts arising from climate change, which, whether on their own or compounded with or by other impacts, directly or indirectly affect fisheries, aquaculture and communities dependent on these sectors for food, nutrition and livelihoods.

- 6. Climate change issues are enshrined in FAO's corporate Strategic Framework endorsed by all its Members in the Conference,⁸ through which FAO delivers its programme of work and contributes to the Sustainable Development Goals. The Framework's outcome statements include: ensuring sustainable consumption and production patterns, ensuring resilient and sustainable agrifood systems in a changing climate and environment; protecting, restoring and promoting sustainable use of terrestrial and marine ecosystems, and combating climate change through more efficient, inclusive, resilient and sustainable agrifood systems.⁹
- 7. The Strategic Framework includes a programme priority area on "climate change mitigation and adapted agrifood systems". The FAO Council recently endorsed the Strategy on Climate Change 2022-31 (the "Strategy"), 10 guiding FAO's support to its Members to, *inter alia*, enhance their Nationally Determined Contributions in so far as they concern the food and agriculture sectors and the sustainable management of marine resources.
- 8. FAO's Committee on Fisheries (COFI) recently commended the development of the Strategy as the new corporate framework for enhancing climate action, and recommended the development of a set of FAO actions focused on climate resilient fisheries and aquaculture. FAO's Committee on Agriculture (COAG) recommended that the Action Plan for the implementation of the Strategy clearly set out FAO's priorities for climate action in the agrifood systems at sectoral level, including for fisheries and aquaculture, taking into account synergies with work by other relevant UN agencies and international organizations. 12
- 9. The Commission's questions broadly concern climate-related environmental problems of ocean warming, ocean acidification, and sea level rise. Ocean warming is impacting fisheries with implications for food production and communities' livelihoods. Sea level rise affects coastal communities, especially those living in coastal areas vulnerable to coastal erosion and living in narrow coastal zones, as in the case of any low-lying and small island States, including Small Island Developing States. Island Developing States.

processed, packaged, transported, distributed, traded, bought, prepared, eaten and disposed of. It also encompasses non-food products that also constitute livelihoods and all of the people as well as the activities, investments and choices that play a part in getting us these food and agricultural products. In the FAO Constitution, the term "agriculture" and its derivatives include fisheries, marine products, forestry and primary forestry products. See CL 166/REP, footnote 6.

According with the Constitution of FAO, the term "agriculture" and its derivatives include fisheries and marine products. See FAO. 2017. *Basic Texts of the Food and Agriculture Organization of the United Nations*. 2017 edition. Constitution, article I (1).

⁸ FAO. 2021. FAO Strategic Framework 2022-31.

⁹ Ibid., pages 16 and 17.

¹⁰ FAO. 2022. *FAO Strategy on Climate Change 2022-2031* (endorsed at the 170th Session of the FAO Council, held from 13 to 17 June 2022, Rome), available at https://www.fao.org/3/cc2274en/cc2274en.pdf (accessed 6 May 2023).

FAO. 2023. Report of the Thirty-fifth Session of the Committee on Fisheries, Rome, 5–9 September 2022. FAO Fisheries and Aquaculture Report No. 1391. Rome. https://doi.org/10.4060/cc3652en, paragraph 16 (c) and (d).

¹² FAO. 2022. Report of the Twenty-eighth Session of the Committee on Agriculture, Rome, 18–22 July 2022. Doc. C 2023/22, paragraph 25 (c).

¹³ Bindoff N.L. *et al.* 2019. Changing Ocean, Marine Ecosystems, and Dependent Communities. In IPCC. *Special Report on the Ocean and Cryosphere in a Changing Climate*.

Oppenheimer, M. et al. 2019. Sea Level Rise and Implications for Low-Lying Islands. In IPCC. Special Report on the Ocean and Cryosphere in a Changing Climate.

10. FAO has worked on addressing the impacts of sea level rise, including in a project (2013–2015) conducted in partnership with the Pacific Small Island Developing States ("PSIDS"). The PSIDS representatives engaging in this activity made recommendations such as ensuring that the outer boundaries of the PSIDS and the maritime jurisdictional areas are preserved, once claimed. 16

III. Preliminary considerations on certain aspects of the Commission's questions

- 11. The Commission refers to the "specific obligations of State Parties to the (...) UNCLOS". UNCLOS currently has 169 Parties, including the European Union.¹⁷ The Parties to UNCLOS,¹⁸ all of which are FAO Members,¹⁹ are committed to the current corporate strategies that were adopted by them through the Governing Bodies of FAO, including its primary organ: the Conference.
- 12. Many Parties to UNCLOS are also Parties to other binding international instruments adopted under the auspices of FAO, such as the *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas* ("the Compliance Agreement"), ²⁰ and the *Agreement on Port States Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* ("PSMA"). ²¹
- 13. Parties to UNCLOS may have also endorsed non-binding instruments adopted under the auspices of FAO that are relevant to the Commission's questions and worth highlighting in this context:²² Code of Conduct for Responsible Fisheries (the "Code"),²³ International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (the "IPOA-IUU"),²⁴ Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem (the

¹⁵ These include the Commission's Members Niue, Palau, Tuvalu and Vanuatu.

Other recommendations are: PSIDS to finalize baselines and complete their boundary delimitations, declare outer limits of their exclusive economic zone (EEZ), and negotiate with neighbouring PSIDS and coastal States where there are overlapping EEZs; and, regional declarations to be made stating that sea level rise should not have adverse impacts on the maritime jurisdictional areas of the PSIDS. This information draws from the document "The contribution of the Food and Agriculture Organization of the United Nations to the Report of the Secretary General on oceans and the law of the sea, on the topic of focus of the ICP21: 'Sea-level rise and its impacts'".

UN. 2023. Division for Oceans Affairs and Law of the Sea. Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements (last updated 19 May 2023), available at https://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm#The%20United%20Nations %20Convention%20on%20the%20Law%20of%20the%20Sea (accessed 20 May 2023).

References to States Parties in this Statement include Parties that are international organizations, referred to in UNCLOS, article 305(1)(f) and Annex IX.

FAO. 2023. Membership of FAO. In: The Development Law Service, available at https://www.fao.org/legal-services/membership-of-fao/en/ (accessed 22 May 2023).

Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (the "Compliance Agreement") (approved by the 27th Session of FAO Conference in November 1993, entered into force on 24 April 2003).

Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing ("PSMA") (adopted 22 November 2009, entered into force on 5 June 2016) (Appendix E to FAO Doc C 2009/REP).

Other non-binding instruments that may also be relevant to the Commission's question include: International Guidelines for the Management of Deep-Sea Fisheries in the High Seas; International Guidelines on Bycatch Management and Reduction of Discards; International Plan of Action for the Conservation and Management of Sharks; Voluntary Guidelines for Flag State Performance; Voluntary Guidelines for Catch Documentation Schemes; Voluntary Guidelines on the Marking of Fishing Gear; and Voluntary Guidelines for Transshipment.

²³ FAO. *Code of Conduct for Responsible Fisheries* (CCRF) (adopted in Resolution 4/95, by the FAO Conference, 28th Session, on 31 October 1995).

²⁴ FAO. 2001. *International Plan of Action to prevent, deter, and eliminate illegal, unreported and unregulated fishing*. Rome, FAO. 2001. 24p.

- "Reykjavik Declaration"), ²⁵ and the *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication* (the "SSF Guidelines"). ²⁶
- 14. While voluntary in nature, certain provisions of non-binding instruments may have a binding effect for all States if the provisions reflect customary international law,²⁷ or for some States where these reflect terms of binding instruments to which they have adhered.²⁸ The Compliance Agreement, which forms an integral part of the Code (article 1.1),²⁹ and the provisions of the Code which reflect customary international law, are binding.

A. The Commission's question relating to pollution of the marine environment

- 15. Article 1 (1.4) of the UNCLOS broadly defines "pollution of the marine environment" as "the introduction by man, directly or indirectly, of **substances or energy into the marine environment**, including estuaries, which results or is likely to result in such deleterious effects as **harm to living resources and marine life**, hazards to human health, hindrance to **marine activities, including fishing** and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities" (emphasis added).
- 16. From the perspective of FAO's mandate, pollution of the marine environment may be caused: (i) by activities taking place in or interacting with the marine environment, and which cause pollution *through the atmosphere*;³⁰ and (ii) by activities that directly cause pollution *into marine waters*.
- 17. In relation to pollution *through the atmosphere*, article 212 of UNCLOS establishes obligations to prevent, reduce and control pollution of the marine environment *from or through the atmosphere*. The agrifood sector, including fisheries and aquaculture, is responsible for over 30 percent of anthropogenic greenhouse gases (GHG) emissions globally,³¹ but "[a]quatic food has one of the lowest carbon footprints among all the animal-source food commodities and thus

Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem (Reykjavik, Conference on Responsible Fisheries in the Marine Ecosystem, 1 to 4 October 2001).

²⁶ FAO, Voluntary Guidelines for Securing Sustainable Small-scale fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) (adopted at the 31st Session of the Committee on Fisheries, Rome, 9-13 June 2014).

B. Kuemlangan et al. 'Integrative policy and legal instruments, approaches and tools: Fisheries and biodiversity conservation' in S. Garcia, J. Rice and A. Charles (eds), Governance of Marine Fisheries and Biodiversity Conservation: Interaction and Co-Evolution (John Wiley & Sons, Chichester, 2014), 166-180; Nakamura J, 'Legal Reflections on the Small-Scale Fisheries Guidelines: Building a Global Safety Net for Small-Scale Fisheries' (2022) 37 The International Journal of Marine and Coastal Law 31.

FAO. 2003. Report of the Workshop on the Implementation of the 1995 FAO Code of Conduct for Responsible Fisheries in the Pacific Islands: a Call to Action. FAO Fisheries Report No. 731, Rome, FAO, Appendix H, B. Kuemlangan "Legal Considerations for the 1995 FAO Code of Conduct for Responsible Fisheries and related International Plans of Action". Note that the Code, article 1.1 affirms that "certain parts of it are based on relevant rules of international law", including those reflected in the UNCLOS, and that the "Code also contains provisions that may be or have already been given binding effect by means of other obligatory legal instruments amongst the Parties", such as the Compliance Agreement, which "forms an integral part of the Code".

²⁹ ITLOS. Supra note 4, paragraph 8.

For the well-documented climate interconnections between atmospheric pollution from GHG emissions and marine waters, see IPCC. 2019: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* (H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)). Cambridge University Press, Cambridge, UK and New York, NY, USA, 755 pp.

M. Crippa *et al.* 2021. Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food* 2, 198–209.

- is a crucial carbon-efficient solution to meet the nutrition needs of a growing world population".³²
- 18. Pollution *through the atmosphere* can be caused by GHG emissions from fishing vessels motorized by internal combustion engines for propulsion and onboard power.³³
- 19. In relation to pollution *into marine waters*, article 194 of UNCLOS lays down measures to prevent, reduce and control pollution of the marine environment *from any source*. Article 194 (3) provides a non-exhaustive list of mandatory measures to deal with all sources of pollution of the marine environment, such as the release of toxic, harmful or noxious substances, from or through the atmosphere, pollution from vessels, and pollution from other installations and devices operating in the marine environment.
- 20. UNCLOS specifies obligations in respect of preventing, reducing and controlling pollution of the marine environment by dumping (article 210) and from vessels (article 211).
- 21. Fishing vessels may introduce substances or energy *into the marine environment*, which can impact living resources and marine life, such as (i) marine litter,³⁴ including abandoned, lost or otherwise discarded fishing gears (ALDFG); and (ii) use of dynamites, poison, toxic or other noxious substances for fishing, which are generally prohibited by law.³⁵
- 22. Additionally, marine aquaculture operations can contribute to: wastewater discharge that can transmit disease and pollution;³⁶ potentially harmful algal blooms that produce toxins, affect co-occurring organisms and alter food-web dynamics;³⁷ and, the eventual use of unsustainable technologies or introduction of alien or new species that can transmit diseases to the natural aquatic fauna.³⁸
- 23. UNCLOS specifies obligations in respect of preventing, reducing and controlling pollution of the marine environment from land-based sources (article 207). Agriculture runoff may affect

FAO. Information document COFI 2022/7 (Addressing climate change in fisheries and aquaculture: reporting on progress and action plan for the implementation of the FAO Strategy on Climate Change 2022-2031), available at https://www.fao.org/3/nj406en/nj406en.pdf (accessed 10 June 2023), paragraph 16.

He, P. et al. Countering climate change: measures and tools to reduce energy use and greenhouse gas emission in fisheries and aquaculture. In: Barange, M. et al. (eds.) 2018. Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation and mitigation options. FAO Fisheries and Aquaculture Technical Paper No. 627. Rome, FAO. 628 pp.

Marine litter includes synthetic ropes, synthetic fishing nets, plastic garbage, pursuant to Annex V (Regulations for the Prevention of Pollution by Garbage from Ships) of the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL), as modified by the Protocol of 1978. See Gilman, E. et al. 2016. Abandoned, lost and discarded gillnets and trammel nets: methods to estimate ghost fishing mortality, and the status of regional monitoring and management. FAO Fisheries and Aquaculture Technical Paper No. 600. Rome. Italy; Hodgson, S. 2022. Legal aspects of abandoned, lost or otherwise discarded fishing gear. Rome, FAO and IMO. https://doi.org./10.4060/cb8071en.

³⁵ In certain countries, the use of natural poisons is still admitted and part of the practice of traditional small-scale fishing communities. See FAO, Duke University & WorldFish. 2023. Illuminating Hidden Harvests – The contributions of small-scale fisheries to sustainable development. Rome. https://doi.org/10.4060/cc4576en, at 65, 188, 195, and 201.

³⁶ Hishamunda, N., Riddler, N. and Martone, E. 2014. *Policy and governance in aquaculture: lessons learned and way forward.* FAO Fisheries and Aquaculture Technical Paper No. 577. Rome, FAO, at 23.

McDaid Kapetsky, J., Aguilar-Manjarrez, J. and Jennes, J. 2013. *A global assessment of offshore mariculture potential from a spatial perspective*. FAO Fisheries and Aquaculture Technical Paper No. 549. Rome, FAO, at 140.

Soto, D. (ed). 2009. *Integrated mariculture: A global review*. FAO Fisheries and Aquaculture Technical Paper No. 529. Rome, FAO.

- coastal waters by spreading sediments and chemical contaminants, concentration of nutrients (eutrophication) and leading to algae blooms that impact aquatic plants and animals.³⁹
- 24. The agrifood sector, including fisheries, accounts for one-third of the anthropogenic GHG emissions driving climate change. ⁴⁰ The pollution of the marine environment by fishing vessels, aquaculture operations, and agricultural product runoff can affect marine species, ecosystems, habitats, biodiversity, and increase their vulnerability to climate change impacts, while also decreasing their capacity to be resilient, and can affect the ocean's capacity to effectively absorb GHG from the atmosphere. ⁴¹

B. The Commission's questions relating to protection and preservation of the marine environment

- 25. The obligations to protect and preserve the marine environment are set out in Part XII of UNCLOS. Protecting and preserving the marine species, ecosystems, habitats, biodiversity can increase their resilience to climate change impacts, while also increasing the ocean's capacity to effectively absorb GHG from the atmosphere.⁴²
- 26. The scope of obligations under certain provisions of Part XII of UNCLOS have already been interpreted by the Tribunal or other international judicial bodies.⁴³
- 27. Consistent with and supporting compliance with UNCLOS obligations, Parties to UNCLOS may adopt conservation and management measures (CMMs) through regional fisheries management organizations (RFMOs). The *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)*⁴⁴ defines CMMs as: "measures to **conserve** and manage one or more species of living marine resources that are adopted and applied consistent with the relevant rules of international law as reflected in the Convention and this Agreement" (article 1 (b), emphasis added). Both the Compliance Agreement (article I (b)) and PSMA (article 1 (a)) provide a similar definition of CMMs.⁴⁵

For instance, the obligations under UNCLOS, including due diligence obligations of flag States, relating to or within Part XII of UNCLOS, are recognized in ITLOS Case No. 21. In the matter of the South China Sea Arbitration (PCA Case No. 2013-19), the Arbitral Tribunal considered that the general obligation under article 192 "extends both to 'protection' of the marine environment from future damage and 'preservation' in the sense of maintaining or improving its present condition" (Award of 12 July 2016, paragraph 941). The Arbitral Tribunal also "consider[ed] that the 'general obligation to protect and preserve the marine environment' in Article 192 includes a due diligence obligation to prevent the harvesting of species that are recognized internationally as being at risk of extinction and requiring international protection" (paragraph 956).

Mateo-Sasgata, J., Zadeh, S.M., Turral, H. 2017. Water pollution from agriculture: a global review. Rome and Colombo, FAO and the International Water Management Institute (IWMI).

⁴⁰ FAO. 2021. The State of Food and Agriculture 2021. Making agrifood systems more resilient to shocks and stresses. Rome, FAO. https://doi.org/10.4060/cb4476en, at "v".

⁴¹ Bahri, T., Barange, M. and Moustahfid, H. Climate change and aquatic systems. In: Barange, M. et al (eds.) 2018. Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation and mitigation options. FAO Fisheries and Aquaculture Technical Paper No. 627. Rome, FAO. 628 pp.

⁴² ibid

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 (New York, 4 August 1995, in force 11 December 2001) 2167 UNTS 3 (UNFSA), at Article 6.

The Compliance Agreement adds that "[s]uch measures may be adopted either by global, regional or subregional fisheries organizations, subject to the rights and obligations of their members, or by treaties or other international agreements" (Article I (b), emphasis added).

28. Over twenty RFMOs have the competence to adopt binding CMMs.⁴⁶ The adoption of CMMs by RFMOs may be reflective of a consensus amongst the respective RFMOs Members in respect of certain sustainable fisheries management and conservation measures⁴⁷ that can support UNCLOS obligations on preservation and protection of the marine environment.⁴⁸ Such CMMs with obligations for the sustainable management of fisheries and conservation can contribute to the preservation and protection of the marine environment, including protection of marine biodiversity and specific species.

IV. Considerations relating to selected instruments adopted under the auspices of FAO

A. The Compliance Agreement and PSMA

- 29. The Compliance Agreement⁴⁹ is a treaty setting out States' responsibilities in respect of the fishing vessels, entitled to fly their flag and which are used or intended to be used for fishing on the high seas (articles II (1) and III), including the responsibility of maintaining a record of fishing vessels (article IV) in respect of such vessels.
- 30. The Compliance Agreement may be relevant to the Commission's question in so far as it supports the effectiveness⁵⁰ of CMMs, which address the prevention, reduction and control of marine pollution, and the protection of the marine environment. It is observed that the Compliance Agreement was adopted by consensus by all FAO Members in the Conference, and currently numbers 45 Parties, including the European Union.
- 31. The PSMA⁵¹ is a further treaty which may also be relevant to the Commission's questions, given its objectives.⁵² The adoption by the FAO Conference of the PSMA, and adherence by 76 Parties including the European Union at the time of writing may reflect a developing international consensus on the matters falling under its scope. The PSMA addresses, for example, scenarios such as when a foreign fishing vessel is engaged or presumed to be engaged in IUU fishing in the context of CMMs violation relating to the prevention, reduction and control of marine pollution or the protection and preservation of the marine environment. In this particular scenario, the violation of such CMMs is considered illegal fishing, pursuant to

T. Løbach, T., Petersson, M., Haberkon, E. and 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.

For example: the Indian Ocean Tuna Commission (IOTC) Resolution 19/03 on the conservation of Mobulid Rays caught in association with fisheries in the IOTC area of competence; Resolution 18/02 on management measures for the conservation of Blue Sharks caught in association with IOTC measures; Resolution 13/04 on the conservation of Cetaceans. See many other examples in the Compendium of Active Conservation and Management Measures for the Indian Ocean Tuna Commission (last updated 09 June 2023), available at https://iotc.org/cmms (accessed 14 June 2023).

Members or Contracting Parties to RFMOs are bound by the respective CMMs, unless the constituting agreement of such RFMO allows a Member or Contracting Party to oppose it.

⁴⁹ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (approved by the 27th Session of FAO Conference in November 1993, entered into force on 24 April 2003).

⁵⁰ See Compliance Agreement, articles III (1), V (1), VI (8) (a).

Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA) (adopted on 22 November 2009, entered into force on 5 June 2016) (Appendix E to FAO Doc C 2009/REP). See the electronic version available at the Depositary website: FAO Treaties Database.

⁵² PSMA, article 2.

the definition of illegal fishing under the IPOA-IUU, paragraph 3.1.2.⁵³ Consequently, port States control measures based on the PSMA apply.

B. International conservation and management measures

- 32. CMMs adopted by RFMOs may also be relevant to the Commission's questions. In the FAO context, of particular relevance are two RFMOs established under article XIV of the FAO Constitution: the General Fisheries Commission for the Mediterranean (GFCM), and the Indian Ocean Tuna Commission (IOTC).
- 33. Out of the 169 Parties to UNCLOS, 19 are GFCM Members, and 28 are IOTC Members. Moreover, there are four GFCM Members (Israel, Libya, the Syrian Arabic Republic and Türkiye) and two IOTC Members (Eritrea and the Islamic Republic of Iran) which are not Parties to UNCLOS.
- 34. GFCM CMMs cover a range of fisheries management issues some of which have an environmental or conservation focus.⁵⁴ GFCM is currently working to address anthropogenic underwater noise, which can contribute to the study of cumulative impacts on marine ecosystems generated by such noise and other stressors such as climate change. In addition, GFCM includes climate change among relevant targets and actions of the GFCM 2030 Strategy for sustainable fisheries and aquaculture, thereby recognizing the importance of addressing this issue, including through the potential adoption in the future of specific CMMs.⁵⁵
- 35. IOTC CMMs also cover a range of fisheries management issues, some of which have an environmental or conservation focus. ⁵⁶ In addition, through *Resolution 22/01 on climate change as it relates to the* [IOTC], Members of IOTC have recognized "the importance of addressing the potential impacts of climate change and other environmental degradation on target stocks, non-target species, and species belonging to the same ecosystem or dependent or associated with the target stocks in the IOTC Area of Competence" (Preamble).
- 36. The GFCM and IOTC CMMs may assist the Tribunal's consideration of the Commission's questions as they contribute to sustainable fisheries, the survival and conservation of species, and the strengthening of the resilience of the marine environment against the overall impacts of climate change.

C. Voluntary instruments

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37. As regards part "(a)" of the Commission's questions, the following voluntary instruments adopted under the auspices of FAO may be relevant:

a. the Code, which contains provisions on, *inter alia*: pollution, waste, discards, catch by lost or abandoned gear, use of selective, environmentally safe and cost-effective fishing gear and techniques (article 7.2.2 (g)); prohibiting the use of dynamites, poisons and other destructive fishing practices (article 8.4.2); development of standards and guidelines for more efficient

⁵³ FAO. *International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing*. Rome, FAO. 2001. 24p.

⁵⁴ GFCM. 2022. Compendium of GFCM Decisions (Revised version 6.0), available at https://gfcmsitestorage.blob.core.windows.net/website/Decisions/GFCM_Compendium_2022-e.pdf (accessed 20 May 2023).

⁵⁵ See the FAO website dedicated to the GFCM Strategy 2030, available at https://www.fao.org/gfcm/2seas1vision/GFCM2030Strategy/es.

⁵⁶ IOTC. 2023. Compendium of Active Conservation and Management Measures for the Indian Ocean Tuna Commission (Last updated 9 June 2023), available at https://iotc.org/cmms (accessed 16 June 2023).

use of energy in capture fisheries (article 8.6.1); equipping vessels to reduce emissions of ozone depleting substances (article 8.8.2); phasing out of the use of chlorofluorocarbons (CFCs) and transitional substances such as hydrochlorofluorocarbons (HCFCs) in the refrigeration systems of fishing vessels, and ensuring that the shipbuilding industry and the fishing industry are informed of and comply with such guidelines (article 8.8.3); refitting vessels with alternative refrigerants to CFCs and HCFCs and alternatives to Halons in fire-fighting installations (article 8.8.4); and, recommendations urging States and owners, charterers and managers of fishing vessels as well as fishers to follow international guidelines for the disposal of CFCs, HCFCs and Halons (article 8.8.5).

- b. SSF Guidelines, which recommend that States prevent, deter and eliminate all forms of illegal and/or destructive fishing practices having a negative effect on marine ecosystems (paragraph 5.16); and that all stakeholders encourage and support energy efficiency in small-scale fisheries (paragraph 9.8).
- c. FAO COFI *Declaration for Sustainable Fisheries and Aquaculture* ("COFI Declaration"),⁵⁷ which notes the significant challenges faced by fisheries and aquaculture sectors arising from changing climatic and ocean conditions, and the potential of these sectors to "contribute to the reduction of emissions, through the employment of energy-efficient practices" (Preamble); and calls for FAO Members to apply management measures across all aquatic systems to reduce the impact of marine litter, ALDFGs, reduce discards and bycatch issues and eliminate harmful fishing practices (paragraph 4).
- 38. As regards the part "(b)" of the Commission's question, various recommendations are provided in the Code, the SSF Guidelines, and the COFI Declaration, which consider that measures relating to fisheries management and conservation can contribute to the overall marine environmental protection and preservation.
- 39. The Code,⁵⁸ the SSF Guidelines,⁵⁹ and the COFI Declaration⁶⁰ also contain certain recommendations for States and non-State actors to address climate change impacts in fisheries and aquaculture.
- 40. The Code requires the application of the precautionary approach to the conservation, management and exploitation of living aquatic resources, reiterating the core notion of this approach: that "[t]he absence of adequate scientific information should not be used as a reason for postponing or failing to take measures to conserve target species, associated or dependent species and non-target species and their environment" (article 6.5; see also article 7.5.1).⁶¹
- 41. The precautionary approach is enshrined in the Reykjavik Declaration,⁶² Deep Sea Fisheries Guidelines,⁶³ and the SSF Guidelines.⁶⁴ The precautionary approach is a widely recognized principle of international environmental law. It is stated as a principle under article 5 of the

⁵⁷ FAO. 2021. 2021 COFI Declaration for Sustainable Fisheries and Aquaculture. Rome.

⁵⁸ Code, articles 7.4.2 and 12.5.

⁵⁹ SSF Guidelines, paragraph 9.2.

⁶⁰ COFI Declaration on Sustainable Fisheries and Aquaculture, paragraph 15.

It is also worth noting article 7.5.5: "If a natural phenomenon has a significant adverse impact on the status of living aquatic resources, States should adopt conservation and management measures on an emergency basis to ensure that fishing activity does not exacerbate such adverse impact. (...) Measures taken on an emergency basis should be temporary and should be based on the best scientific evidence available".

⁶² Reykjavik Declaration, paragraph 5.

Deep Sea Fisheries Guidelines, paragraphs 12 (i), 20, 22 and 65.

⁶⁴ SSF Guidelines, at paragraph 3.1 (10).

- UNFSA, which shall be applied in accordance with its article 6. In ITLOS Case No. 17, the Seabed Disputes Chamber of the Tribunal observed that "the precautionary approach has been incorporated into a growing number of international treaties and other instruments" and "this has initiated a trend towards making this approach part of customary international law".⁶⁵
- 42. The precautionary approach calls on States Parties to the UNCLOS to take action notwithstanding scientific uncertainty about the risks and potential effects of climate change in the marine environment.
- 43. Another important approach in this context is the ecosystem approach. FAO defines the ecosystem approach to fisheries (EAF) as one that "strives to balance diverse societal objectives, by taking account of the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries". 66
- 44. The ecosystem approach can promote understanding about the interconnections between species, ecosystems, habitats, and how meeting States' obligations in respect of fisheries management and conservation can contribute to the prevention, reduction, and control of marine pollution associated with climate change, as well as the protection and preservation of the marine environment against climate change impacts.⁶⁷

V. Conclusions

- 45. This Statement sets out considerations which may assist the Tribunal in its deliberations on the Commission's questions. The international instruments adopted under the auspices of FAO to the issues of prevention, reduction, control of marine pollution, and preservation and protection of the marine environment, all in their connections with climate change, may be reflective of existing or developing international consensus on matters addressed in those instruments.
- 46. In particular, the specific obligations that Parties to the UNCLOS have accepted through their adherence to the Compliance Agreement, PSMA, or as Members of RFMOs, may support broad understandings concerning the sustainability of fisheries and aquaculture, and the overall protection of the marine environment, its resilience and ability to adapt to the impacts of climate change. The endorsement in the FAO Governing Bodies of non-binding instruments referred to herein may also reflect growing consensus on matters of particular relevance to PSIDS, whose communities depend on the marine environment, including fisheries, for their food and nutrition security and survival.

⁶⁵ ITLOS. Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area (Request for Advisory Opinion submitted to the Seabed Disputes Chamber), Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p. 10, paragraph. 135.

FAO. 2003. Fisheries Department. *The ecosystem approach to fisheries*. FAO Technical Guidelines for Responsible Fisheries. No. 4, Suppl. 2. Rome, FAO. 112 p., at 14.

⁶⁷ Ibid. See also Code, articles 2(i), 6.1, 6.2, 6.4, 6.6, 6.8, 7.2., 12.4, 12.5.

Annex

- Bahri T. et al (eds). 2021. Adaptive management of fisheries in response to climate change. FAO Fisheries and Aquaculture Technical Paper No. 667. Rome, FAO. https://doi.org/10.4060/cb3095en
- Barange, M. et al. (eds) 2018. Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation and mitigation options. FAO Fisheries and Aquaculture Technical Paper No. 627. Rome, FAO. 628 pp.
- Brugère, C. and De Young, C. 2020. Addressing fisheries and aquaculture in National Adaptation Plans. Supplement to the UNFCCC NAP Technical Guidelines. Rome, FAO. https://doi.org/10.4060/ca2215en
- Brugère, C., and De Young, C. 2015. Assessing climate change vulnerability in fisheries and aquaculture: Available methodologies and their relevance for the sector. FAO Fisheries and Aquaculture Technical Paper No. 597. Rome, FAO
- Cook, K., Rosenbaum, K. and Poulain, F. 2021. Building resilience to climate change and disaster risks for small-scale fishing communities. A human-rights-based approach to the implementation of Chapter 9 of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. Rome, FAO
- FAO. Fisheries and Aquaculture Division's webpage on climate change available at https://www.fao.org/fishery/en/climatechange.
- FAO. 2022. *The State of World Fisheries and Aquaculture 2022. Towards Blue Transformation*. Rome, FAO. https://doi.org/10.4060/cc0461en
- FAO. 2020. Agriculture and climate change Law and governance in support of climate smart agriculture and international climate change goals. FAO Legislative Studies No. 115. Rome. https://doi.org/10.4060/cb1593en
- FAO. 2016. The State of Food and Agriculture. Climate change, agriculture and food security. Rome, FAO.
- FAO. 2015. *Climate change and food security: risks and responses*, available at https://www.fao.org/3/i5188e/I5188E.pdf
- FAO. 2008. Climate change and food security: a framework document.
- Gutierrez, N.L.et al. 2023. Production and environmental interactions of small-scale fisheries. In: FAO, Duke University & WorldFish. 2023. *Illuminating Hidden Harvests The contributions of small-scale fisheries to sustainable development*. Rome, FAO; Durham, USA, Duke University; Penang, Malaysia, WorldFish.
- Levin, L., Baker, M. and Thompson, A. (eds) 2018. *Deep-ocean climate change impacts on habitat, fish and fisheries*. FAO Fisheries and Aquaculture Technical Paper No. 638. Rome, FAO. 186 pp. https://doi.org/10.4060/ca2528en/1/09.19
- Shelton, C. 2014. *Climate change adaptation in fisheries and aquaculture compilation of initial examples*. FAO Fisheries and Aquaculture Circular No. 1088. Rome, FAO. 34 pp
- Watkiss, P., Ventura, A. and Poulain, F. 2019. *Decision-making and economics of adaptation to climate change in the fisheries and aquaculture sector.* FAO Fisheries and Aquaculture Technical Paper No. 650. Rome, FAO