

Listing of Commercially Exploited Aquatic Species in the CITES Appendices: FAO and SEAFDEC Perspectives

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Aquatic species have been exploited worldwide to support food security and income generation either for commercial or subsistent purposes making a large number of species becoming fully exploited or overexploited, while some are threatened with the risk of being endangered. Several conservation and management measures have been developed either within the exclusive economic zones of coastal States or on the high seas by the respective regional fisheries management organizations (RFMOs) to ensure that the species targeted for fishing activities could be utilized in a sustainable manner. In addition to the efforts to ensure sustainable harvest of the species, it is also envisaged that trading, especially international trade, of the species also contributes to more exploitation of the resources posing risk to their survival. Thus, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was established as an international agreement between governments with the aim to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species. The text of the Convention was agreed upon at a meeting of representatives of 80 countries in March 1973, and in July 1975 the CITES entered into force.

This article portrays the roles of the Food and Agriculture Organization of the United Nations (FAO) in assessing proposals for listing of commercially-exploited aquatic species in the CITES Appendices from a scientific perspective and in accordance with CITES biological listing criteria, and those of the Southeast Asian Fisheries Development Center (SEAFDEC) in providing fora for countries in Southeast Asia to share information, build up relevant technical capacity, and develop common/coordinated positions in response to the proposals.

The international trade in vulnerable aquatic species is regulated once they are listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendices (**Box**). For the species to be listed, the Parties to the Convention have to submit proposals at least 150 days before the meeting of the CITES Conference of the Parties (CoP). Then, listing the species in the CITES Appendices would be adopted by a vote of the two-thirds majority of Parties present at the CoP. Currently, over 38,700 species—including roughly 5,950 species of animals (114 fish species listed in Appendix II) and 32,800 species of plants—are protected by CITES against overexploitation through international trade (CITES, 2023c).

Box. CITES Appendices (CITES, 2023b)

Appendix I

Appendix I lists species that are the most endangered among CITES-listed animals and plants. They are threatened with extinction and CITES prohibits the international trade in specimens of these species except when the purpose of the import is not commercial, for instance for scientific research. In these exceptional cases, trade may take place provided it is authorized by the granting of both an import permit and an export permit (or re-export certificate).

Appendix II

Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled. It also includes so-called “look-alike species” *i.e.* species whose specimens in trade look like those of species listed for conservation reasons. International trade in specimens of Appendix II species may be authorized by the granting of an export permit or re-export certificate. No import permit is necessary for these species under CITES (although a permit is needed in some countries that have taken stricter measures than CITES requires). Permits or certificates should only be granted if the relevant authorities are satisfied that certain conditions are met, above all that trade will not be detrimental to the survival of the species in the wild.

Appendix III

Appendix III is a list of species included at the request of a Party that already regulates trade in the species and that needs the cooperation of other countries to prevent unsustainable or illegal exploitation. International trade in specimens of species listed in this Appendix is allowed only on presentation of the appropriate permits or certificates.

Nevertheless, after nearly half a century of entering into force, the CITES procedures and implementation have posed some challenges in ensuring its effectiveness in better conservation and existence of the species listed in the Appendices due to several reasons. Decisions to list species in CITES do not require, encourage, or even allow for consideration of the impacts of its key decisions. Moreover, decisions to list species in CITES are based only on a set of biological and trade information according to the CITES listing criteria. The decisions of the CITES Parties that resulted in listed species conservation failure without any formal consideration of such consequences were discussed by Cooney *et al.* (2021). Regarding the species listing in Appendix II, the key challenge is the difficulty to show how CITES trade controls will improve the conservation status of such listed species. Once the species was listed under Appendix II, there is limited informational trade information as well as scientific data to be obtained because of the impact listing of such species.

Role of FAO in Listing of CEAS in the CITES Appendices

While the proposals for listing species in CITES Appendices in the past focused mainly on terrestrial flora and fauna, starting from the early 2000s, an increasing number of commercially exploited aquatic species (CEAS) have been proposed for inclusion in CITES Appendices. As of 2022, CITES Appendices include more than 100 CEAS of fishes, mollusks, echinoderms, among others (FAO, 2022). **Table 1** shows the major CEAS included in CITES Appendices since 1975.

Table 1. Major commercially exploited aquatic species listed in CITES Appendices in 1975-2022

CITES CoP and year	Species	CITES Appendix
CoP1 in 1975	Arapaima, <i>Arapaima gigas</i>	Appendix II
CoP4 in 1983	Giant clams, Tridacnidae	Appendix II
CoP7 in 1989	Stony corals, Scleratinia	Appendix II
CoP9 in 1994	Caribbean queen conch, <i>Strombus gigas</i>	Appendix II
CoP10 in 1997	Sturgeons and paddlefish, Acipenseriformes (<i>Acipenser brevirostrum</i> and <i>A. sturio</i> in Appendix I)	Appendix II apart from two species in Appendix I
CoP12 in 2002	Basking shark, <i>Cetorhinus maximus</i>	Appendix II
	Pipefishes and seahorses, <i>Hippocampus</i> spp.	Appendix II
	Whale shark, <i>Rhincodon typus</i>	Appendix II
	Sea cucumber, <i>Isostichopus fuscus</i>	Appendix III
CoP13 in 2004	Humphead (Napoleon) wrasse, <i>Cheilinus undulatus</i>	Appendix II
	Mediterranean date mussel, <i>Lithophaga lithophaga</i>	Appendix II
	Great white shark, <i>Carcharodon carcharias</i>	Appendix II
CoP14 in 2007	European eel, <i>Anguilla anguilla</i>	Appendix II
	Sawfishes, Pristidae	Appendix I
CoP16 in 2013	Scalloped hammerhead shark, <i>Sphyrna lewini</i>	Appendix II
	Great hammerhead shark, <i>Sphyrna mokarran</i>	Appendix II
	Smooth hammerhead shark, <i>Sphyrna zygaena</i>	Appendix II
	Oceanic whitetip shark, <i>Carcharhinus longimanus</i>	Appendix II
	Porbeagle shark, <i>Lamna nasus</i>	Appendix II
	Sawfish, <i>Pristis microdon</i>	Appendix I
	Manta rays, <i>Manta</i> spp.	Appendix II

CITES CoP and year	Species	CITES Appendix
CoP17 in 2016	Silky shark, <i>Carcharhinus falciformis</i>	Appendix II
	Thresher sharks, <i>Alopias</i> spp.	Appendix II
	Devil rays, <i>Mobula</i> spp.	Appendix II
	Clarion angelfish, <i>Holacanthus clarionensis</i>	Appendix II
	Nautilus, Nautilidae spp.	Appendix II
CoP18 in 2019	Mako sharks, <i>Isurus oxyrinchus</i> and <i>Isurus paucus</i>	Appendix II
	Guitarfishes, <i>Glaucostegus</i> spp.	Appendix II
	Wedgefishes, Rhinidae spp.	Appendix II
	Teatfish, <i>Holothuria</i> spp. <i>Holothuria fuscogiva</i> , <i>H. nobilis</i> , and <i>H. whitmaei</i>	Appendix II
CoP19 in 2022	Carcharhinidae spp.	Appendix II
	Hammerhead shark, Sphyrnidae spp.	Appendix II
	Freshwater stingray, <i>Potamotrygon albimaculata</i> , <i>P. henlei</i> , <i>P. jabuti</i> , <i>P. leopoldi</i> , <i>P. marquesi</i> , <i>P. signata</i> , and <i>P. wallacei</i>	Appendix II
	Guitarfish, Rhinobatidae spp.	Appendix II
	Sea cucumber, <i>Thelenota</i> spp.	Appendix II
	Zebra pleco, <i>Hypancistrus zebra</i>	Appendix II

However, as the global and regional approaches for the management of fishery resources are generally based on the best scientific evidence available, it is also of the view that listing CEAS into the CITES Appendices should be also decided from a scientific perspective. CITES, therefore, established formal relationships with the Food and Agriculture Organization (FAO) and relevant RFMOs such as the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Secretariat of the Pacific Regional Environment Programme (SPREP) to strengthen cooperation and collaboration to share information on marine species of common concerns cooperation (CITES, 2023a).

The collaboration between CITES and FAO was initiated in 1997. The Memorandum of Understanding was signed in 2006 for FAO and the CITES Secretariat to work together to ensure adequate consultations in the scientific and technical evaluation of proposals for including, transferring, or removing CEAS in the CITES Appendices. Under the MOU, FAO takes the major role to carry out scientific and technical reviews of such proposals and for the output to be transmitted to the CITES Secretariat in order that the CITES Secretariat would further communicate the results to the CITES Parties (CITES, 2006).



Among the very first commercially-exploited aquatic species listed in the CITES Appendices are giant clams, Tridacnidae in 1983, whale shark, *Rhincodon typus* in 2002, humphead (Napoleon) wrasse, *Cheilinus undulatus* in 2004, and Great white shark, *Carcharodon carcharias* in 2004 (clockwise from top left)

Along this line, the twenty-fifth session of the FAO Committee on Fisheries in 2003 established the FAO Ad Hoc Expert Advisory Panel for Assessment of Proposals to CITES. The terms of reference for the Panel defined the assessment process and composition of the Panel established by the FAO Secretariat in advance of CITES CoP with the main task to assess proposals from a scientific perspective and in accordance with CITES biological listing criteria. The Panel consists of a core group of 10 experts and 10 supplement specialists on the species being considered and aspects of fisheries relevant to the species being proposed to be listed in CITES Appendices. The Panel assesses and provides advice on proposals to amend CITES Appendices I and II concerning CEAS. During the discussion of the Panel, key issues are identified including possible elements of differences in the interpretation of uncertainties regarding the definition of decline and the estimation of the baseline, definition of reduction, types of indicators and alternatives, treatment of data-poor technical information, and flexibility on the evaluation and a precaution approach. Such elements are analyzed together with trade data, extent of the decline of the species, existing management measures, and mitigation considerations.

The criteria used by the Panel include the reliability of information derived from different sources for use as indices of abundance considering the reliability index of population abundance. As shown in **Table 2**, a score of 0 indicates that

Table 2. Criteria used by the FAO Ad Hoc Expert Advisory Panel to assign a measure of the reliability of information derived from different sources for use as indices of abundance (FAO, 2004)

Reliability Index of Population Abundance Information	Source of Data or Information
5	Statistically designed, fishery-independent survey of abundance
4	Consistent and/or standardized catch-per-unit effort data from the fishery
3	Unstandardized catch-per-unit effort data from the fishery; scientifically-designed, structured interviews; well-specified and consistent anecdotal information on major changes from representative samples of stakeholders
2	Catch or trade data without information on effort
1	Confirmed visual observations; anecdotal impressions
0	Information that does not meet any of the above, or equivalent, criteria; flawed analysis or interpretation of trends

the information is considered not reliable, while a score of 5 indicates that it is considered highly reliable. Any information on abundance allocated a non-zero value was considered to be useful. These scores could be adjusted either up or down in any particular case, depending on the length of the time series and the amount of information that was available on the sources and methods (FAO, 2004).

Generally, the assessment process is shown in **Figure**. Through such assessment, comprehensive comments on technical aspects of the proposal in relation to biology, ecology, trade, and management issues for improving their respective species management will be made and reported to CITES by FAO. In parallel, FAO will also obtain additional information on the proposal within a specified timeframe from

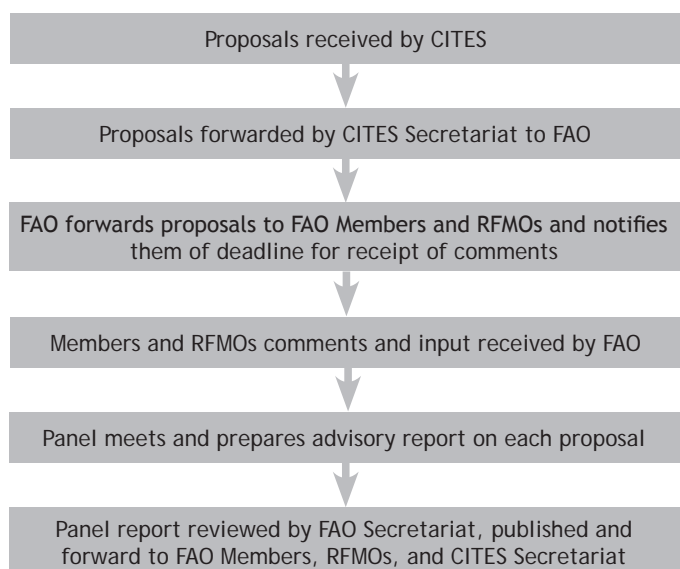


Figure. Assessment process of the FAO Expert Advisory Panel for Assessment of Proposals to CITES

FAO Members, relevant RFMOs, as well as experts who are not a member of the Panel if required. As a result, prior to each CITES CoP, the Panel makes a report based on its assessment and review, providing comprehensive information and advice as appropriate on each listing proposal. Such a report is distributed as soon as it is finalized to all FAO Members and the CITES Secretariat with a request that they distribute it to all CITES Parties.

During the CITES CoP, CITES Parties would be tasked to consider (and where appropriate adopt) proposals to amend the lists of species in Appendices I and II through voting. A debate of each proposal starts with the introduction of the proposal by the Proponent and is followed by the debate among the Parties that support or oppose the proposal with additional inputs from observers. Each Party would then consider, by taking into consideration the information and recommendations from the Panel and/or the International Union for Conservation of Nature (IUCN), potential livelihood concerns and use in national trade and environment, from their respective national information on fish stocks, among others, and make their respective decision. It should be noted that despite the Panel conclusions based on the scientific information available and considering the CITES listing criteria, the decision of CITES on each of the proposals was based on voting by the CITES Parties. The final decision for amendments in Appendices I and II would be adopted by a two-thirds majority of the Parties. Nevertheless, several proposals for CEAS were reviewed by the Panel that do not meet the CITES listing criteria, but the species were supported by the CITES Parties and listed in the CITES Appendices. From its first meeting in 2004 until the seventh meeting in 2022, the EAP reviewed several proposals which are summarized in **Table 3** (FAO, 2004, 2007, 2010, 2013, 2016, 2019, 2022).

Table 3. CITES CoP Proposals reviewed by the FAO Expert Advisory Panel from 2004 to 2022

CITES CoP proposal	Conclusion of the FAO Expert Advisory Panel	CITES CoP decision
CoP13 Proposal 32. Proposal to include <i>Carcharodon carcharias</i> (white shark) in CITES Appendix II, including an annotation that states that a zero annual export quota is established for this species.	Insufficient information to develop an informed opinion about the relative importance of international trade to the conservation of white sharks. (First Meeting in 2004)	Adopted
CoP13 Proposal 33. Proposal to include <i>Cheilinus undulatus</i> (humphead wrasse) in Appendix II in accordance with Article II, paragraph 2(a) of the Convention.	Regulation of trade as a result of CITES listing could make a significant contribution to the conservation problems for this species. Therefore, strengthening regional and national management of the live reef food fish trade and domestic fisheries is necessary to ensure the protection of this species. (First Meeting in 2004)	Adopted
CoP13 Proposal 35. Proposal to include <i>Lithophaga lithophaga</i> (Mediterranean date mussel) in Appendix II.	Could not accurately determine the extent to which the species is exploited throughout its range, although it was clear that destructive fishing practices threaten the species at the local and perhaps national levels in certain parts of the Mediterranean Sea. (First Meeting in 2004)	Adopted
CoP13 Proposal 36. Proposal for an amendment of the annotation for <i>Helioporidae</i> spp., <i>Tubiporidae</i> spp., <i>Scleractinia</i> spp., <i>Milleporidae</i> spp., and <i>Stylasteridae</i> spp.	There could be conservation issues with the export of live rocks (<i>i.e.</i> potential damage to live reefs) but was unable to determine the extent of the potential impact, as this is a complex question on which little information was available. (First Meeting in 2004)	Withdrawn
CoP14 Proposal 15. Proposal to include <i>Lamna nasus</i> (porbeagle shark) on CITES Appendix II in accordance with Article II paragraph 2(a)	Globally, the species did not meet the biological decline criteria for listing in CITES Appendix II. (Second Meeting in 2007)	Rejected

Table 3. CITES CoP Proposals reviewed by the FAO Expert Advisory Panel from 2004 to 2022 (Cont'd)

CITES CoP proposal	Conclusion of the FAO Expert Advisory Panel	CITES CoP decision
CoP14 Proposal 16. Proposal to include <i>Squalus acanthias</i> (spiny dogfish) on CITES Appendix II in accordance with Article II paragraph 2(a)	Globally, the species did not meet the biological criteria for listing in CITES Appendix II. (Second Meeting in 2007)	Rejected
CoP14 Proposal 17. Proposal to include all species of the family Pristidae (sawfishes) in CITES Appendix I in accordance with Article II paragraph 1	The available evidence supported the proposal to include all species of Pristidae in CITES Appendix I in accordance with Article II paragraph 1. (Second Meeting in 2007)	Adopted
CoP14 Proposal 18. Proposal to include <i>Anguilla anguilla</i> (European eel) in CITES Appendix II in accordance with Article II paragraph 2(a)	The available evidence supported the proposal to include <i>Anguilla anguilla</i> (European eel) in CITES Appendix II in accordance with Article II paragraph 2(a). (Second Meeting in 2007)	Adopted
CoP14 Proposal 19. Proposal to include <i>Pterapogon kauderni</i> (Banggai cardinalfish) in CITES Appendix II in accordance with Article II paragraph 2(a)	The proposal did not meet the biological criteria for the Appendix II listing. (Second Meeting in 2007)	Withdrawn
CoP14 Proposal 20. Proposal to include the species of <i>Panulirus argus</i> and <i>P. laevicauda</i> of the Brazilian lobster population in CITES Appendix II in accordance with Article II paragraphs 2(a) and 2(b)	The available evidence did not support the proposal to include the Brazilian populations of <i>Panulirus argus</i> and <i>P. laevicauda</i> in CITES Appendix II. (Second Meeting in 2007)	Withdrawn
CoP14 Proposal 21. Proposal to include all species in the genus <i>Corallium</i> (red/pink corals) in CITES Appendix II in accordance with Article II paragraph 2(a)	The available evidence did not support the proposal to include all species in the genus <i>Corallium</i> in CITES Appendix II in accordance with Article II paragraph 2(a). (Second Meeting in 2007)	Rejected
CoP15 Proposal 15. Proposal to include <i>Sphyrna lewini</i> (scalloped hammerhead) in CITES Appendix II in accordance with Article II paragraph 2(a), and to include <i>S. mokarran</i> (great hammerhead), <i>S. zygaena</i> (smooth hammerhead), <i>Carcharhinus plumbeus</i> (sandbar shark), and <i>C. obscurus</i> (dusky shark) in CITES Appendix II in accordance with Article II paragraph 2(b)	The available evidence supported the proposal to include scalloped hammerhead (<i>S. lewini</i>) in CITES Appendix II in accordance with Article II paragraph 2(a), along with the look-alike species, great hammerhead shark (<i>S. mokarran</i>) and smooth hammerhead shark (<i>S. zygaena</i>), in accordance with Article II paragraph 2(b). However, there was insufficient evidence to also include sandbar shark (<i>Carcharhinus plumbeus</i>) and dusky shark (<i>C. obscurus</i>) in accordance with Article II paragraph 2(b) due to inadequate evidence relating to "look-alike" considerations. (Third Meeting in 2009)	Rejected
CoP15 Proposal 16. Proposal to include <i>Carcharhinus longimanus</i> (oceanic whitetip shark) in CITES Appendix II in accordance with Article II paragraph 2(a)	The available evidence supported the proposal to include <i>C. longimanus</i> (oceanic whitetip shark) in CITES Appendix II. (Third Meeting in 2009)	Rejected
CoP15 Proposal 17. Proposal to include <i>Lamna nasus</i> (porbeagle shark) in CITES Appendix II in accordance with Article II paragraphs 2(a) and 2(b)	The available evidence supported the proposal to include <i>L. nasus</i> (porbeagle shark) in CITES Appendix II. (Third Meeting in 2009)	Rejected
CoP15 Proposal 18. Proposal to include <i>Squalus acanthias</i> (spiny dogfish) in Appendix II in accordance with Article II paragraphs 2(a) and 2(b)	The available evidence did not support the proposal to include <i>S. acanthias</i> (spiny dogfish) in CITES Appendix II. (Third Meeting in 2009)	Rejected
CoP15 Proposal 19. Proposal to include <i>Thunnus thynnus</i> (Atlantic bluefin tuna) in CITES Appendix I in accordance with Article II paragraph 1	The available evidence supported the proposal to include <i>Thunnus thynnus</i> (Atlantic bluefin tuna) in CITES Appendix I. (Third Meeting in 2009)	Rejected
CoP15 Proposal 21. Proposal to include all species in the family Coralliidae (red and pink corals) in CITES Appendix II in accordance with Article II paragraphs 2(a) and 2(b)	The available evidence did not support the proposal to include all species in the family Coralliidae (<i>Corallium</i> spp. and <i>Paracorallium</i> spp.) in CITES Appendix II. (Third Meeting in 2009)	Rejected
CoP16 Proposal 42. Proposal to include <i>Carcharhinus longimanus</i> (oceanic whitetip shark) in CITES Appendix II in accordance with Article II paragraph 2(a)	Met the biological criteria for listing in CITES Appendix II. (Fourth Meeting in 2012)	Adopted

Table 3. CITES CoP Proposals reviewed by the FAO Expert Advisory Panel from 2004 to 2022 (Cont'd)

CITES CoP proposal	Conclusion of the FAO Expert Advisory Panel	CITES CoP decision
CoP16 Proposal 43. Inclusion of <i>Sphyrna lewini</i> in CITES Appendix II in accordance with Article II 2(a) and inclusion of <i>S. mokarran</i> and <i>S. zygaena</i> in Appendix II in accordance with Article II paragraph 2(b)	The available evidence on scalloped hammerhead (<i>Sphyrna lewini</i>) met the biological criteria for listing in CITES Appendix II. The other two proposed species, great hammerhead shark (<i>S. mokarran</i>) and smooth hammerhead shark (<i>S. zygaena</i>) fulfill the criteria for inclusion under CITES Appendix II stipulated in Article II paragraph 2b ("look-alike clause"). (Fourth Meeting in 2012)	Adopted
CoP16 Proposal 44. Inclusion of <i>Lamna nasus</i> in CITES Appendix II in accordance with Article II paragraph 2(a)	The species met the decline criteria for Appendix II. (Fourth Meeting in 2012)	Adopted
CoP16 Proposal 45. Transfer of <i>Pristis microdon</i> from CITES Appendix II to Appendix I in accordance with Article II paragraph 1	The evidence met the biological criteria for CITES Appendix I listing. (Fourth Meeting in 2012)	Adopted
CoP16 Proposal 46. Inclusion of the genus <i>Manta</i> in CITES Appendix II in accordance with Article II paragraph 2(a)	Both species are pan-oceanic in distribution and did not qualify under the distribution criterion. (Fourth Meeting in 2012)	Adopted
CoP16 Proposal 47. Inclusion of the ceja river stingray (<i>Paratrygon aiereba</i>) in CITES Appendix II in accordance with Article II paragraph 2(a)	The species was widely distributed, did not meet the restricted area criterion, and the populations were not believed to meet the criterion of a small population. (Fourth Meeting in 2012)	Rejected
CoP16 Proposal 48. Inclusion of freshwater stingrays <i>Potamotrygon motoro</i> and <i>P. schroederi</i> in CITES Appendix II in accordance with Article II paragraph 2(a)	There was insufficient information to show that the species met the criteria for inclusion in CITES Appendix II, and it was suggested that it would be more useful to strengthen management measures at the country level. (Fourth Meeting in 2012)	Rejected
CoP17 Proposal 42. Proposal to include silky shark (<i>Carcharhinus falciformis</i>) in CITES Appendix II in accordance with Article II paragraph 2(a)	Evidence of decline in abundance was reported for Colombia, but not to the extent required for consideration in Appendix II. (Fifth Meeting in 2016)	Adopted
CoP17 Proposal 43. Proposal to include bigeye thresher shark (<i>Alopias superciliosus</i>) in CITES Appendix II in accordance with Article II paragraph 2(a). If listed, this would include all other species of thresher sharks (<i>Alopias</i> spp.) in CITES Appendix II in accordance with Article II paragraph 2(b)	There was no reliable evidence of a decline in bigeye thresher that would meet CITES Appendix II listing criteria. (Fifth Meeting in 2016)	Adopted
CoP17 Proposal 44. Proposal to include sicklefin devil ray (<i>Mobula tarapacana</i>) and spintail devil ray (<i>M. japonica</i>) in CITES Appendix II in accordance with Article II paragraph 2(a). If listed, this would include all other species of mobula rays (<i>Mobula</i> spp.) in CITES Appendix II in accordance with Article II paragraph 2(b)	No global population estimates were available and there was little known about their stock structure. These species were considered to have low productivity; and based on the best available evidence, the data on decline met the CITES Appendix II listing criteria. (Fifth Meeting in 2016)	Adopted
CoP17 Proposal 45. Proposal to include Raya (<i>Potamotrygon motoro</i>) in CITES Appendix II in accordance with Article II paragraph 2(a)	Raya did not meet the CITES Appendix II criteria, but noted that CITES Parties have previously recommended range States consider including Raya in CITES Appendix III. (Fifth Meeting in 2016)	Withdrawn
CoP17 Proposal 46. Proposal to include the Banggai cardinalfish (<i>Pterapogon kauderni</i>) in CITES Appendix II in accordance with Article II paragraph 2(a)	The local extinction at five sites across the Banggai archipelago, with a further seven sites where the decline in abundance met the criteria for listing in CITES Appendix II. (Fifth Meeting in 2016)	Withdrawn
CoP17 Proposal 47. Proposal to include clarion angelfish (<i>Holacanthus clarionensis</i>) in CITES Appendix II in accordance with Article II paragraph 2(a)	No decline in the overall population was demonstrated and did not meet the criteria for CITES Appendix II listing. (Fifth Meeting in 2016)	Adopted
CoP17 Proposal 48. Proposal to include family Nautilidae in CITES Appendix II in accordance with Article II paragraph 2(a)	Met the CITES Appendix II listing criteria. (Fifth Meeting in 2016)	Adopted

Table 3. CITES CoP Proposals reviewed by the FAO Expert Advisory Panel from 2004 to 2022 (Cont'd)

CITES CoP proposal	Conclusion of the FAO Expert Advisory Panel	CITES CoP decision
CoP18 Proposal 42. Proposal to include the mako shark (<i>Isurus oxyrinchus</i>) in CITES Appendix II in accordance with Article II paragraph 2(a) and <i>I. paucus</i> in CITES Appendix II in accordance with Article II paragraph 2(b)	The available data did not provide evidence that the species met the CITES Appendix II listing criteria. (Sixth Meeting in 2019)	Adopted
CoP18 Proposal 43. Proposal to include blackchin guitarfish (<i>Glaucostegus cemiculus</i>) and sharpnose guitarfish, (<i>G. granulatus</i>) in CITES Appendix II in accordance with Article II paragraph 2(a) and inclusion of all other giant guitarfish (<i>Glaucostegus</i> spp.) in accordance with Article II paragraph 2(b)	There was insufficient evidence to decide in relation to CITES criteria, recommending that CITES Parties take note of the one example of extirpation, the widespread lack of management, and the very high value of guitarfish fins in international trade. (Sixth Meeting in 2019)	Adopted
CoP18 Proposal 44. Proposal to include white-spotted wedgefish (<i>Rhynchobatus australiae</i>) and <i>R. djiddensis</i> in CITES Appendix II in accordance with Article II paragraph 2(a). If listed, this would include <i>R. cooki</i> , <i>R. immaculatus</i> , <i>R. laevis</i> , <i>R. luebberti</i> , <i>R. palpebratus</i> , <i>R. springeri</i> , <i>Rhynchorhina mauritaniensis</i> , <i>Rhina ancylostoma</i> , and all other putative species of family Rhinidae (wedgefish) in CITES Appendix II in accordance with Article II paragraph 2(b)	There was insufficient evidence to make a decision in relation to CITES criteria, recommending that CITES Parties take note of the widespread lack of management and the very high value of wedgefish fins in international trade. (Sixth Meeting in 2019)	Adopted
CoP18 Proposal 45. Proposal to include the subgenus <i>Holothuria</i> (Microthele): <i>H. fuscogilva</i> , <i>H. nobilis</i> , and <i>H. whitmaei</i> in CITES Appendix II in accordance with Article II paragraph 2(a)	The available data for <i>H. fuscogilva</i> did not meet the CITES Appendix II listing criteria. There was insufficient evidence to determine <i>H. nobilis</i> , but <i>H. whitmaei</i> did meet the CITES Appendix II listing criteria. (Sixth Meeting in 2019)	Adopted
CoP19 Proposal 37. Proposal to include 19 shark species in family Carcharhinidae in CITES Appendix II in accordance with Article II, paragraph 2(a) and satisfying criteria A and B in Annex 2a of CITES Resolution Conf. 9.24 (Rev. CoP17). This proposal included 35 to 40 species as "look-alikes".	Did not meet the CITES criteria as a single proposal. Three species met the CITES Appendix II listing criteria, <i>i.e.</i> grey reef shark (<i>Carcharhinus amblyrhynchos</i>), smalltail shark (<i>C. porosus</i>), and Ganges shark (<i>Glyphis gangeticus</i>). Twelve species did not meet the CITES Appendix II listing criteria, <i>i.e.</i> Borneo shark (<i>C. borneensis</i>), Pacific smalltail shark (<i>C. cerdale</i>), Pondicherry shark (<i>C. hemiodon</i>), lost shark (<i>C. obsoletus</i>), Caribbean reef shark (<i>C. perezii</i>), night shark (<i>C. signatus</i>), daggernose shark (<i>Isogomphodon oxyrinchus</i>), Borneo broadfin shark (<i>Lamiopsis tephrodes</i>), whitenose shark (<i>Nasolamia velox</i>), whitecheek shark (<i>C. dussumieri</i>), dusky shark (<i>C. obscurus</i>), and sandbar shark (<i>C. plumbeus</i>). Other four species had insufficient data to decide, <i>i.e.</i> blacknose shark (<i>C. acronotus</i>), smoothtooth blacktip shark (<i>C. leiodon</i>), broadfin shark (<i>Lamiopsis temmincki</i>), and sharptooth lemon shark (<i>Negaprion acutidens</i>). Separate proposals should be considered for the assessed species to meet the CITES Appendix II listing criteria. (Seventh Meeting in 2022)	Adopted
CoP19 Proposal 38. Proposal to include <i>Sphyrna tiburo</i> in CITES Appendix II in accordance with Article II, paragraph 2(a) and satisfying criteria A and B in Annex 2a, and all remaining species in the family Sphyrnidae as "look-alikes"	Met the criteria (Seventh Meeting in 2022)	Adopted
CoP19 Proposal 39. Proposal to include <i>Potamotrygon wallacei</i> and <i>P. leopoldi</i> in CITES Appendix II in accordance with Article II and satisfying criteria A and B in Annex 2a of CITES Resolution Conf. 9.24 (Rev. CoP17), and to include <i>P. henlei</i> , <i>P. albimaculata</i> , <i>P. jabuti</i> , <i>P. marquesi</i> , and <i>P. signata</i> as "look-alikes".	<i>P. wallacei</i> met the criteria, while <i>P. leopoldi</i> did not meet the criteria (Seventh Meeting in 2022)	Adopted

Table 3. CITES CoP Proposals reviewed by the FAO Expert Advisory Panel from 2004 to 2022 (Cont'd)

CITES CoP proposal	Conclusion of the FAO Expert Advisory Panel	CITES CoP decision
CoP19 Proposal 40. Proposal to include six species of guitarfish (<i>Acroteriobatus variegatus</i> ; <i>Pseudobatos horkelii</i> ; <i>Rhinobatos albomaculatus</i> ; <i>R. irvinei</i> ; <i>R. rhinobatos</i> ; and <i>R. schlegelii</i>) in CITES Appendix II in accordance with Article II paragraph 2(a) and satisfying criteria A and B in Annex 2a of CITES Resolution Conf. 9.24 (Rev. CoP17). In addition, to add 37 species as "look-alikes".	Did not meet the criteria (Seventh Meeting in 2022)	Adopted
CoP19 Proposal 41. Proposal to include <i>Hypnancistrus zebra</i> in CITES Appendix I in accordance with Article II paragraph 1, and by meeting Annex 1 B (iii; iv) and Annex 1 C (i; ii) of CITES Resolution Conf. 9.24 (Rev. CoP17). No "look-alikes"	Did not meet the criteria (Seventh Meeting in 2022)	Adopted to be listed in Appendix II
CoP19 Proposal 42. Proposal to include three species belonging to the genus <i>Thelenota</i> in CITES Appendix II in accordance with Article II paragraph 2(a) qualifying for criteria A and B in Annex 2a of CITES Resolution Conf. 9.24 (Rev. CoP17). No "look-alikes"	Did not meet the criteria (Seventh Meeting in 2022)	Adopted

Role of SEAFDEC in Relation to CITES Issues

SEAFDEC has been playing an active role in supporting the ASEAN Member States (AMSs) to achieve Sustainable Development Goals (SDGs), particularly SDG14: Life below Water to conserve and sustainably use the oceans, seas and marine resources; and in enhancing the awareness and capacity of the AMSs in addressing requirements as stipulated in other international instruments such as the FAO Code of Conduct for Responsible Fisheries, as well as in addressing trade-related issues. Furthermore, the AMSs need to cooperate and develop common positions in the international fish trade-related fora which was reflected in the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030), *i.e.* Plan of Action no. 82 "Strengthen cooperation and mechanisms among AMSs to work towards common positions that could be reflected in international fish trade related fora, *e.g.* World Trade Organization (WTO), Food and Agriculture Organization of the United Nations (FAO)/COFI Sub-committee on Fish Trade, Office International des Epizooties (OIE), Codex Alimentarius Commission (CAC), and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)."

Since the early 2000s, SEAFDEC started implementing its programs and projects to enhance the capacity of the countries in Southeast Asia in data collection of aquatic species under international concerns, such as marine turtles, sharks and rays, sea cucumbers, tunas, anguillid eels, and others focusing on species identification, collection of data on catch/landings, stock assessment, socioeconomic assessment, development of



A number of elasmobranch species including sharks and rays had been proposed for listing in the CITES Appendices starting from early 2000s, while SEAFDEC is undertaking several studies to collect data on the species up to the present

Table 4. SEAFDEC programs and projects on aquatic species under international concern

Year	Project	Funding
1999-2004	Fish Trade and Environment	JTF
1999-2004	Sea Turtle Hatchery Management Studies	JTF
1999-2004	Sea Turtle Tagging Survey	JTF
2003-2006	Management of Fisheries and Utilization of Sharks and Research on Sea cucumbers in Southeast Asia	JTF
2003-2006	Survey of Shark Utilization in Southeast Asia - DNA analysis of Shark	JTF
2004-2009	Stock Enhancement for Threatened Species of International Concern	JTF
2004-2009	Research for Stock Enhancement of Sea Turtles	JTF
2005-2022	Assistance for Capacity Building in the Region to Address International Trade-related Issues	JTF
2008-2011	Cetacean Research in Southeast Asian Waters: Cetacean Sighting Program	JTF
2010-2014	Resource Enhancement of International Threatened and Over-exploited Species in Southeast Asia through Stock Release	JTF
2010-2014	Research and Management of Sea Turtles in Foraging Habitats in the Southeast Asia Waters	JTF
2013-2014	Research and Management of Sharks and Rays in the Southeast Asian Waters	JTF
2015-2024	Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region	JTF
2015-2019	Enhancement of Sustainability of Catadromous Eel Resources in Southeast Asia	JTF
2017-2019	Enhancing Sustainable Utilization and Management Scheme of Tropical Anguillid Eel Resources in Southeast Asia	JAIF
2018-2019	SEAFDEC-EU/CITES Sharks Project Phase II	EU through CITES Secretariat
2020-2022	Development of Stock Assessment Method and Strengthening of Resources Management Measures on Tropical Anguillid Eels in ASEAN Region	JAIF
2020-2024	Sustainable Utilization of Anguillid Eels in the Southeast Asian Region	JTF

Japanese Trust Fund (JTF)
Japan-ASEAN Integration Fund (JAIF)

non-detriment findings, aquaculture, and stock enhancement of the species (**Table 4**). Such efforts are envisaged to enhance the capacity of the respective countries in data collection on several species under international concerns, including vulnerable species that may be subject to CITES. In addition, information on the existing conservation and management measures undertaken by the countries that could serve as the

basis for discussion during the CITES CoP was also compiled by SEAFDEC.

Moreover, as instructed by the SEAFDEC Council, SEAFDEC also provided the regional forums with funding support from the Japanese Trust Fund (JTF) under the project “Assistance for Capacity Development in the Region to Address International Fisheries-related Issues” for the ASEAN-SEAFDEC Member Countries on the proposed listing of CEAS into the CITES Appendices to share available information on the species proposed for CITES CoP and discuss the possibility of developing common or coordinated positions based on scientific evidence to help the fisheries and CITES authorities of the respective countries in raising their voices during the CITES CoP meetings. The common/coordinated positions of ASEAN-SEAFDEC Member Countries were submitted for endorsement by the SEAFDEC Council and subsequently by the ASEAN Sectoral Working Group on Fisheries (ASWGF), and finally endorsed by the Senior Officials Meeting of the ASEAN Ministers on Agriculture and Forestry (SOM-AMAF). The list of regional platforms organized by SEAFDEC is shown in **Table 5**.

As for the CITES CoP19 on 14–25 November 2022 in Panama City, Panama, 52 proposals for animals and plants including CEAS were discussed. In preparation for the CoP19,



SEAFDEC exhibition booth at the CITES CoP13 in Bangkok, Thailand in 2004 showing projects on data collection on sharks proposed for listing into the CITES Appendices

Table 5. Regional platforms provided by SEAFDEC for the development of common/coordinated positions of the ASEAN-SEAFDEC Member Countries on CITES CoP proposals

Date and venue	Regional platforms provided by SEAFDEC	CITES CoP
22 January 2013, Bangkok, Thailand	Regional Consultation on the ASEAN-SEAFDEC Common Positions for the Commercially-exploited Aquatic Species	CoP16
19-20 May 2016, Bangkok, Thailand	Regional Consultation for Development of the ASEAN-SEAFDEC Common Position on the Proposed listing of CEAS into the CITES Appendices	CoP17
30-31 January 2019, Bangkok, Thailand	Regional Consultation for Development of the ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices	CoP18
30 August -1 September 2022, Bangkok, Thailand	Regional Technical Consultation on Development of the ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices	CoP19



Participants of the 2022 “Regional Technical Consultation on Development of the ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices”

SEAFDEC with funding support from the JTF convened the “Regional Technical Consultation (RTC) on Development of the ASEAN-SEAFDEC Common Positions on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices” on 30 August–1 September 2022 in Bangkok, Thailand. The RTC aimed to discuss the technical information on the CEAS proposed for listing in the CITES Appendices as well as develop the ASEAN-SEAFDEC common position on the proposed listing of CEAS in the CITES Appendices. During the RTC, the assessment and views on the six CEAS from the 7th Meeting of Expert Advisory Panel of FAO organized in July 2022 were shared by one of the members of the FAO EAP. **Table 6** summarizes the outcomes of the RTC (SEAFDEC, 2022).

During CoP19, SEAFDEC convened the side event “Resource Utilization of Commercially-exploited Aquatic Species (CEAS) in Southeast Asia: Regional Cooperation to Support National Actions” on 18 November 2022. With support from the Japanese Trust Fund, the side event was intended to share the experiences of SEAFDEC including regional initiatives and lessons learned in supporting the ASEAN-SEAFDEC Member Countries through the implementation of capacity-building programs on the identification of sharks and rays and conduct of the study on the market and trade of sharks including the major actors, market channels, practices, and utilization, to



CITES CoP19 on 14-25 November 2022 in Panama City, Panama (*above*) and the side event organized by SEAFDEC (*below*) to disseminate information on SEAFDEC works on aquatic species under international concern

Table 6. Outcomes of the 2022 Regional Technical Consultation on Development of the ASEAN-SEAFDEC Common Positions on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices

CITES CoP19 Proposal	Technical information on the proposed species	Impacts of listing in Appendices I and II	ASEAN-SEAFDEC Position
<p>Proposal 37. Inclusion of the grey reef shark (<i>Carcharhinus amblyrhynchos</i>), dusky shark (<i>C. obscurus</i>), smalltail shark (<i>C. porosus</i>), Ganges shark (<i>Glyphis gangeticus</i>), sandbar shark (<i>C. plumbeus</i>), Borneo shark (<i>C. borneensis</i>), Pondicherry shark (<i>C. hemiodon</i>), smoothtooth blacktip shark (<i>C. leiodon</i>), sharptooth lemon shark (<i>Negaprion acutidens</i>), Caribbean reef shark (<i>C. perezii</i>), daggernose shark (<i>Isogomphodon oxyrhynchus</i>), night shark (<i>C. signatus</i>), whitenose shark (<i>Nasolamia velox</i>), blacknose shark (<i>C. acronotus</i>), whitecheek shark (<i>C. dussumieri</i>), lost shark (<i>C. obsoletus</i>), Pacific smalltail shark (<i>C. cerdale</i>), Borneo broadfin shark (<i>Lamiopsis tephrodes</i>) and the broadfin shark (<i>Lamiopsis temminckii</i>) in CITES Appendix II in accordance with Article II paragraph 2(a) and satisfying Criterion A and B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).</p> <p>Inclusion of all other species in the family Carcharhinidae (requiem sharks): Genus <i>Carcharhinus</i>, Genus <i>Isogomphodon</i>, Genus <i>Loxodon</i>, Genus <i>Nasolamia</i>, Genus <i>Lamiopsis</i>, Genus <i>Negaprion</i>, Genus <i>Prionace</i>, Genus <i>Rhizoprionodon</i>, Genus <i>Scoliodon</i>, Genus <i>Triaenodon</i> and any other putative species of family Carcharhinidae in CITES Appendix II in accordance with Article II paragraph 2(b) and satisfying Criterion A in Annex 2b of Resolution Conf. 9.24 (Rev. CoP17).</p>	<ul style="list-style-type: none"> - Approximately 39 species under family Carcharhinidae are found in the region. The species are mostly bycatch from commercial or artisanal fisheries, and are fully utilized. - Nineteen (19) species of family Carcharhinidae have a range of distinctly different sizes, morphological appearances, productivity, fishery, and trade profiles, thus, making evaluation as a group difficult. - The most traded species in the region are “look-alike.” Many species can be differentiable from one another, although some look very similar. In certain cases, it is difficult to quickly identify commodities to species level, but there are marked differences in the trade profiles of these species, and for traders, the commodities can be differentiated. - Identification to species level is more difficult in the case of meat, cartilage, skin, and oil products. 	<ul style="list-style-type: none"> - Two species, <i>i.e.</i> <i>C. longimanus</i> and <i>C. falciformis</i>, are already in CITES Appendix II. It is anticipated that the listing of all remaining species under family Carcharhinidae including look-alike species would create difficulty in the implementation and management, and would require a lot of resource investment, <i>e.g.</i> capacity building on species identification, inspection of specimens, development of non-detriment finding (NDF) documents, etc. 	<p>No common position not to support the Proposal</p>
<p>Proposal 38. Inclusion of <i>Sphyrna tiburo</i>, commonly referred to as the bonnethead shark, in CITES Appendix II in accordance with Article II paragraph 2(a) and satisfying Criterion A and B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).</p> <p>Inclusion of all remaining species in the family Sphyrnidae (hammerhead sharks) which are not already listed in CITES Appendix II, including: <i>S. media</i>, <i>S. tudes</i>, <i>S. corona</i>, <i>S. gilberti</i>, and <i>Eusphyrna blochii</i>, as well as any other yet to be identified species of the Family Sphyrnidae, in CITES Appendix II in accordance with Article II paragraph 2(b) and satisfying Criterion A in Annex 2b of Resolution Conf. 9.24 (Rev. CoP17)</p>	<ul style="list-style-type: none"> - <i>Sphyrna</i> spp. are caught as bycatch from inshore and offshore areas in Southeast Asian countries and utilized for livelihood and food security. 	<ul style="list-style-type: none"> - Although <i>S. tiburo</i> is not found in the Southeast Asian region, it is anticipated that the inclusion of all species in the family as “look-alike” species would impact the export of other shark commodities from the region. - It is anticipated that the listing of species in the CITES Appendix II would result in not reporting and recording of catch and trade of the species creating difficulty and burden for authorities to collect scientific data to support the management of the species. 	<p>No common position to support the Proposal</p>
<p>Proposal 39. Inclusion of <i>Potamotrygon wallacei</i> and <i>P. leopoldi</i> in CITES Appendix II in accordance with Article II and satisfying criteria A and B in Annex 2a of CITES Resolution Conf. 9.24 (Rev. CoP17)</p> <p>Inclusion of look-alike endemic freshwater stingray species that are on the ornamental fish trade legally as <i>P. henlei</i> and illegally as <i>P. albimaculata</i>, <i>P. jabuti</i> from the black stingray group. The illegally exported species such as <i>P. marquesi</i> and <i>P. signata</i> of the brown stingray group such as <i>P. wallacei</i> in accordance with Criteria A of Annex 2b (Conf. 9.24, Rev. CoP17).</p>	<ul style="list-style-type: none"> - No species of family Potamotrygonidae occurs in the natural habitats of the Southeast Asian region. - Potamotrygons are cultured for ornamental purposes (mostly as hybrids) and traded by countries in the region, <i>e.g.</i> Malaysia and Thailand. Breeders that were generally domesticated and imported from other countries were not sourced from the wild. Countries trading (importing/exporting) the species are applying regulations for traders to obtain permits from fisheries authorities. 	<p>It is anticipated that the listing of the species in the CITES Appendix II would pose hurdles in the trade of aquaculture-bred and reared stingrays, <i>e.g.</i> documentation requirements to certify facilities and sources of breeders, packaging requirements, export checks of live product in transit, which could impact the growth of the industry. In addition, the breeding facilities are developing market-favored hybrids species that are difficult to identify/record.</p>	<p>No common position not to support the Proposal</p>

Table 6. Outcomes of the 2022 Regional Technical Consultation on Development of the ASEAN-SEAFDEC Common Positions on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices (*Cont'd*)

CITES CoP19 Proposal	Technical information on the proposed species	Impacts of listing in Appendices I and II	ASEAN-SEAFDEC Position
	<p>(<i>Cont'd</i>)</p> <ul style="list-style-type: none"> - Trade of wild-caught stingrays has been regulated in Brazil since 1998, including the exported number of each species and number per species plus the maximum size that were in place since 2003. In addition, all Potamotrygons in this proposal have already been listed in CITES Appendix III since January 2017. - Production of Potamotrygonins in the aquaculture sector is a positive practice as it removes pressure on the wild stock. 		
<p>Proposal 40. Inclusion of the six species of guitarfish (<i>Acroteriobatus variegatus</i>, <i>Pseudobatos horkelii</i>, <i>Rhinobatos albomaculatus</i>, <i>R. irvinei</i>, <i>R. rhinobatos</i>, and <i>R. schlegelii</i>) in CITES Appendix II in accordance with Article II, paragraph 2(a) and satisfying criteria A and B in Annex 2a of CITES Resolution Conf. 9.24 (Rev. CoP17). In addition, add another 37 species as “look-alikes” to the list</p>	<ul style="list-style-type: none"> - At least seven species of guitarfish (family Rhinobatidae) are commonly found in the Southeast Asian region. The small-sized guitarfish species are caught as bycatch mainly from inshore areas and utilized for livelihood and food security. - Large-sized guitarfish species are already listed in the CITES Appendix II. This proposal will add small-sized species that are primarily utilized as food as well as commodities that have lower export value. - Different species under the same family are difficult to identify/differentiate, especially by parts and in product forms and derivatives. - The international trade information on these species is limited. 	<p>It is anticipated that the listing of species in CITES Appendix II would result in not reporting and recording of catch and trade of the species creating difficulty and burden for authorities to collect scientific data to support the management of the species.</p>	<p>No common position not to support the Proposal</p>
<p>Proposal 42. Inclusion of all species in the genus <i>Thelebona</i> which includes the three species <i>T. ananas</i>, <i>T. anax</i>, and <i>T. rubralineata</i> in CITES Appendix II in accordance with Article II paragraph 2(a)</p>	<ul style="list-style-type: none"> - <i>Thelebona ananas</i> and <i>T. anax</i> are harvested by countries in the Southeast Asian region and traded both domestically and internationally; while <i>T. rubralineata</i> is rare in natural habitats and not considered a traded species. However, <i>Thelebona</i> spp. is considered a low-value species compared to other market-preferred sea cucumber species, e.g. <i>Holothuria</i> spp. - Identification/differentiation of <i>Thelebona</i> species in live and dried form is relatively simple; however, countries, e.g. Malaysia is also producing sea cucumber oil (minyak gamat) from other sea cucumber species, which is harder to identify to species level. - As a result of the long debate, CITES Commission I in CoP16 agreed that sea cucumbers should be managed by the respective countries rather than CITES regulations. 	<p>It is anticipated that the listing of species in CITES Appendix II would create difficulties to trade concerning identification of species as raw materials for products such as sea cucumber oil and balm.</p>	<p>No common position not to support the Proposal</p>

Table 6. Outcomes of the 2022 Regional Technical Consultation on Development of the ASEAN-SEAFDEC Common Positions on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices (*Cont'd*)

CITES CoP19 Proposal	Technical information on the proposed species	Impacts of listing in Appendices I and II	ASEAN-SEAFDEC Position
<p>Proposal 41. Inclusion of <i>Hypancistrus zebra</i> in CITES Appendix I in accordance with Article II, paragraph 1 and satisfying criterion in Annex 1 B (iii; iv) and Annex 1 C (i; ii) of CITES Resolution Conf. 9.24 (Rev. CoP17).</p>	<ul style="list-style-type: none"> - The habitat of this species in Brazil is negatively affected by a hydroelectric dam. - Brazil has issued several national legal instruments including banning of collection, transportation, and exportation of the species since 2005, and listed the species in CITES Appendix III since 2017. - The species produced from ornamental fish farms are being traded in some AMSs, e.g. Malaysia and Thailand. Listing of the species in CITES Appendix I would mean that trade in the species (including from captive breeding of ornamental fish farms) would be also prohibited which will result in the loss of sustainable production and livelihoods in the ornamental aquaculture sector. - Production of zebra catfish in the aquaculture sector is a positive practice as it removes pressure on the wild stock. 	<p>It is anticipated that the listing of the species in CITES Appendix I would make trading in the species produced from captive breeding no longer possible.</p>	<p>No common position not to support the Proposal</p>

support sustainable development and management of shark and ray resources in the Southeast Asian region. Moreover, the common positions of the ASEAN-SEAFDEC Member Countries on the proposed listing of commercially-exploited aquatic species into the CITES Appendices at the CoP19 were also shared during the side event.

Trading of CEAS listed in CITES Appendix I is generally not possible except for purposes such as scientific research and requires both import and export permits. While listing the CEAS in CITES Appendix II, although possible for a commercial purpose, could result in complications due to various reasons. From the RTC organized by SEAFDEC, the anticipated issues are summarized as follows:

- When the species is listed in CITES Appendices, the countries harvesting the species would amend the national legislation to regulate not only trading but also catching of the species. With such regulations, catching and trading of the species is prohibited. The catching and trading may continue as most of the catches are bycatch, but could neither be declared nor recorded, making data for such species unavailable and it becomes difficult to obtain information on the status of the species in the future, unless through research.
- In proposing the species to be listed in CITES Appendix II, the proposed species may not only comprise those that are threatened with extinction but also include “look-alike species,” whose traded specimens look like those of species listed for conservation reasons. Although the specimens must have an export permit or re-export

certificate, identification of the species by looking at the specimens could be difficult, especially if the specimens are not the whole body of the species, but only as meat, fin, oil, bone, etc. requiring appropriate methods for species identification.

- Trading of species listed in CITES Appendix II requires documents to certify that trade will not be detrimental to the survival of the species in the wild (non-detriment findings or NDF) granted by the State’s scientific authority. Nevertheless, the issuance of NDF documents also requires scientific data that may not be available if the State prohibited catching and trading or did not conduct scientific research on the species.
- Stringent regulation in harvesting and trading of CITES-listed species could create an adverse impact on the income and livelihood of small-scale fishers and fishing communities catching the species as bycatch without any positive consequences on their population.

Way Forward

In order to ensure that the scientific information would be used in the future discussion and decision of the CITES CoP, it was recommended that the countries that are Parties to CITES need to increase the involvement not only by CITES authority but also by fisheries authority when conducting any consultations in relation to species that are subject to CITES discussion. There is also a need for countries to collect scientific data and information on the species subject to discussion at the CITES CoP. This is to ensure that the fisheries perspective as well as the scientific information available is appropriately



Several species listed under CITES Appendices are traded in various product forms as well as in parts making species identification of traded specimens difficult

considered when developing the country's positions to be reflected at the CITES CoP. SEAFDEC and the relevant fora of ASEAN, *i.e.* ASEAN Working Group on CITES and Wildlife Enforcement (AWG CITES & WE), could serve as regional fora to facilitate sharing of information as well as developing common/coordinated positions among countries to be reflected at the CITES CoP.

As for the CEAS listed under the CITES Appendices, especially Appendix II, considering that in many countries, harvesting and trading of such species may be prohibited by their national legal framework resulting in discontinued data collection on catch and landing of the species; thus, scientific data collection program should be considered to obtain information on the status and trends of the species. Capacity building in terms of species identification and scientific data collection is also necessary to support the data collection program as well as in providing necessary data to support the development of non-detriment finding documents by the scientific authority of the respective countries to enable the trade of the species. Moreover, methodologies and capacity building on species identification of traded specimens is also necessary especially for customs officers to ensure that trade of the species listed in CITES Appendices is regulated in accordance with the CITES Provisions. However, it should be also recognized that the listing of species in CITES Appendices may pose more risk of illegal trade of the specimens that could not be regulated, and measures should be established to address this issue. Moreover, it should be also recalled that listing species in CITES Appendices may not necessarily result in the reduction in catch of the species considering that the species could still be caught as bycatch; therefore, regulation of the harvest and trade of the species need to take into account

this issue. Furthermore, the importance of the species for the livelihood of people especially the small-scale fishers and their communities that are dependent on harvesting these natural resources, and the long-term impacts of listing of CEAS in CITES Appendices need to be assessed.

References

- CITES. (2006). *Memorandum of Understanding between the Food and Agriculture Organization of the United Nations (FAO) and the Secretariat of the Convention on International Trade in Endangered Species (CITES)*. <https://cites.org/sites/default/files/eng/disc/sec/FAO-CITES-e.pdf>
- CITES. (2023a). *Cooperation and partnerships*. <https://cites.org/eng/disc/coop.php>
- CITES. (2023b). *The CITES Appendices*. <https://cites.org/eng/app/appendices.php>
- CITES. (2023c). *The CITES species*. <https://cites.org/eng/disc/species.php>
- Cooney, R., Challender, D. W. S., Broad, S., Roe, D., & Natusch, D. J. D. (2021). Think before you act: improving the conservation outcomes of CITES listing decisions. *Frontiers in Ecology and Evolution*, 9, 631556. <https://doi.org/10.3389/fevo.2021.631556>
- FAO. (2004). *Report of the FAO Ad Hoc Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-exploited Aquatic Species, Rome, 13–16 July 2004*. Ad Hoc Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially Exploited Aquatic Species, Rome. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/y5523e/y5523e.pdf>

- FAO. (2007). *Report of the Second FAO Ad Hoc Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-Exploited Aquatic Species, Rome, 26–30 March 2007*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/a1143e/a1143e.pdf>
- FAO. (2010). *Report of the third FAO Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of Cites Concerning Commercially-Exploited Aquatic Species, Rome, 7–12 December 2009*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/i1899e/i1899e00.pdf>
- FAO. (2013). *Report of the Fourth FAO Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-exploited Aquatic Species, Rome 3–8 December 2012*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/ap999e/ap999e.pdf>
- FAO. (2016). *Report of the fifth FAO Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-exploited Aquatic Species, Rome, 6–10 June 2016*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/I5932E/i5932e.pdf>
- FAO. (2019). *Report of the sixth FAO Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-exploited Aquatic Species, Rome, 21–25 January 2019*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/CA3576EN/ca3576en.pdf>
- FAO. (2022). *Report of the Seventh FAO Expert Advisory Panel for the Assessment of the Proposals to Amend Appendices I and II of CITES Concerning Commercially-Exploited Aquatic Species, Rome, Rome, 18–22 July 2022*. Food and Agriculture Organization of the United Nations. <https://doi.org/10.4060/cc1931en>
- SEAFDEC. (2022). *Report of the Regional Technical Consultation on Development of the ASEAN-SEAFDEC Common Positions on the Proposed Listing of Commercially-Exploited Aquatic Species into the CITES Appendices*. Southeast Asian Fisheries Development Center. <http://www.seafdec.org/documents/2022/12/rtc-cites-2022-report.pdf>

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