Original: English

Revised ICCAT Plan of Action on Climate Change Explanatory Note from the Chair of the Climate Change Experts' Meeting

As Chair of the Climate Change Experts Meeting, I first introduced a "Draft ICCAT Plan of Action on Climate Change" on the second day of the virtual Meeting, July 13, 2023. The first draft of the Plan of Action was developed in consultation with the SCRS Chair in response to the call in Res. 22-13 to "develop a workplan to guide the Commission's future work on relevant issues associated with climate change." The first draft attempted to incorporate the wide-ranging ideas and presentations offered by meeting participants during the first 1.5 days of discussion.

In response to comments made on the initial draft during the July meeting, I circulated a revised version of the Plan of Action for intersessional review by CPCs and, should time allow, the SCRS. Four CPCs provided edits and comments on the second version of the Plan of Action during that correspondence process. I have now attempted to reconcile this feedback in a second revision of the Plan of Action, which I have submitted for consideration by the Commission at its 2023 Annual Meeting. Given some competing feedback from CPCs, there are brackets in the text reflecting where further discussions amongst CPCs is likely needed.

For transparency, a combined text that reflects all edits submitted by CPCs is available in the Background documents section of the "CLIM" NextCloud folder. This combined text also includes annotations from me reflecting how comments and edits were handled.

Revised ICCAT Plan of Action on Climate Change

(Presented by the Climate Change Expert Meeting Chair in consultation with the SCRS Chair)

With a view to advancing the implementation of the *Resolution by ICCAT on Climate Change* (Res. 22-13) and taking into account the discussions held at the ICCAT Climate Change Expert Meeting (11-12 July 2023), the Commission endorses the following Plan of Action on Climate Change, noting that it is intended to be a living document of priority Commission and SCRS actions that [should] [could] be reviewed [biennially] [annually] and revised, as appropriate, as new information becomes available and work progresses on this urgent issue:

2023

Commission

Climate Change Expert Group: In order to build upon initial discussions held at the July 2023 two-day Climate Change Expert Meeting, Eestablish a Standing Joint Expert Group on Climate Change (SJEG-CC) at the 2023 ICCAT Annual Meeting to provide a dedicated forum to further consider and advise the Commission on the issues specified in Resolution by ICCAT on Climate Change (Res. 22-13), including matters introduced at the July 2023 two-day Climate Change Expert Meeting, and to ensure continued close coordination between the SCRS and Commission, and to guide cooperation with the FAO and other RFMOs.

2024 and future years

Commission and SCRS

 SJEG-CC Meetings: Hold at least one meeting of the SJEG-CC, either virtually or in conjunction with another ICCAT intersessional meeting, during the 2024 intersessional period and future intersessional meetings when needed, as decided by the Commission, guided by advice from the SJEG-CC.

Commission

- Plan of Action Review and Revision: Review progress on the implementation of this Plan of Action at each ICCAT Annual Meeting and consider next steps, including, as appropriate, revisions to the plan based on, inter alia, SCRS advice and SJEG-CC input.
- Commission Agenda: Include "Matters pertaining to incorporating Climate Change considerations into the work of the Commission" as a [standing] item on the Commission's agenda for the Annual Meeting to provide a dedicated place for consideration of relevant issues related to climate change each year, including climate change impacts, mitigation, and adaptation. Publish a statement in the annual meeting report each year about progress made in implementing this Plan of Action.
- Panel Agendas: Incorporate the issue of climate change into appropriate items of the Panel agendas, particularly those agenda items related to conservation and management measures and research.
- Standing Committee on Finance and Administration (STACFAD):
 - Consider, if appropriate, possible additional approaches to reduce the organization's environmental and climate impacts, including those related to its headquarters operation and meetings.
 - Consider and prioritize any SCRS/ICCAT Secretariat requests for supplementary funds or other resources needed to carry out expanded scientific work associated with climate change.

SCRS

- Organization and Structure: Consider whether the current SCRS structure is optimal to meet the
 developing needs and challenges related to evaluating and providing scientific advice about climate
 change impacts on ICCAT target stocks, non-target species, related ecosystems, and other scientific
 aspects included in Res. 22-13 as well as provide scientific advice in light of those impacts; if it is not,
 consider how its structure might be changed to facilitate this work, while still maintaining other core
 SCRS functions, and report on these deliberations and any conclusions to the Commission.
- Research, data collection, and scientific tools and approaches: Continue and, where possible, expand efforts to identify and address data gaps and other scientific challenges related to climate change, including by reviewing existing climate change research, as appropriate, as well as research needs and opportunities and consider potential tools and approaches to improve the provision of scientific advice relating to climate change to the Commission, [while taking into account other various tasks of the SCRS,] including, inter alia:
 - Evaluating through Develop appropriate methodologies, such as management strategy evaluation
 (MSE) framework for assessing the performance of management strategies taking into account the
 potential effects of climate change on ICCAT stocks and species;
 - Continuing the ongoing work with respect to implementing an ecosystem approach to fisheries management (EAFM), including developing ecosystem report cards; climate and ecosystem modeling; enhancing information on essential habitats for ICCAT target and bycatch species, including with regard to climate refugia, and on the potential changes to species interactions and spatial overlap in target and bycatch species; and advising on any potential benefits of marine protected areas; and
 - Considering and, where appropriate, advising the Commission on taking action in response to the questions included in the **Annex**.
- Strategic Plan: Update of the SCRS Strategic Plan in 2024 or as soon as possible thereafter to
 incorporate climate change related activities, approaches, and considerations, including prioritizing
 needed scientific research and data collection and specifying associated time frames, where possible.
- SCRS Report: Advise the Commission in 2024 on the feasibility of providing at least the following information to the Commission as part of the 2025 and future SCRS Reports: (1) commentary on the vulnerability of each stock to the effects of climate change; (2) discussion of any uncertainties associated with the scientific advice related to climate change; and (3) a description of if and how the effects of climate change were or could be incorporated into the stock-specific analyses. In 2025 or as soon as possible thereafter, include a new section on the impacts of climate change in the Executive Summaries for each stock/species included in the SCRS Report.
- Resource needs analysis: Working with the ICCAT Secretariat, consider if current human and financial resources are sufficient to undertake any needed research and data collection/evaluation related to climate change. Such data collection should include collation of existing databases and publicly available data, and consideration of collaboration with other organisations with a specialty in climate-related fisheries science. Based on this analysis, seek supplementary funds and/or other resources through STACFAD and/or other means, as appropriate.
- Plan of Action Review: Annually review this Plan of Action and, as appropriate, suggest revisions and/or provide other relevant feedback to the Commission.

Annex

Questions related to the provision of Climate-informed Scientific Advice

- What do we know about climate change effects on ICCAT species and fisheries and associated ecosystems? How can we consolidate knowledge?
- To what extent does the existing work of the SCRS capture climate induced changes and its impact on target and non-target species/stocks and the marine ecosystem?
- What effective tools, approaches, and/or techniques are available to assist in the consideration of climate change impacts in the formulation of scientific advice, such as climate and ecosystem modeling, climate vulnerability analyseis,[genetic techniques for stock assessments,] risk tables, scenario planning, incorporation of differing climatic projections (emissions-based projections), etc.?
- What impact does non-stationarity in population dynamics as a result of climate change have on the accuracy of scientific advice as well as the robustness and efficacy of management actions, and what are the potential implications for scientific models and/or modeling approaches?
- What can be gained by gathering high quality fishery dependent data and/or conducting independent surveys to detect climate related changes in productivity as well as spatial and temporal distributions; should such data collection be enhanced and, if so, how and over what timescale?
- How does increasing systematic collection of size and age composition data from fisheries help detect productivity changes; should such data collection be enhanced and, if so, how might that be accomplished and over what timescale? Could there be a benefit to providing technical support to CPCs in cooperation with the ICCAT Secretariat?
- [How can joint indices of abundance improve our understanding of changes in distribution and productivity as a result of climate change?]