CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

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**CITES**

Twenty-sixth meeting of the Plants Committee
Geneva (Switzerland), 5 – 9 June 2023

Thirty-second meeting of the Animals Committee
Geneva (Switzerland), 19 – 23 June 2023

Strategic matters

IPBES ASSESSMENT REPORT ON THE SUSTAINABLE USE OF WILD SPECIES

1. This document has been submitted by the Chair of the Animals Committee[*].

2. At its 19th meeting (CoP19, Panama City, 2022), the Conference of the Parties adopted Decisions 19.28 and 19.29 on *IPBES Assessment report on the sustainable use of wild species* as follows:

   **Directed to Animals and Plants Committees**

   **19.28** *The Animals and Plants Committee shall review the scientific aspects of the thematic assessment of the sustainable use of wild species of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES); consider their relevance to the implementation of the Convention; and provide the results of their review and any associated recommendations to the Standing Committee.*

   **Directed to the Standing Committee**

   **19.29** *The Standing Committee shall consider the review of the IPBES thematic assessment of the sustainable use of wild species and associated recommendations prepared by the Animals and Plants Committees; make additional recommendations as appropriate; and submit the resulting conclusions and any recommendations as appropriate to the 20th meeting of the Conference of the Parties for its consideration.*

3. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was established to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development. At its 18th meeting (CoP18, Geneva, 2019), the Conference of Parties adopted Resolution Conf. 18.4 on *Cooperation with the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* and acknowledged that the objectives of IPBES have relevance for the objectives of CITES.

4. Based on provisions contained in the Resolution, the Chair of the Animals Committee continues to participate as an observer in the IPBES Multidisciplinary Expert Panel (MEP) and provided an update on relevant CITES related activities to the 20th meeting of the MEP that took place on 30 - 31 March 2023.

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*\* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

5. The IPBES Assessment Report on the Sustainable Use of Wild Species is composed of a Summary for Policymakers approved at the 9th session of the IPBES Plenary (IPBES-9, Bonn, 2022) and a set of six Chapters accepted by IPBES-9. The summary and chapters can be accessed on the IPBES website: Sustainable use of wild species.

6. Taking into consideration the decision directed to the Animals and Plants Committees it may be pertinent for the Committees to consider the Summary for Policymakers as well as the sections relevant to CITES implementation, knowledge gaps, challenges and research priorities and drivers of sustainable use of wild species, contained in Chapter 3 (*Status of and trends in the use of wild species and its implications for wild species, the environment and people*) and Chapter 4 (*The drivers of the sustainable use of wild species*).

7. Annex 1 includes a provisional list of scientific aspects addressed in Chapter 3 and 4 that could be relevant for CITES implementation and processes. Annex 2 contains a table of these scientific aspects and the current CITES Resolutions, Decisions, systems and processes that could address these aspects. Annex 3 contains the key findings in the Summary for Policymakers and the possible relevance to the mandates of the Animals and Plants Committees as well as the Standing Committee.

8. The Animals and Plants Committees could consider establishing a joint intersessional working group to facilitate the implementation of Decision 19.28. In this regard, the following is proposed for consideration by the Committees as a draft terms of reference for the working group:

   *The intersessional working group on the IPBES assessment report on the sustainable use of wild species will work through electronic means to:*

   i) *review the scientific aspects of the thematic assessment of the sustainable use of wild species of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) relevant to CITES implementation as highlighted in the Annexes to document PC26 Doc. 12 / AC32 Doc. 12 and other aspects as agreed by the two Committees and the members of the working group;*

   ii) *identify aspects relevant to CITES implementation that are not adequately covered in existing Resolutions and Decisions and may require further consideration by the Animals and Plants Committees or the Standing Committee;*

   iii) *prepare a draft report of the results of the review and possible recommendations for consideration by the joint sessions of the 33rd meeting of the Animals Committee and the 27th meeting of the Plants Committee scheduled to take place in 2024; OR*

   iv) *prepare a document containing the outcome of the review and recommendations for consideration by the 77th meeting of the Standing Committee.*

Recommendations

9. The Plants and the Animals Committees are invited to:

   i) consider the establishment of a joint intersessional working group to facilitate the implementation of Decision 19.28; and

   ii) consider the draft terms of reference contained in paragraph 8 and adopt a terms of reference to guide the work of the joint intersessional working group.

PROVISIONAL LIST

SCIENTIFIC ASPECTS IN CHAPTERS 3 AND 4 RELEVANT TO CITES IMPLEMENTATION

i)   *Indicators and databases:* The international trade databases, such as the CITES Trade Database can assist in providing possible insights in the role of management interventions on traded species and could be pivotal in linking use of species with their management and recovery plans (Chapter 3).

ii)  *Knowledge gaps, challenges and research priorities discussed in Chapter 3, including*:

   a)   Status of taxonomic groups and their uses at different levels and scales: Knowledge of conservation status and use is severely lacking for invertebrates among others.

   b)   Life histories and stocks of marine fish species are not well understood and there is a need to assess the impact of international trade on fisheries and marine biodiversity, globally and regionally.

   c)   Identification gaps in taxonomic groups of terrestrial animal harvesting: Lack of proper identification for some groups of terrestrial animals harvested mainly for trade (e.g., reptiles). A research emphasis should be on taxonomic assessment of under-researched taxa.

   d)   Exotic pet animal species: The majority of species in the exotic pet trade are not included in the Appendices, leaving the international trade in these species mostly unregulated and unmonitored.

   e)   Logging: Timber are supplied to markets, however it is unclear to estimate which come from legal or illegal sources as well as differentiate timber from wild *vs* plantation sources. Determining the levels of logging that will secure long-term viable populations of difference species as well as most cost-efficient implementation of conservation measures are emerging challenges.

   f)   Insufficient bridging of indigenous and science-based knowledge and the integration of indigenous local knowledge in processes, including monitoring.

iii)  *Drivers of sustainable use (Chapter 4)*

   a)   "The drivers of sustainable use of wild species, such as unsustainable and extractive use of wild species, including wild species trade, land use change, climate change, and invasive species, not only have consequences on the sustainable use of wild species but also are connected to the emergence, amplification and spread of disease-causing pathogens."

   b)   CITES role in supporting more sustainable levels of use of wild species:

      i.   *Practices in CITES procedures and practices addressed in the Chapter that could address sustainable use*:

         a.   Legal provisions and compliance monitoring: Requirements in terms of legislative provisions and monitoring of levels of non-compliance (*Standing Committee*)

         b.   Non-detriment findings: Templates, guidance and tools exist, but the levels of uptake and application are harder to assess.

         c.   Review of Significant Trade: Concerns that the implementation of the Review of Significant Trade could fail to prevent trade not compliant with the provisions of the Convention if effective enforcement is lacking.

         d.   Uplisting of species or populations from Appendix II to Appendix I - the predominance of certain taxa (cacti, succulent plants, tortoises and turtles and Psittaciformes) in uplisting could indicate challenges associated with sustainable use of these taxa.

e. Interactions between Scientific Authorities in importing and exporting countries.

ii. *Sustainable and legal trade:*

a. Difficulties to identify specific indicators to determine how CITES has contributed to sustainable use of wild species. To measure impact, indicators related to harvest and trade of species listed as threatened or endangered would be needed.

b. Challenges in the interpretation of trade volumes to determine whether the inclusion of species in the CITES Appendices reduce the levels of trade.

c. Shift from trade in wild-sourced specimens to captive bred or artificially propagated specimens.

d. A clear indicator for CITES acting as a driver for legal and sustainable levels of harvest and trade could be an improvement in the conservation status of species. A Red List Index analysis for species listed in CITES was not available and several caveats to using the available Red List and Red List Index data to assess impact of CITES are reflected on in the assessment.

e. Extent to which unsustainable legal trade is replaced with unsustainable illegal trade.

iii. *Unintended outcomes*

a. Leakages and displacement to other similar species or other jurisdictions: The listing of species in the CITES Appendices can reduce the trade in that species to sustainable levels but displace trade to other similar species or other areas.

b. Increased demand (linked to proposals to list species): Increased trade linked to the listing process where traders acquire or offload stock before restrictions / regulations become applicable.

CITES PROCESSES RELATING TO THE SCIENTIFIC ASPECTS IDENTIFIED IN ANNEX 1

| Scientific aspect | CITES Resolutions / Decisions / systems (incl. databases, guidance, tools etc) |
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| Indicators and databases | |
| The international trade databases, such as the CITES trade database can assist in providing possible insights in the role of management interventions on traded species and could be pivotal in linking use of species with their management and recovery plans. | <ul><li>Resolution Conf. 18.3 on *CITES Strategic Vision: 2021 – 2030*</li><li>Strategic vision indicators *(link)*</li><li>Decisions 19.11 to 19.14 on *CITES Strategic Vision*</li><li>Decisions 19.20, 19.21, 17.55 (Rev. CoP19) and 17.56 (Rev. CoP19) on *Cooperation with Multilateral Environmental Agreements and other international organizations*</li><li>CITES Trade database</li><li>CITES Wildlife TradeView</li><li>RST Management System</li><li>Export Quota Tool</li><li>Species+</li></ul> |
| Knowledge gaps, challenges and research priorities | |
| a) Status of taxonomic groups and their uses at different levels and scales: Knowledge of conservation status and use is severely lacking for among other invertebrates. | <ul><li>Decisions 19.132 to 19.134 on *Non-detriment findings* (workstream on terrestrial invertebrates)</li><li>Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade*</li></ul> |
| b) Life histories and stocks of marine fish species are not well understood and there is a need to assess the impact of international trade on fisheries and marine biodiversity, globally and regionally. | <ul><li>Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*</li><li>Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*</li><li>Resolution Conf. 12.6 (Rev. CoP18) on *Conservation and management of sharks*</li><li>Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*</li><li>Listing proposals (marine species included in Appendix II)</li><li>Decisions 19.189 to 19.191 on *Aquatic species listed in the CITES Appendices*</li><li>Decisions 19.140 to 19.141 on *Introduction from the sea*</li><li>Decisions 19.222 to 19.227 on *Sharks and rays (Elasmobranchii spp.)*</li></ul> |

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| | | • Decision 19.66 paragraph b) on *Review of Resolution Conf. 11.3 (Rev. CoP19) on* Compliance and enforcement<br><br>• Decisions 19.135 to 19.139 on *Non-detriment findings for specimens of Appendix-II species taken from areas beyond national jurisdiction*<br><br>• Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* |
| c) | Identification gaps in taxonomic groups of terrestrial animal harvesting: Lack of proper identification for some groups of terrestrial animals harvested mainly for trade (e.g., reptiles). A research emphasis should be on taxonomic assessment of under-researched taxa. | • Resolution Conf. 19.4 on *Materials for the identification of specimens of CITES-listed species*<br><br>• Resolution Conf. 12.11 (CoP19) on *Standard nomenclature*<br><br>• Decisions 19.142 to 19.144 on *Materials for the identification of specimens of CITES-listed species*<br><br>• Decisions 19.123 to 19.127 on Tortoises and freshwater turtles |
| d) | Exotic pet animal species: The majority of species in the exotic pet trade are not included in the Appendices, leaving the international trade in these species mostly unregulated and unmonitored. | Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* |
| e) | Logging: Timber are supplied to markets, however it is unclear to estimate which come from legal or illegal sources as well as differentiate timber from wild *vs* plantation sources. Determining the levels of logging that will secure long-term viable populations of difference species as well as most cost-efficient implementation of conservation measures are emerging challenges. | • Resolution Conf. 18.7 (Rev. CoP19) on *Legal acquisition findings*<br><br>• Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*<br><br>• Resolution Conf. 14.3 (Rev. CoP19) on *CITES compliance procedures*<br><br>• Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*<br><br>• Resolution Conf. 11.3 (Rev. CoP19) on *Compliance and enforcement*<br><br>• Resolution Conf. 8.4 (Rev. CoP15) on *National laws for implementation of the Convention*<br><br>• Decisions 19.128 to 19.131 on *Legal acquisition findings*<br><br>• Decisions 19.132 to 19.134 on *Non-detriment findings* (workstream on timber)<br><br>• Decisions 19.145 to 19.148 on *Identification of timber and other wood products*<br><br>• Decisions 19.182 to 19.183 on *Guidance on the term 'artificially propagated'* |
| f) | Insufficient bridging of indigenous and science-based knowledge and the integration of indigenous local knowledge in processes, including monitoring. | • Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*<br><br>• Resolution Conf. 16.6 (Rev. CoP18) on *CITES and livelihoods* |

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| | | • Decisions 18.31 (Rev. CoP19) and 19.54 on *Engagement of indigenous peoples and local communities* |
| | | • Decisions 18.33 (Rev. CoP19), 18.34 (Rev. CoP19) and 18.35 (Rev. CoP19) on *Livelihoods* |
| | | • Decisions 19.132 to 19.134 on *Non-detriment findings* (workstream on Incorporation, weighing and integration of various knowledge systems, including local, traditional and indigenous knowledge, and participatory species monitoring and management in NDF making (including gender equity)) |

| *Drivers of sustainable use* | |
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| *i.* | *Practices in CITES procedures and practices addressed in the Chapter that could address sustainable use* |

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| a) | "The drivers of sustainable use of wild species, such as unsustainable and extractive use of wild species, including wild species trade, land use change, climate change, and invasive species, not only have consequences on the sustainable use of wild species but also are connected to the emergence, amplification and spread of disease-causing pathogens." | Decisions 19.15 to 19.19 on the *Role of CITES in reducing risk of future zoonotic disease emergence associated with international wildlife trade* |
| b) | Legal provisions and compliance monitoring: Requirements in terms of legislative provisions and monitoring of levels of non-compliance (*Standing Committee*). | *Several resolutions and decisions, including*<br><br>• Resolution Conf. 18.7 (Rev. CoP19) on *Legal acquisition findings*<br><br>• Resolution Conf. 14.3 (Rev. CoP19) on *CITES compliance procedures*<br><br>• Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*<br><br>• Resolution Conf. 11.17 (Rev. CoP19) on *National reports*<br><br>• Resolution Conf. 11.3 (Rev. CoP19) on *Compliance and enforcement*<br><br>• Resolution Conf. 8.4 (Rev. CoP15) on *National laws for implementation of the Convention*<br><br>• Decisions 19.44 to 19.46 on *Compliance Assistance Programme*<br><br>• Decisions 19.58 to 19.62 on *National laws for implementation of the Convention* |
| c) | Non-detriment findings: Templates, guidance and tools exist, but the levels of uptake and application are harder to assess. | • Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*<br><br>• Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*<br><br>• Decisions 19.132 to 19.134 on *Non-detriment findings*<br><br>• Guidance – CITES webpage |
| d) | Review of Significant Trade: Concerns that the implementation of the review of significant trade could fail to prevent trade not compliant with the | • Resolution Conf. 14.3 (Rev. CoP19) on *CITES compliance procedures* |

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| | provisions of the Convention if effective enforcement is lacking. | • Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*<br><br>• Decisions 19.44 to 19.46 on *Compliance Assistance Programme* |
| e) | Uplisting of species or populations from Appendix II to Appendix I - the predominance of certain taxa (cacti, succulent plants, tortoises and turtles and Psittaciformes) in uplisting could indicate challenges associated with sustainable use of these taxa. | • Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* |
| f) | Interactions between Scientific Authorities in importing and exporting countries. | • Resolution Conf. 10.3 on *Designation and role of the Scientific Authorities* |
| ii. | *Sustainable and legal trade* | |
| a) | Difficulties to identify specific indicators to determine how CITES has contributed to sustainable use of wild species. To measure impact, indicators related to harvest and trade of species listed as threatened or endangered would be needed. | • Resolution Conf. 18.3 on *CITES Strategic Vision: 2021 – 2030* and the indicators adopted by Parties<br><br>• Decisions 19.184 and 19.185 on *Assessment of Appendix-I listed species* |
| b) | Challenges in the interpretation of trade volumes to determine whether the inclusion of species in the CITES Appendices reduce the levels of trade. | • CITES Trade database<br><br>• CITES Wildlife TradeView |
| c) | Shift from trade in wild-sourced specimens to captive bred or artificially propagated specimens. | • Resolution Conf. 17.7 (CoP19) on *Review of trade in animal specimens reported as produced in captivity*<br><br>• Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes*<br><br>• Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*<br><br>• Resolution Conf. 10.16 (Rev. CoP19) on *Specimens of animal species bred in captivity*<br><br>• Resolution Conf. 9.19 (Rev. CoP15) on *Registration of nurseries that artificially propagate specimens of Appendix-I plant species for export purposes*<br><br>• Decisions 17.108 (Rev. CoP19), 17.109 (Rev. CoP19) and 17.110 (Rev. CoP19) on *Review of Significant Trade*<br><br>• Decisions 19.63 to 19.65 on *Review of Resolution Conf. 17.7 (Rev. CoP19) on* Review of trade in specimens reported as produced in captivity |
| d) | A clear indicator for CITES acting as a driver for legal and sustainable levels of harvest and trade could be an improvement in the conservation status of species. A Red List Index analysis for species listed in CITES was not available and several caveats to using the available Red List | • Decision 19.14 on the *CITES Strategic Vision*<br><br>• Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* |

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| and Red List Index data to assess impact of CITES are reflected on in the assessment. | • Decisions 19.30 and 19.31 on the *World Wildlife Trade Report*<br><br>• Decisions 19.184 and 19.185 on *Assessment of Appendix-I listed species* |
| e) Extent to which unsustainable legal trade is replaced with unsustainable illegal trade. | • Resolution Conf. 11.17 (Rev. CoP19) on *National reports (*annual reports, annual illegal trade reports and implementation reports)<br><br>• Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II specieS*<br><br>• Decisions 19.222 to 19.227 on *Sharks and rays (Elasmobranchii spp.)*<br><br>• Decision 19.80 on *Annual illegal trade reports* |
| iii. *Unintended outcomes* | |
| a) Leakages and displacement to other similar species or other jurisdictions. | • Resolution Conf. 12.8 (Rev. CoP18) on *Review of Significant Trade in specimens of Appendix-II species*<br><br>• Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*<br><br>• Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* |
| b) Increased demand (linked to proposals to list species). | |

IPBES THEMATIC ASSESSMENT REPORT ON THE SUSTAINABLE USE OF WILD SPECIES – SUMMARY FOR POLICYMAKERS

PRELIMINARY ALLOCATION OF FINDINGS THAT COULD BE CONSIDERED BY THE ANIMALS AND PLANTS COMMITTEES AND THE STANDING COMMITTEE

(Extract from IPBES Thematic Assessment Report)

| *IPBES finding* | *Animals and Plants Committees / Standing Committee* |
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| **A. Sustainable use of wild species is critical for people and nature** | |
| **A1. Billions of people in all regions of the world rely on and benefit from the use of wild species for food, medicine, energy, income and many other purposes.** | |
| *(A.1.1)* The use of wild species directly contributes to the well-being of billions of people globally on a day-to-day basis and is particularly important to people in vulnerable situations (well established)<br><br>*(A.1.2)* About 50,000 wild species are used for food, energy, medicine, materials and other purposes through fishing, gathering, logging and terrestrial animal harvesting globally.<br><br>*(A1.3)* Wild species are important sources of subsistence resources and income. Uses of wild species form the basis for economically and culturally important activities worldwide (established but incomplete)<br><br>*(A.1.4)* Gathering wild plants, fungi and algae takes place in both developed and developing countries worldwide. Such a practice is closely associated with cultural and subsistence practices, and can also supply global markets (established but incomplete) | ☐ AC<br>☐ PC<br>☒ SC |
| *(A.1.5)* Wild tree species are currently the major source for wood and wood products and will continue to be so in the coming decades (well established) | ☐ AC<br>☒ PC<br>☒ SC |
| *(A.1.6)* Nature-based tourism, including wildlife watching, supports mental and physical well-being, raises awareness and facilitates connections to nature, in addition to bringing local benefits such as direct income generation to local communities (well established) | ☐ AC<br>☐ PC<br>☒ SC |

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| *(A.1.7) Potential contributions from sustainable use of wild species to meeting the Sustainable Development Goals are substantial, but largely overlooked (established but incomplete)* | ☒ AC<br><br>☒ PC<br><br>☒ SC |
| **A2. Sustainable use of wild species is central to the identity and existence of many indigenous peoples and local communities.**<br><br>*(A.2.1) Wild species play essential roles in the well-being of many indigenous peoples and local communities. Loss of opportunity to engage in sustainable use of wild species represents an existential threat to indigenous peoples and local communities (well established)*<br><br>*(A.2.2) Sustainable use of wild species contributes to the livelihoods of indigenous peoples and local communities through subsistence, as well as trade in informal and formal markets (well established)*<br><br>*(A.2.3) Knowledge, practices and worldviews guide sustainable uses of wild species by many indigenous peoples and local communities (well established)* | ☒ AC<br><br>☒ PC<br><br>☒ SC |
| **A3. Ensuring sustainability of the use of wild species, including by promoting sustainable use and halting overexploitation, is critical to reverse the global trend in biodiversity decline**<br><br>*(A.3.1) Effective management systems that promote the sustainable use of wild species can contribute to broader conservation objectives (established but incomplete)*<br><br>*(A.3.2) Overexploitation has been identified as the main threat to wild species in marine ecosystems and the second greatest threat to those in terrestrial and freshwater ecosystems (well established)*<br><br>*(A.3.3) Indigenous peoples manage fishing, gathering, terrestrial animal harvesting and other uses of wild species on more than 38 million km$^2$ of land in 87 countries (well established)* | ☒ AC<br><br>☒ PC<br><br>☒ SC |
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| **B. Status and trends in uses of wild species** | |
| **B1. Status and trends in uses of wild species vary depending on types and scales of use, and social ecological contexts.** | |
| *(B.1.1) Recent global estimates indicate that approximately 34 per cent of marine wild fish stocks are overfished and 66 per cent are fished within biologically sustainable levels, but this global picture displays strong heterogeneities (well established)* | ☒ AC<br><br>☐ PC<br><br>☒ SC |

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| *(B.1.2) Unintentional bycatch of threatened and/or protected marine species is unsustainable for many populations, including wild sea turtles, seabirds, sharks, rays, chimaeras, marine mammals and some bony fishes. Reducing unintentional bycatch and discards is progressing, but still insufficient (well established)* | ☒ AC<br>☐ PC<br>☒ SC |
| *(B.1.3) Trade in wild plants, algae and fungi for food, medicine, hygiene, energy, and ornamental use is increasing (well established)* | ☐ AC<br>☒ PC<br>☒ SC |
| *(B.1.4) Terrestrial animal harvesting takes place in a variety of governance, management, ecological and socio-cultural contexts, which affect the outcomes for sustainable use. Globally, populations of many terrestrial animals are declining due to unsustainable use, but the impacts of use on wild species and society can be neutral or positive in some places (well established)* | ☒ AC<br>☐ PC<br>☒ SC |
| *(B.1.5) Large-bodied mammals are the most targeted species for subsistence and commercial hunting, as these animals provide more meat for consumption and sale to generate more economic benefits for hunters' households (well established* | ☒ AC<br>☐ PC<br>☒ SC |
| *(B.1.7) Destructive logging practices and illegal logging threaten sustainable use of natural forests (established but incomplete)* | ☐ AC<br>☒ PC<br>☒ SC |
| *B.1.8) Nature-based tourism is an important nonextractive practice and recreational use of wild species. Demand for media (e.g., documentaries) and in situ observing (e.g., wildlife watching tourism) related to wild species was growing up to 2020 (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| **B2. The sustainability of the use of wild species is influenced negatively or positively by multiple drivers.** | |
| *(B.2.1) Multiple drivers affect the sustainability of the use of wild species and these interact with one another (well established)*<br><br>*(B.2.2) Drivers such as landscape and seascape changes, climate change, pollution and invasive alien species impact the abundance and distribution of wild species, and can increase stress and challenges for the human communities who use them (well established)*<br><br>*(B.2.3) Climate change is an increasingly strong driver affecting sustainable use, creating many challenges (well established)* | ☒ AC<br>☒ PC<br>☒ SC |

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| *(B.2.4) Regulations, together with market forces, have resulted in a shift from wild species to specimens derived from farmed stocks (established but incomplete)* | ☒ AC<br>☐ PC<br>☒ SC |
| *(B.2.5) Throughout the world, where people living in poverty rely on the use of wild species, environmental degradation and resource depletion threaten their livelihoods and well-being (well established)*<br><br>*(B.2.6) Multiple drivers threaten indigenous peoples' and local communities' ability to maintain and restore practices associated with sustainable use of wild species (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(B.2.7) Land tenure and resource rights can contribute to sustainable use (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(B.2.8) Inequitable distribution of costs and benefits from the use of wild species often undermines sustainability (well established)*<br><br>*(B.2.9) Gender is seldom taken into account in the governance of wild species, leading to inequities in the distribution of costs and benefits from their use. There are often gender inequities in how the costs and benefits of wild species' uses are distributed, with women bearing more of the costs and receiving fewer benefits of use (well established)* | ☒ AC<br>☐ PC<br>☒ SC |
| *(B.2.10) Urbanization is a dominant global trend which has negative impacts or indirect positive influences on sustainable use (well established)* | |
| *(B.2.11) Global trade in wild species is a major driver of increased use. When not effectively regulated, it can become a driver of unsustainable use. Global trade in wild species has expanded substantially over the past 40 years in terms of volumes, value and trade networks (well established)* | ☒ AC<br>☒ PC<br>☒ SC |
| *(B.2.12) Illegal harvesting and trade in wild species occur across all practices, involving numerous species, and often lead to unsustainable use (established but incomplete)*<br><br>*(B.2.13) Conflict, including armed conflict, can have significant and diverse impacts on sustainable use. Indigenous peoples and local communities and other people in vulnerable situations can be displaced from territories, severing their relationships to valued species. This can result in unsustainable use in other areas due to the migration and settlement of displaced peoples (established but incomplete)*<br><br>*(B.2.14) Culture, comprising language, knowledge, religion, food habits, values and philosophies, influences people's interactions with wild species and the extent to which particular practices and uses are acceptable and sustainable (well established)* | ☐ AC<br>☐ PC<br>☒ SC |

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| *(B.2.15) Education, communication and public awareness are key drivers of sustainable use as they provide knowledge and capacity for improved decision-making regarding the sustainability of wild species' uses (established but incomplete) but are seldom prioritized as policy options (established but incomplete)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(B.2.16) Science, research and technology create conditions that can support or undermine sustainable use of wild species, and local livelihoods based on them by, for example, setting quotas or harvest levels (established but incomplete)* | ☒ AC<br>☒ PC<br>☒ SC |
| **B3. Key elements of sustainable use of wild species have been identified in relevant international and regional standards, agreements and certification schemes but indicators are incomplete, most notably for social components.** | |
| *(B.3.1) Conceptualizations of sustainable use are evolving over time. Nevertheless, statements in international and regional agreements continue to maintain a common emphasis on not causing irreversible harm to biodiversity and supporting the material and non-material contributions of biodiversity to human well-being (well established)*<br><br>*(B.3.2) Available indicators provide a fragmented view of wild species' use in social-ecological systems across the globe and within each practice, impeding both full evaluation of sustainability of practices in many instances and comparisons of sustainability across practices (well established)*<br><br>*(B.3.3) Many of the ecological, economic and governance indicators in global and regional indicator sets have low sensitivity or specificity for the sustainability of individual practices, thus requiring substantial contextual information to be interpreted reliably (established but incomplete)* | ☒ AC<br>☒ PC<br>☒ SC |
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| **C. Key elements and conditions for the sustainable use of wild species** | |
| **C1. Policy instruments and tools are most successful when tailored to the social and ecological contexts of the use of wild species and support fairness, rights and equity** | |
| *(C.1.1) Conceptualizations of sustainable use of wild species influence policymaking by determining the ecological and social elements that are considered, monitored, assessed and used in policy (established but incomplete)*<br><br>**NOTE: Box SPM.2 page 26 – CITES**<br><br>The Convention on International Trade in Endangered Species of Wild Fauna and Flora was established in 1973 to protect wild species from overexploitation associated with international trade and to avoid utilization that is incompatible with their survival. As at April 2021, the Convention had 183 parties. | ☒ AC<br>☒ PC<br>☒ SC |

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| The assessment found that the Convention has been an important instrument for driving global coordination of regulations and enforcement regarding international trade in wild species, as well as the establishment of institutions and tools to ensure sustainable use *(well established)*. As a result of those efforts, 101 countries now have the legislation and institutions in place to fully implement the Convention and a further 43 countries are in a position to partially implement it.<br><br>Tools for assessing whether trade is detrimental to the survival of a species in trade (termed non-detriment findings) have been developed for a wide range of taxa with different life histories and vulnerabilities to trade. As at 2021, over 38,700 species were listed in the appendices to the Convention and subjected to regulation by the parties. Based on these operational indicators, the Convention on International Trade in Endangered Species of Wild Fauna and Flora is a successful policy instrument.<br><br>Nevertheless, based on trends of continuing decline in the status of species affected by international trade, these species continue to be affected by unsustainable levels of use and illicit trade *(established but incomplete)*.<br><br>The Convention focuses on regulating international trade but other factors affecting the use of wild species fall outside the scope of the Convention and can continue to drive unsustainable and/ or illegal trade both from the supply and demand sides of trade. These issues also affect domestic trade in wild species, which can be significant, and so species can continue to decline despite international trade restrictions.<br><br>Successful outcomes for the species listed in the appendices to the Convention have often been linked to complementary actions that either reduce demand for wild species, achieve greater coherence between domestic policies and the decisions of the Convention, involve local communities affected by decisions relating to international trade, or reduce illegal trade *(established but incomplete)*. Durable outcomes from Convention decisions are more likely if there is a good fit between the regulatory options available to the Convention and the specific contexts in which they are applied. There is a growing body of evidence that can support better outcomes for species and complement biological information to inform decisions, including for economics, consumer behaviour, the structure of legal and illicit markets, impacts on livelihoods and the role of communities in promoting sustainable use and combating illegal trade. | |
| *(C.1.2) Policy instruments and tools commonly fail when they are not tailored to local ecological and social contexts (established but incomplete)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(C.1.3) Fairness, rights and equitable distribution of benefits are essential to ensure the sustainable use of wild species (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(C.1.4) Effectiveness of market-based incentives, such as certification and labelling, is mixed and mostly limited to high-value markets (established but incomplete)* | ☒ AC<br>☒ PC<br>☒ SC |

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| **C2. Policy instruments and tools are more effective when they are supported by robust and adaptive institutions and are aligned across sectors and scales. Inclusive, participatory mechanisms enhance the adaptive capacity of policy instruments.** | |
| *(C.2.1) Robust governance systems tend to be adaptive to changes in social and ecological conditions and include participatory mechanisms (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(C.2.2) Aligning and coordinating policies across sectors and scales of governance can create enabling conditions for sustainable use of wild species (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(C.2.3) Policies that support secure tenure rights and equitable access to land, fisheries and forests, as well as poverty alleviation, create enabling conditions for sustainable use of wild species (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| *(C.2.4) Strengthening customary institutions and rules often contributes to the sustainable use of wild species (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| **C3. Effective monitoring of social, including economic, and ecological outcomes supports better decision-making. Scientific evidence is often limited, and indigenous and local knowledge is underutilized and undervalued.** | |
| *(C.3.1) Monitoring of the ecological and social, including economic, aspects of uses of wild species is critical for sustainable use (well established*<br><br>*(C.3.2) Policy instruments and tools are more effective when they are inclusive of plural knowledge systems (well established) Bringing together scientists and holders of indigenous and local knowledge improves decision-making (well established)* | ☒ AC<br>☒ PC<br>☒ SC |
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| **D. Pathways and levers to promote sustainable use and enhance the sustainability of the use of wild species in a dynamic future** | |
| **D1. The sustainability of the use of wild species in the future is likely to face challenges due to climate change, increasing demand and technological advances. Addressing and meeting these challenges will require transformative changes.** | |
| *(D.1.1) According to most scenarios and models, climate change is expected to lead to multiple changes, such as changing wild species distribution and population dynamics, increasing frequency of extreme events and altering nutrient cycles, as well as ecological changes, which* | ☒ AC |

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| *will affect wild species and their use across all practices, through multiple impacts. There is uncertainty however about future trajectories. Climate change may further exacerbate social, including economic, vulnerabilities and inequalities (well established)*<br><br>*(D.1.2) For many practices, demand is linked to demographic trends and consumption patterns. Growing human populations and consumption will result in greater pressure on wild species (well established)*<br><br>*(D.1.3) Technological advances will affect future uses of wild species both negatively and positively (well established)*<br><br>*(D.1.4) Scenarios projecting the future use of wild species are few in number (well established), but they indicate that transformative changes are needed to ensure sustainable use and to enhance the sustainability of the use of wild species (established but incomplete)* | ☒ PC<br>☒ SC |
| **D2. To address current and projected future pressures, concerted interventions will be needed to implement and scale up policy actions that have been shown to support the sustainable use of wild species.** | |
| *(D.2.1) Key elements (sets of policy actions) that support sustainable use of wild species have been identified. However, with the exception of fishing, these key elements are poorly integrated into binding agreements and this limits progress towards their implementation (established but incomplete)*<br><br>*(D.2.2) These seven key elements have been deployed in limited contexts and could be used as levers of changes to promote sustainable use and enhance the sustainability of the use of wild species in the future if they are scaled up across practices, regions and sectors (well established)* | ☐ AC<br>☐ PC<br>☒ SC |
| **D3. The world is dynamic and to remain sustainable, use of wild species requires constant negotiation and adaptive management. It also requires a common vision of sustainable use and transformative change in the human nature relationship.** | |
| *(D.3.1) Successful adaptation and negotiation require attention to the dynamics of both the social and ecological contexts of uses (well established)* | ☒ AC<br>☒ PC<br>☒ SC |
| *(D.3.2) Intensification of existing uses and/or the emergence of new uses for wild species have often led to the rapid and substantial reconfiguration of trade-offs and synergies within and among practices, with negative impacts on the sustainability of the use (well established)* | ☒ AC<br>☒ PC<br>☒ SC |
| *(D.3.3) Achieving transformative change relating to the use of wild species requires moving towards a common vision while recognizing different value systems and conceptualizations of sustainable use (established but incomplete)* | ☐ AC<br>☐ PC<br>☒ SC |

| *(D.3.4) The sustainable use of wild species will benefit from a transformative change in the prevailing conceptualization of nature, shifting from the human nature dualism deeply rooted in many (but not all) cultures, to a more systemic view that humanity is part of nature (well established)* | |