





SPC FAME priorities and emerging work areas 2024

Neville Smith

Director
SPC FAME division

Graham Pilling

Deputy Director
Oceanic Fisheries Programme

Andrew Smith

Deputy Director Coastal Fisheries & Aquaculture Programme

Working Paper No. 3





2050 Strategy for Blue Pacific Region

National Development Plans

Regional fisheries and aquaculture frameworks

National fisheries and aquaculture plans

Routine member requests

SPC Strategic Plan 2022–2031

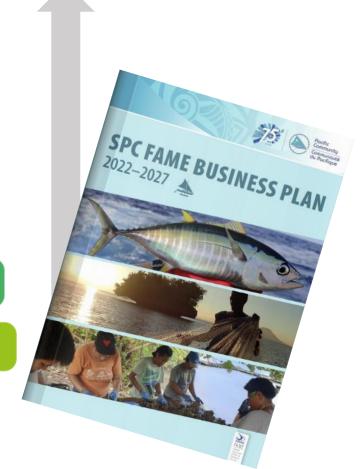
SPC Strategic Results Framework

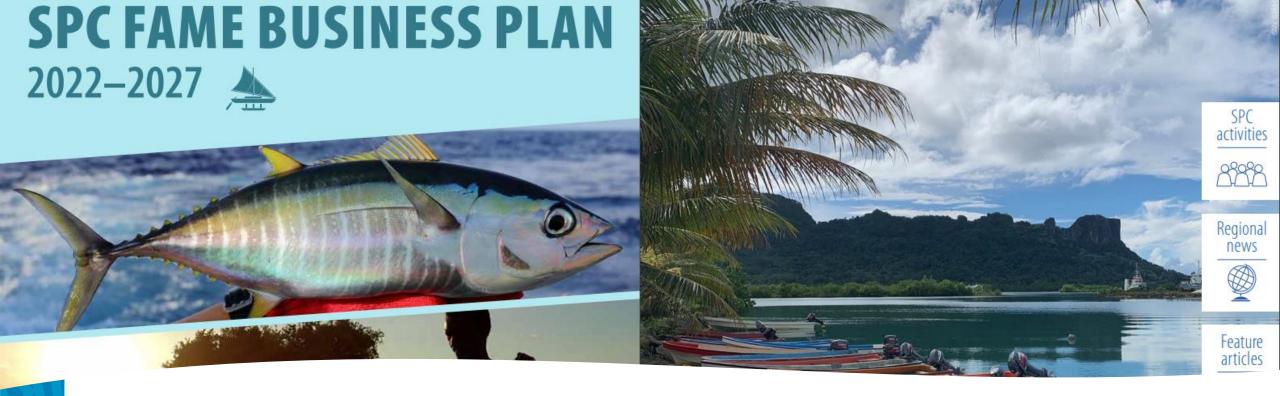
Business Plan 2022–2027 and Results Framework

CFAP and OFP long-term plans (five-year plans)

Annual implementation plans and budget

Section annual work plans





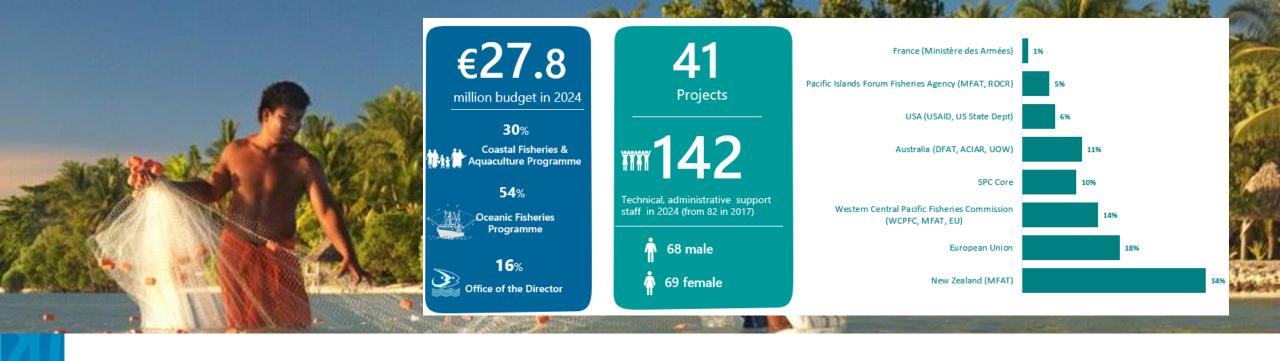
Director's Office priorities in 2024

Guiding Te Wa

- Placing FAME in the work of broader SPC, Regional Offices, other Divisions, and CROPS
- Strategic oversight and direction setting
- Integrate SPC FAMEs work into SPC flagship programmes

Information and knowledge section

- Production of reference newsletters and information bulletins that highlight some of the most exciting research and case studies on marine-related topics of interest in the region
- Production of scientific and technical reports to assist members and other SPC FAME sections, as well as other paper-based information tools
- Production of tailor-made information for communities, in line with the New Song recommendations, using additional materials such as interactive videos, animated films



Director's Office priorities in 2024

Planning, Monitoring, Evaluation and Learning

- Supports FAME with MEL in generating evidence, facilitate talanoa on learning and reflection, communicate
 results to members and stakeholders, while improving systems and tools, enhancing FAME capacity and
 capability
- Support FAME visibility and enhance ongoing collaboration with CROP agencies
- Resource mobilisation concept and proposal writing, tracking projects and grants, documentation
- Support the development and implementation of annual and long-term plans including Implementation Plan and SPC FAME Business Plan 2022-2027
- Pacific Fisheries Leadership Programme enhancing capacity and capability of regional fisheries leadership

Finance and Administration

- Budgeting and expenditure tracking, financial reporting, audit and risk
- Procurement support and administration
- Logistical management for travel and meetings



Director's Office priorities in 2024

• Strategic science assets

- Renovation and expansion of fisheries laboratory
- Tuna tagging research vessel
- Regional fisheries and aquaculture science facility



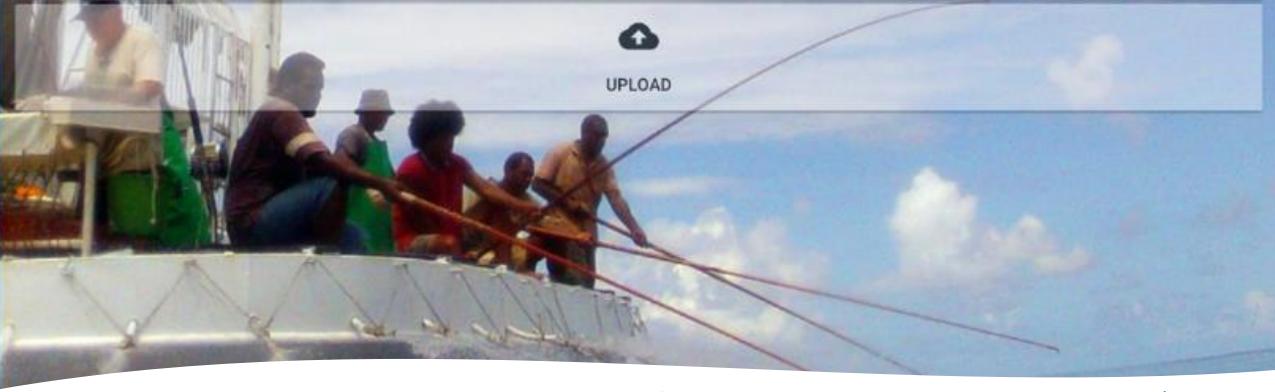
Oceanic Fisheries Programme (OFP) priorities in 2024

- Provide scientific advice on stock status and impacts of fisheries and environment on both non-target species and pelagic ecosystem.
- Work closely with members at national level and through various regional and subregional fisheries organisations – e.g. WCPFC, FFA, PNA, SPG.
- Providing best available scientific information and advice to help inform short-term and long-term options and maintain healthy oceanic resources and ecosystems.
- National science capacity building to continue to build the region's skill sets.
- OFP delivers its work programs through three sections Fisheries, Ecosystems Monitoring and Assessment (FEMA), Data Management (DM), and Stock Assessment and Modelling (SAM)



Fisheries Ecosystem Monitoring and Analysis (FEMA)

- Providing updated biological inputs for stock assessment and scientific advice –
 including tuna age and growth, reproduction, movement, diet and trophic ecology –
 aided by <u>renovated lab facilities</u> and expanded <u>tissue bank</u>.
- Modelling impacts of environment variations, including <u>climate change</u>, on tuna and the pelagic ecosystem, and enhanced climate change monitoring – including work plan for <u>CC indicator testing</u>.
- Cutting edge science application of genomics and molecular ecology e.g. CKMR, epigenetic ageing – and the <u>regional infrastructure</u> needed to deliver this.
- Bycatch impacts and wahoo and mahi mahi ecology and vulnerability.
- Investigating the impact of methyl mercury and micro/nano-plastic <u>contamination</u> of tuna and other fish stocks, including the health implications of the Pacific island communities.



Data Management (DM)

- Ongoing enhancement of <u>TUFMAN 2</u> and <u>support</u> to member countries to manage/report on their integrated tuna fishery data.
- Seamless <u>database systems migration</u> to ensure ongoing functionality and security.
- Enhancing <u>E-Reporting tools</u> developed by SPC in response to member country requests, <u>support to E-Monitoring systems</u> (incl third party systems) for seamless data acquisition.
- Evaluating <u>utility of LL E-Monitoring data</u>, given WCPFC TT CMM 'bigeye catch limit' decisions.
- Data management support to the WCPFC, which also covers the direct support to member countries in satisfying WCPFC reporting obligations.
- <u>Data visualisation</u>, analysis and reporting including alerts.
- Pursuing cannery receipt data to verify estimates of purse seine tuna species catch.



Stock Assessment and Modelling (SAM)

- Regional <u>stock assessments</u> of tuna, billfish, and sharks to inform scientific advice on current stock status and fishery sustainability within the WCPO
- Harvest strategy work for key tuna stocks and fisheries, including SP albacore following adoption of the harvest strategy approach by WCPFC
- National-level analyses and advice to address specific national requests
- Ongoing research and analysis on <u>Fish Aggregation Devices</u> (FADs) to increase knowledge and support decision-making on FAD related issues
- Development of <u>new stock assessment tools</u> to ensure that regional WCPO assessments remain at the forefront of international best practice



Coastal Fisheries and Aquaculture Programme (CFAP) priorities in 2024

- Science and technical support for management of coastal fisheries, and the sustainable development of coastal fisheries, aquaculture and nearshore livelihoods
- Support PICTs to effectively manage and equitably benefit from coastal fisheries and aquaculture resources, using emerging technology, community engagement, evidence-based management, and people-centered approaches
- End of Pacific European Union Marine Partnership (PEUMP) programme, and the 3rd year of Sustainable Coastal Fisheries and Aquaculture for Pacific Livelihoods, Food and Economic Security (SCoFA) and the Pacific Coastal Fisheries Management and Compliance (PaFMaC)
- CFAP sections: Aquaculture; CFAP Science; and Coastal Fisheries Management and Livelihoods. Supported by Information and Database Management and Coastal fisheries economics



Aquaculture

- Regional and national capacity in aquaculture policy, planning, MCS and legislation to facilitate the
 establishment of clear priorities for aquaculture to meet current and future needs
- Facilitate the development of the **Pacific Regional Aquaculture Strategy** through a consultative process
- Enhance the **management of aquatic biosecurity risks** supporting the application and mid-term review of the **Regional Framework on Aquatic Biosecurity**; strengthening **risk analysis capacity** and assess aquatic biosecurity needs and practices
- Provide technical and analytical support for aquaculture to facilitate production and economic sustainability
- Identify and promote aquaculture practices that are climate resilient and help mitigate climate change (such as nature positive, non-fed aquaculture and carbon sequestration)



Coastal Fisheries Management and Livelihoods

- Strengthen PICT coastal fisheries and aquaculture management arrangements, through support and training on reviewing and drafting policies, management plans, legislation and regulations, and training in monitoring, control, surveillance and enforcement activities
- Expand the support for implementing **effective CBFM scaling-up approaches** aligned with the **Pacific Framework for Action on Scaling-up Community-based Fisheries Management**; expand and enhance the **Echoes of Oceania CBFM web portal**
- Support sustainable livelihoods opportunities, strengthening national anchored FAD
 programmes; training for key nearshore fisheries; capacity enhancement and support in safe,
 sustainable fishing methods; exploring alternative target species; and developing nonextractive uses of coastal fisheries resources
- Explore the advantages of and trial emerging technology in monitoring and detecting offences



Coastal Fisheries and Aquaculture Programme

Science

- Build the **CFAP science capacity and capability** to support PICT requests
- Science foundations for a standardised approach to sustainable, evidence-based coastal fisheries management
- e-tools and approaches for online data entry; standardised data collection; data and information quality control; and analysis and dissemination for management decision-making
- Support PICTs to conduct **fisheries independent** (in water surveys) and **fisheries dependent** (market and creel surveys) assessments, through **online learning software** and conducting virtual and **in-person training**
- Assist members to assess and manage finfish and invertebrate resources and their associated habitats to inform management through resource assessments, data analysis, interpretation, training, mentoring and advice



Information and Database Management

Economics

- Innovation in small-scale fisheries catch data collection, including the use of artificial intelligence (AI) and machine learning tools to semi-automate data entry by predicting species, reading scales, and calibrating images for length measurements
- Collation of the biology, exports and regulations of targeted species in an online database, along with associated tools--weight and length conversions between wet and processed product; suggested minimum sizes--online module expanded to extract biological sampling data
- Exploring the development of tools and methodologies to assist with **tracing commercial products to improve monitoring** and to facilitate enforcement
- Provide **economic advice, analysis and assessment** of coastal fisheries and aquaculture activities

Recommendations





Members are invited to:

- Review the priorities and emerging work areas in 2024 and beyond
- Make suggestions on strategic direction, and
- Endorse the priorities and emerging work areas in line with SPC-FAME Business Plan 2022-2027

