



COMMISSION
Twenty-First Regular Session
28 November to 3 December 2024
Suva, Fiji (Hybrid)

Terms of Reference for a CMM Climate Change Vulnerability Assessment

WCPFC21-2024-12a_Rev01
30 November 2024

Submitted by the Co-Leads of the WCPFC Climate Change Workplan

Explanatory Note

A note on the Assessment's title

Following input from Subsidiary Bodies regarding the term “susceptibility,” the co-leads have found the term “vulnerability” to be more appropriate to describe the underlying motivation and purpose of this effort and suggest this effort be henceforth referred to as the CMM Climate Change Vulnerability Assessment.

Background

At TCC19, the Scientific Services Provider presented an update on the Status of Fisheries and Impacts of climate change and the increased importance of ensuring information and data collection to understand the impacts of climate change and implications for management of WCPFC fisheries. As a result, TCC19 recommended that the TCC Chair and Secretariat consider how ongoing work on developing monitoring strategies for harvest strategies, and SC19's recommendation to develop and test ecosystem and climate indicators, intersect with the work of TCC, including how these may be included in the TCC workplan. Further, TCC19 noted it would be beneficial to receive direction from the Commission on incorporating climate change discussions into its agenda. To address this, the United States introduced a discussion paper (WCPFC20-2023-DP-08) at WCPFC20 to advance these discussions. The Commission subsequently agreed to task co-leads from the RMI and the US to develop a Climate Change Workplan, for review by each of the subsidiary bodies in 2024.

TCC20 outcomes included the following:

25. *TCC20 discussed the importance of implementing an assessment of CMMs susceptible to the impact of climate change, but expressed concern over:*
 - a. *the required Secretariat and SSP resources to support a comprehensive CMM assessment,*
 - b. *the value of the assessment,*
 - c. *how it would support the work of subsidiary bodies in providing advice to the Commission,*
 - d. *whether there would be a phased approach to a CMM assessment, and*
 - e. *the timeframe for completing an assessment.*

26. *TCC20 noted the draft Terms of Reference for the CMM assessment, presented in Attachment B in WCPFC-TCC20-2024-13. TCC20 noted that most CCMs consider these TORs were subject to a clear understanding of the issues outlined above (paragraph 25), and TCC20 requests the co-leads to present a revised version addressing these issues at WCPFC21 for the Commission's consideration.*

27. *TCC20 recommended the Commission consider a select number of CMMs for application of a climate change susceptibility assessment in 2025 once the Commission has endorsed the Terms of Reference referred to in paragraph 26 above.*

28. TCC20 welcomed the contributions from the USA and Chinese Taipei of financial resources to support the integration of climate change into fisheries management of the Western and Central Pacific Ocean.

Following these outcomes above and discussion at TCC20, the co-leads have updated the TORs. Specifically, edits have been made to the TORs to address TCC outcome 25(b), (c), (d), and (e) and TCC outcome 26.

The Assessment was originally proposed at WCPFC20 in paper WCPFC20-2023-DP-08 and was initially conceived of as a comparative exercise in which a subset of CMMs would be determined for further consideration by TCC in climate change discussions. The assessment is intended to consider issues that are known climate change impacts – like changes in species distributions or possible changes in species interactions – and use that information to identify which CMMs might benefit from further discussion (such as those CMMs with specific geographic boundaries).

The co-leads note extensive discussion at SC regarding the definition of terms to be used in the Assessment. Paragraph 18 of the TORs addresses concerns raised during those discussions. The co-leads envision an existing definition or framework will be adopted for the term “vulnerability,” noting the suggestion herein to use that term instead of “susceptibility.” For example, the IPCC Third Assessment Report¹ describes vulnerability as:

“The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.” (IPCC, 2001, p. 388).

Finally, the co-leads note that these TORs are not subject to any requirements associated with CMM proposals.

¹ IPCC, 2001: Climate Change 2001: Synthesis Report. A Contribution of Working Groups I, II, and III to the Third Assessment Report of the Intergovernmental Panel on Climate Change [Watson, R.T. and the Core Writing Team (eds.)]. Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA, 398 pp. Accessed via https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_TAR_full_report.pdf

Terms of Reference for a CMM Climate Change Vulnerability Assessment

Background

1. In 2024, WCPFC20 affirmed [Resolution 2019-01 on Climate Change as it Relates to the Western and Central Pacific Fisheries Commission](#) (WCPFC) by agreeing to develop a work plan (**Workplan**) and support an assessment (**Assessment**) of the susceptibility of WCPFC Conservation and Management Measures to the impacts of climate change ([WCPFC20 Outcomes](#)):

23. The Commission requested the Secretariat with the SSP explore the scope and feasibility of undertaking an assessment of active CMMs and to determine specific CMM provisions that may be susceptible to be impacted by climate change, and present the findings to the Science Committee, the Technical and Compliance Committee and the Commission.

24a. The Commission recommended co-leads are identified to develop a Commission workplan for addressing climate change on WCPFC fisheries in the Convention Area. The co-leads would use the WCPFC Convention and Resolution 2019-01 as guides for that work. The draft workplan would be discussed and considered by each subsidiary body in 2024, with a view to taking this to WCPFC21 for consideration. The work plan will include, but not be limited to; the scoping and feasibility study of an assessment of CMMs and their susceptibility to be affected by climate change...

2. These terms of reference (TOR) define the Scope, Objectives, Rationale, Methodology, Timing, and Resources of the Assessment.
3. In consultation with the Workplan co-Chairs from the Republic of the Marshall Islands and the United States (**co-leads**), the WCPFC Secretariat and Scientific Services Provider (SSP) have reviewed the scope and feasibility of an Assessment (WCPFC21-2024-12) as proposed at WCPFC20 ([WCPFC20-2023-DP08_Rev02](#)) and presented the findings to the Northern Committee, Scientific Committee, the Technical and Compliance Committee, and the Commission.
4. Following feedback from subsidiary bodies, the co-leads suggest this effort be henceforth referred to as a “CMM Climate Change Vulnerability Assessment.”

Scope

5. The scope of the Assessment:

- a. is limited to informing (*i.e.* not advising) the Commission and its subsidiary bodies as to whether specific provisions of conservation and management measures (CMMs) might be affected by climate change;
- b. does not prejudice or have any effect on members' implementation of obligations arising from specific conservation and management provisions;
- c. is not intended to initiate, or result in, renegotiation of CMMs; and
- d. will be limited to publicly available information such as adopted CMMs, published climate advice of the SSP, the ISC, and Scientific Committee, peer reviewed scientific literature, and Indigenous and traditional knowledge, including species climate vulnerability assessments and research on geographic shifts of species distributions.

Objectives

6. The Assessment will:

Review active WCPFC CMMs defined by the Commission and identify the specific provisions that could benefit from additional discussion among CCMs, as being vulnerable to climate change.

7. The Assessment is not intended to preclude any future consideration, evaluation, or prioritization of any CMM.

8. The Assessment will:

- a. Support discussions within the Technical and Compliance Committee, on undertaking one of its core functions: to provide the Commission with information, technical advice and recommendations relating to the implementation of, and compliance with, conservation and management measures (Convention Article 14.1(a), by identifying monitoring, control, and surveillance (MCS) data and information gaps and potential management challenges; and
- b. Support discussions within the Scientific Committee regarding scientific data and information gaps and research needs to improve understanding of impacts of climate change on assessed CMM provisions.

9. The Assessment will focus on improving the Commission’s understanding of how climate change impacts might affect existing CMM provisions, and does not intend to derive in discussions on how those changes may affect the subsidiary bodies’ ability to assess compliance with them.

Rationale

10. With the continued dynamic changes of marine environments due to climate change and the potential vulnerability to climate change of species, ecosystems, and CMMs, the Commission has identified a need for work that aims to ensure that relevant information and data collection are adequate to support improved and updated understanding by the Commission on the impacts of climate change and implications for the management of WCPFC fisheries.
11. The value of this Assessment will be in identifying the MCS and scientific data and information gaps, research needs, and potential management challenges to improve CCM’s understanding of the vulnerability to climate change of certain CMM provisions, and which CMMs might benefit from further discussion (*e.g.*, in area of application, species of focus, or mechanism of implementation), to ensure continued sustainable management of WCPFC fisheries into the future.

Methodology

12. The Assessment will:
 - a. compile available advice from the SSP, the ISC, and the Scientific Committee, peer-reviewed scientific literature, and Indigenous and traditional knowledge (following collective benefit, authority to control, responsibility, and ethics principles; known as the CARE principles), including but not limited to, species climate vulnerability assessments and research on geographic shifts of species distributions and other climate impacts on fisheries managed by the Commission,
 - b. review and analyze CMM provisions available via the WCPFC website in the context of 12(a); and
 - c. provide to WCPFC and its subsidiary bodies a list of active CMM provisions with an explanation of any identified potential climate vulnerabilities associated with specific provisions.
13. The vulnerability of CMMs to climate change has not been explored or discussed by the Commission. As a first step towards focusing the work of CCMs, this Assessment will provide a definition of “vulnerability” to be used for the Assessment.

14. The Consultant will use available science and existing resources (as specified in paragraph 12 (a), and consistent with the outcomes of paragraph 13) to select a definition for “vulnerability” to be used for the Assessment. The definition will be included in initial Assessment outcomes for consideration by CCMs.
15. In assessing the “vulnerability”, the Assessment will consider, but not be limited to, whether provisions of WCPFC CMMs are implemented based on:
- a. certain target or bycatch species,
 - b. specific geographic areas,
 - c. different gear types,
 - d. review period, or
 - e. any mention of climate.
16. The deliverables of the consultancy will be (a) a WCPFC-relevant framework for assessing CMM provisions’ vulnerability to climate change using the best available information per paragraph 12(a), including a definition for “vulnerability” to be used for the Assessment as described in paragraphs 13 and 14, (b) a list of the specific CMM provisions identified as being vulnerable to climate change that could benefit from additional discussion among CCMs, (c) the identification of MCS and scientific data and information gaps, research needs, and potential management challenges, including in instances where more information would improve the Assessment, and (d) after assessing CMM provisions, the Consultant will also suggest minimum/sufficient information required to be able to categorize CMM provisions as either being “vulnerable” or “not vulnerable” to climate change, as appropriate.

Timeline

17. The proposed timing for the Assessment to support CCMs in discussions at the Commission and its subsidiary bodies’ meetings is as follows:

| Timing | Description |
|---------------|---|
| January 2025 | Initiate the Consultancy and Assessment of the initial subset of CMMs. |
| February 2025 | Initial compiled list of available information sources (paragraph 12a) in a bibliography and targeted literature review. |
| March 2025 | A WCPFC-relevant framework for assessing CMM provisions’ vulnerability to climate change using the best available information, per paragraph 12(a), including a definition for “vulnerability” to be used for the Assessment. |

| | |
|------------------------|---|
| April 2025 - June 2025 | <p>A list of the specific CMM provisions identified as being vulnerable to climate change that could benefit from additional discussion among CCMs.</p> <p>The identification of MCS and scientific data and information gaps, research needs, and potential management challenges, including in instances where more information would improve the Assessment.</p> <p>Suggested metrics of minimum/sufficient information required to be able to categorize CMM provisions as either being “vulnerable” or “not vulnerable” to climate change, as appropriate.</p> |
| June - September 2025 | Results from the Assessment of at minimum the CMMs defined by the Commission provided as information papers to support CCMs during discussions at NC21, SC21, TCC21 and WCPFC22. |
| 2026 | Iterate the Assessment to apply to additional CMMs as directed by the Commission. |

Resources

18. The Assessment will be completed by a consultant hired by the Secretariat and completed with a narrow scope as described above. Funding is available to provide compensation for this work through the use of voluntary contributions already made to WCPFC.

19. The Assessment will be overseen by the WCPFC Secretariat in consultation with the SSP and ISC, and the outcomes will be provided for CCMs’ consideration during Commission and subsidiary body meetings.