



**SCIENTIFIC COMMITTEE  
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**Update on capacity building and stakeholder engagement activities for WCPFC  
harvest strategies**

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**WCPFC-SC19-2023/MI-IP-05  
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## Stakeholder engagement and capacity building objectives

WCPFC17 agreed to a workplan for the adoption of harvest strategies for WCPO skipjack, bigeye, yellowfin and South Pacific albacore tuna. A key component of this work is stakeholder engagement and capacity building for WCPFC members, as during the harvest strategy development process WCPFC members are required to make a range of informed decisions, including those related to the desired management objectives, performance indicators, management strategy evaluation (MSE) framework, development of candidate management procedures (MP) and harvest control rules (HCRs), and the selection of a preferred MP. Many of these decisions require a two way dialogue between scientists and decision makers from member countries and territories.

SPC supports the development of WCPFC harvest strategies through the New Zealand Ministry of Foreign Affairs and Trade (MFAT) funded project “Pacific Tuna Management Strategy Evaluation”. Under this project, a stakeholder engagement strategy was developed in June 2018, following discussions between SPC and FFA, and has been used to guide project engagement activities. This included a suggestion to initialise a science-management dialogue (SMD) process for fishery managers and the wider stakeholder group to define key aspects of the harvest strategy process (SPC, 2018; SPC and Secretariat, 2018).

Feedback from WCPFC members indicates that capacity building remains a high priority and is needed for the harvest strategy workplan to be progressed. In particular, the need was recognised for additional time to build capacity and a sound understanding of harvest strategy components and consequences among stakeholders.

The focus of the capacity building and stakeholder engagement activities have changed as the development of the harvest strategies has progressed.

An interim MP for WCPO skipjack was adopted by the WCPFC at the end of 2022. Training and engagement activities in 2022 therefore targeted decision makers and provided advice around the use of performance indicators to select preferred MPs, based on how well they may achieve management objectives. These activities elicited member input on a number of issues and provided valuable input to the harvest strategy development process. With an MP for one of the stocks now adopted, albeit in an interim fashion, it is hoped that Commission members have become more familiar with the harvest strategy development process.

The current harvest strategy workplan suggests that the MP for South Pacific albacore will be adopted by the end of 2024. To support this target, capacity building and engagement activities may be needed on a number of topics including the selection of a target reference point, MP design and performance indicators.

This report updates WCPFC-SC17-2022/MI-IP-10 (Scott et al., 2022a) and describes the stakeholder engagement and capacity building activities undertaken by SPC since August 2022, with support from FFA, the challenges that are faced, and proposed future activities.

Members are encouraged to contact SPC, for example through the harvest strategy email address (fame-harvest-strategies@spc.int), if they have any questions or would like to discuss any elements of harvest strategies.

## Current stakeholder engagement and capacity building activities

### National and regional workshops and seminars

Since 2018, 17 national capacity building workshops have been conducted, with support from FFA (Table 1). Covid-19 related travel restrictions have now been relaxed meaning that in-country workshops are again possible.

These workshops have typically been conducted over two or three days. However, it is possible to arrange shorter workshops. For example, an informal two or three hour talk on-line can be used to address specific topics and will be easier to organise.

Table 1: National harvest strategy capacity building workshops conducted since 2018.

Member	Date	Type
Kiribati	July, 2018	In person
Solomon Islands	October, 2018	In person
Federated States of Micronesia	March, 2019	In person
Marshall Islands	March, 2019	In person
Cook Islands	May, 2019	In person
Kiribati	September, 2019	In person
Fiji	February, 2020	In person
Tonga	March, 2020	In person
Papua New Guinea	March, 2020	In person
Tuvalu	October, 2020	On-line
New Caledonia	February, 2021	In person
Solomon Islands	May, 2021	On-line
Palau	June, 2021	On-line
French Polynesia	May, 2022	On-line
Federated States of Micronesia	June 2022	On-line
Samoa	March 2023	In person
Kiribati	May 2023	In person

As well as national capacity building workshops, additional training workshops and engagement activities have been conducted, including online meetings with Japan and the EU.

The first SMD was held in August 2022 after SC18 ([WCPFC, 2022](#)). This meeting provided essential input to the selection and development of candidate management procedures (MPs) for skipjack.

The SPC harvest strategy team has been closely working with members to develop elements of the South Pacific albacore harvest strategy, in particular through the South Pacific Group (SPG) and SPA-IWG. This kind of engagement is particularly useful to SPC as it provides input to the harvest

strategy development process.

Training workshops have been conducted under the West Pacific East Asia Project (WPEA) for members from Indonesia, Phillipines and Vietnam (in-person, March, 2023).

## Capacity building tools

The interactive R-Shiny training tools developed by SPC have continued to be updated (Scott et al., 2022b). These tools allow users to explore the development and performance of HCRs and MPs and have been used in training workshops. Self-guiding tutorials are also available via the tool websites to support learning outside of the workshops.

The tools include:

- Introduction to Harvest Control Rules (<https://ofp-sam.shinyapps.io/AMPLE-intro-hcr/>)
- Introduction to Performance Indicators (<https://ofp-sam.shinyapps.io/AMPLE-measuring-performance/>)
- Comparing Performance of Management Procedures (<https://ofp-sam.shinyapps.io/AMPLE-comparing-performance/>)

## Decision making tools

A key component of the harvest strategy process is selection of preferred MPs using performance indicators. To help facilitate adoption of the interim skipjack MP at the WCPFC meeting in December 2022, the interactive decision making tool developed by SPC, PIMPLE, was updated to include the candidate MPs and robustness test results. The updated version now also includes the interim MP: [https://ofp-sam.shinyapps.io/PIMPLE\\_WCPFC19/](https://ofp-sam.shinyapps.io/PIMPLE_WCPFC19/)

One of the important elements of the harvest strategy process is the development of operating models used in the Management Strategy Evaluation (MSE). An online tool has been developed that allows users to explore the current operating model grid for South Pacific albacore: (<https://ofp-sam.shinyapps.io/spa-oms/>) (Natadra et al., 2023).

## Harvest strategy Moodle course

Moodle is a widely used on-line learning platform that facilitates the delivery of training materials in multiple formats. An ‘Introduction to Harvest Strategies’ training course has continued to be developed using the SPC’s Moodle site. This has become a key source of reference and learning material for WCPFC members and currently contains information on many aspects of harvest strategies, including management objectives, performance indicators, reference points, MPs and MSE.

It is possible to access the course from the main page by using a guest login: <https://spc.learnbook.com.au/login/index.php>.

## **Pacific Island Fisheries Professionals**

Pacific Island Fisheries Professionals (PIFP) are one year positions at SPC where the PIFP works alongside SPC staff on a specific project, before returning to their home country. In contrast to the training workshops described above, the PIFP positions provide a long-term type of capacity building but for only a very small number of people.

In 2022 a new PIFP was recruited to the SPC harvest strategy team: Raijeli Natadra from Fiji. Raijeli has already made an impact in the team by supporting the capacity building workshops and has contributed to a number of SC papers, as well developing the online tool that explores the South Pacific albacore operating models.

## **Harvest strategy training films**

Two harvest strategy training films that focus on using PIMPLE to explore and select skipjack MPs were completed and released by SPC in 2022. These films supported the adoption of the interim skipjack MP by the WCPFC and are available on the SPC YouTube channel (<https://www.youtube.com/watch?v=xs9aNuIPMqg> and <https://www.youtube.com/watch?v=zhQCmThqStQ&t=6s>).

A film on the importance of harvest strategies in the Pacific was produced by SPC and the Ocean Foundation and is available here: <https://www.youtube.com/watch?v=fHkjguWG1JM>. This film features familiar faces from around the region, including scientists and representatives from industry and regional bodies.

## **Additional engagement material**

The harvest strategy Slack group continues to provide an informal communication channel with members. Please contact Finlay Scott at SPC ([finlays@spc.int](mailto:finlays@spc.int)) if you would like to join.

## **Challenges**

There are several challenges and barriers to the stakeholder engagement and capacity building that SPC is working to address.

Challenges to future training workshops include scheduling sufficient time given the busy regional calendar. For example, there have been instances of national training workshops being rescheduled or cancelled at the last minute due to other commitments.

Additionally, most workshops participants do not work on harvest strategy related topics on a regular basis and exposure to harvest strategies can be sporadic. It is recognised that follow-up training and additional support material is also important. To this end, additional training materials have been developed, such as the use of the Moodle and interactive training tools.

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