



15th SPC Heads of Fisheries Meeting
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Information paper 2

Assessment of climate change vulnerability of Pacific Ocean resources – 10-year update

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Assessment of climate change vulnerability of Pacific Ocean resources – 10-year update

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Task/Deliverable: D4 – D5

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Deliverable description: Inception process with Pacific Island stakeholders, provide regular updates. D4: Heads of Fisheries paper and input (10/02/2023). D5: Regional Fisheries Ministers input (10/02/2023) and Regional Technical Meeting on Coastal Fisheries and Aquaculture input (15/02/2023).

Report:

D4: Heads of Fisheries paper and input

An update on the work was provided to Heads of Fisheries 14 as detailed below. Input was received at the meeting from members and continues to be received via the national contact point system established by HoF 14.

Heads of Fisheries The 14th SPC Heads of Fisheries Meeting was held 14–17 June 2022 and included working paper four on [FAME's work programme on climate impacts on Pacific fisheries and ocean ecosystems](#) and the [associated presentation](#).

The paper (see Annex 1 of this report for full extract) provided an update to Heads of Fisheries on the work of FAME and its partners to assist SPC members with enhancing the technical information for adapting their fisheries management to climate impacts. A summary of progress towards achieving the HoF13 endorsed “climate” work programme was provided along with a description of the new regional climate initiatives for fisheries. This included...*the Australian Department of Foreign Affairs and Trade “Assessment of climate change vulnerability of Pacific Ocean resources – 10-year update”*. These new initiatives will require consultation with each national agency and with other regional organisations and stakeholders to ensure their outcomes meet the needs of SPC's members.

Noting that all recent climate initiatives require regular and ongoing consultation with members to ensure they meet their needs, members and partners discussed a consultation process that would meet the requirements of the portfolio of all projects and alleviate consultation fatigue, maximise efficiencies and ensure that duplication of activities is avoided.

In response, Heads of Fisheries agreed to allocate at least one senior staff member within each national fisheries agency to be the focal point for liaison with SPC, Conservation International (CI) and other project partners regarding all activities associated with development and delivery of the climate change programme detailed at HoF14 ([Hof Outcomes 14g](#)).

D5: Regional Fisheries Ministers input

The Third Regional Fisheries Ministers Meeting (RFMM) was held from 11-11 August 2022. SPC tabled an update on the 14th Heads of Fisheries meeting in working paper one, which included explicit mention of the vulnerability assessment (page 4). The CROP agencies also tabled working paper four *The Ocean-Climate Nexus - Learning from COP26 to engage effectively at COP27*. The paper highlighted that Leaders, Regional Fisheries Ministers and officials continue to be updated on the climate change impacts on the fisheries sector and the on-going work by CROP agencies and partners in supporting Pacific Small Island States (PSIDS) in: i. improving technical information on the impacts of climate change on fisheries and aquaculture; ii. safeguarding fisheries rights and entitlements under the UNCLOS; iii. climate finance opportunities for adaptation in the fisheries and aquaculture sector; and iv. opportunities for enhanced engagement by the fisheries sector in the climate change space.

Officials took the opportunity of this first hybrid/face-to-face meeting to reinforce clarity of what climate change is and, thus the required technical information needed to manage for the impacts of climate change.

Climate in a narrow sense is usually defined as the average weather, or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities (temperature, precipitation, wind etc.) Climate in a wider sense is the state, including a statistical description, of the climate system. (IPCC definition). The climate system is a highly complex system consisting of five major components: the atmosphere, the hydrosphere, the cryosphere, the lithosphere and the biosphere and the interactions between them. (IPCC definition). The ocean is therefore an integral part of the climate. For Islands, (and coastal areas of continental landmasses), the local climate is dependent on the atmosphere and the ocean (hydrosphere). Around tropical islands, the ocean and atmosphere are tightly coupled, and ocean circulation and temperature patterns often drive weather patterns (ENSO for example). As a result, for tropical island states, the ocean really is the climate.

Further to the working paper one update, and the general discussions on climate change throughout the meeting, the Australian DFAT participant in the meeting mention the vulnerability assessment across the floor at two key points in the meeting, and the broader membership thanked Australia for contributing to the region with this targeted and needed technical support.

In terms of outcomes, *Ministers commended the One CROP effort in climate change impacts on fisheries knowledge generation, and the provision of regional tools that convert current information into ready-made solutions for climate change adaption in fisheries, and aquaculture policies, planning and management* (note - this includes *inter alia* the vulnerability assessment). In a linked outcome and work which also draw on the vulnerability assessment, *Ministers requested CROP agencies work with partners to develop a strategy to investigate different approaches to address loss and damage to fisheries caused by climate change.*

D5: Regional Technical Meeting on Coastal Fisheries and Aquaculture input

The 5th SPC Regional Technical Meeting on Coastal Fisheries and Aquaculture was held from 11–14 October 2022. A key input in advance of the discussions was a survey of their priority needs for coastal fisheries and aquaculture. Summaries of those needs were reflected in papers and discussions at the meeting. There were not specific outcomes with respect to this project, however climate change vulnerability was a common factor in many discussions, and all priority actions included elements of building resilience informed by the latest information and assessment of vulnerability.

Annex 1 – para21-27 of HoF working paper four

The Australian Department of Foreign Affairs and Trade “Assessment of climate change vulnerability of Pacific Ocean resources – 10-year update”

21. The Australian Government has agreed to support the update the 2011 Assessment of climate change vulnerability of Pacific Ocean resources (coordinated with the oceanic fisheries assessment which is supported through the New Zealand initiative described above).

22. The update includes coastal fisheries and habitats and aquaculture technical analyses, and implications for food security, livelihoods and adaptation. This will involve completing a technical re-analysis, review, collation and synthesis of current climate science, coastal habitats, fisheries and demographic data to input to the updated assessment that can be extended as an online resource. The update will include coastal habitats (coral reefs, seagrass, mangroves) that support fisheries, how they are projected to change due to climate change and implications for food security and livelihoods. Linked to the coastal fisheries analysis is the technical re-analysis, review, collation and synthesis of current aquaculture data from all PICTs and the vulnerability to the latest climate change projections to input to the updated assessment. The aquaculture update is proposed to be conducted through the CFAP Aquaculture team. The coastal fisheries and habitat component is proposed to be undertaken by both CFAP and a specialist consultant team from C2O Pacific.

23. The project will include a science management and editorial services component which will be based part-time at SPC Noumea in the FAME Division. It will coordinate all the technical science analysis components to deliver a comprehensive assessment for the Pacific region and all 22 PICTs. The position will be responsible for coordinating the different analyses (including for oceanic fisheries), input from technical experts through a Technical Working Group, guiding and leading the science writing process with all authors, compiling the sub-sectoral analyses into summaries for each PICT, and coordinating the design and publication process within SPC requirements. The Editorial role will need to be appointed at the start of the project for a period of 2 years, will report directly to the SPC FAME Division, and will most likely be under a contractor arrangement.

24. Resourcing for publication and extension of results includes design and layout of publication (either as an e-book or printed), supporting infographics and an interactive web tool. The dissemination of the project results is expected to be varied and will be outlined in a Communication Strategy to be developed early in the project, and could include additional products such as videos, fact sheets etc. The publication of outputs is proposed to be delivered by the SPC publications team (potentially with external provider for some elements) and would align with the SPC Communication Guidelines.

25. Project completion is expected by December 2023, with an official launch in early 2024.

26. The results of this project along with the oceanic vulnerability assessment will be important contributors to the climate rationale to be included in the Funding Proposal for the GCF regional tuna programme.

27. This initiative will also need to preferably follow a “bottom-up” process so that outcomes and outputs best support member needs. To facilitate this dialogue, it would be preferable for a senior staff member within each national fisheries agency to be the focal point for liaison with SPC and the project team.