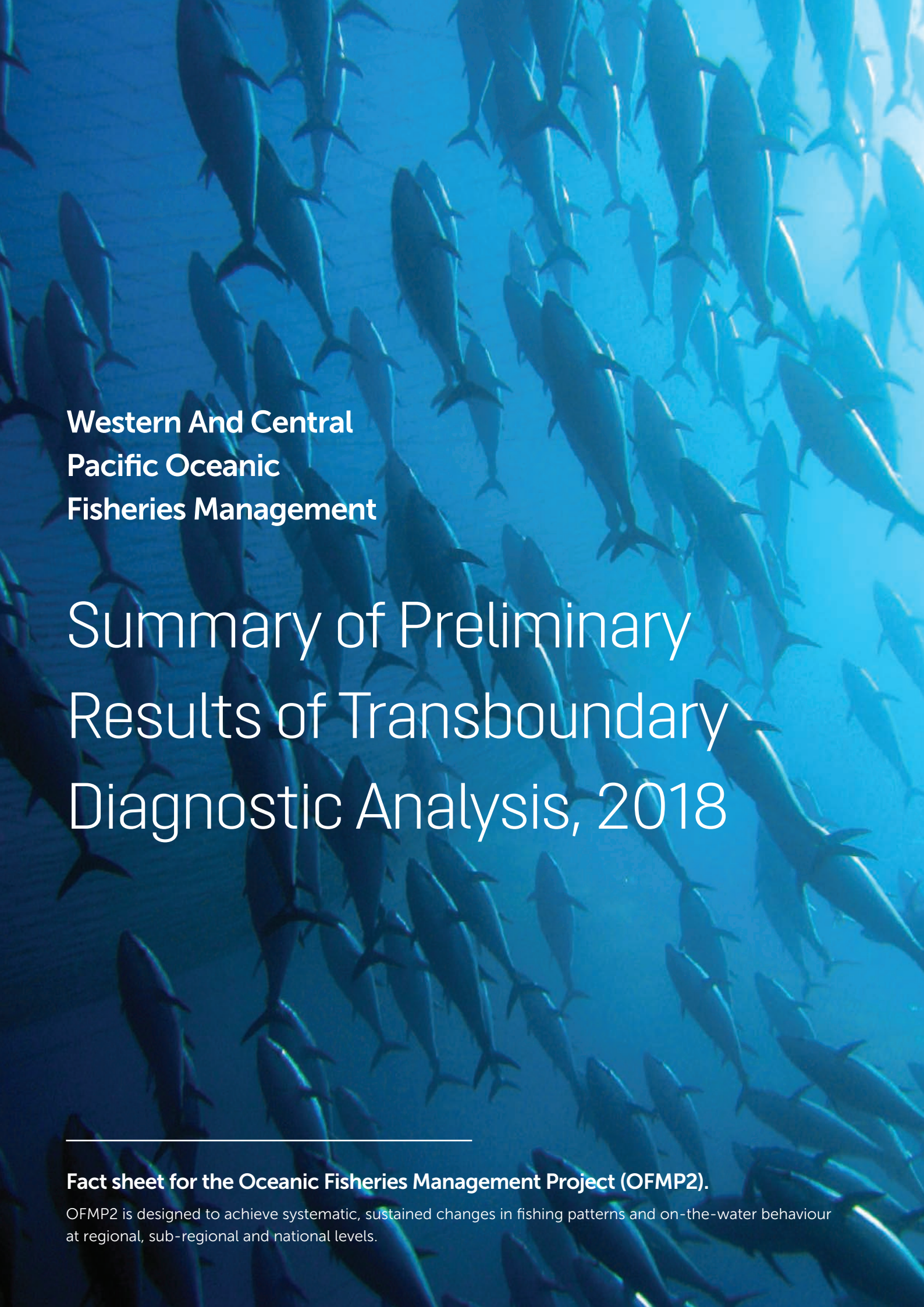


Western And Central Pacific Oceanic Fisheries Management

Summary of Preliminary Results of Transboundary Diagnostic Analysis, 2018

Fact sheet for the Oceanic Fisheries Management Project (OFMP2).

OFMP2 is designed to achieve systematic, sustained changes in fishing patterns and on-the-water behaviour at regional, sub-regional and national levels.

The Western and Central Pacific Oceanic fisheries, which involve harvesting of highly migratory tuna populations, are currently assessed as sustainable. This is thanks to 20 years of action by Pacific Island States and Territories (PICTs) working together under the 2004 agreed Convention, and with the support of the Forum Fisheries Agency (FFA) and the Pacific Community (SPC). Keeping these fisheries sustainable requires action to:

- Improve fisheries management and compliance
- Understand, assess, model and adapt to the impacts of climate change on the fish stocks
- Base fisheries management on a better understanding of the oceanic ecosystem
- Identify, mitigate and reduce land and marine-based pollution and activities that impact on the migratory tuna stocks.

What is a Transboundary Diagnostic Analysis (TDA)?

Tuna are highly mobile species that can move large distances. Tuna fisheries are not contained within one country's Exclusive Economic Zone (EEZ) and will move through many EEZs as well as the high seas. This makes tuna fisheries a 'transboundary problem'.

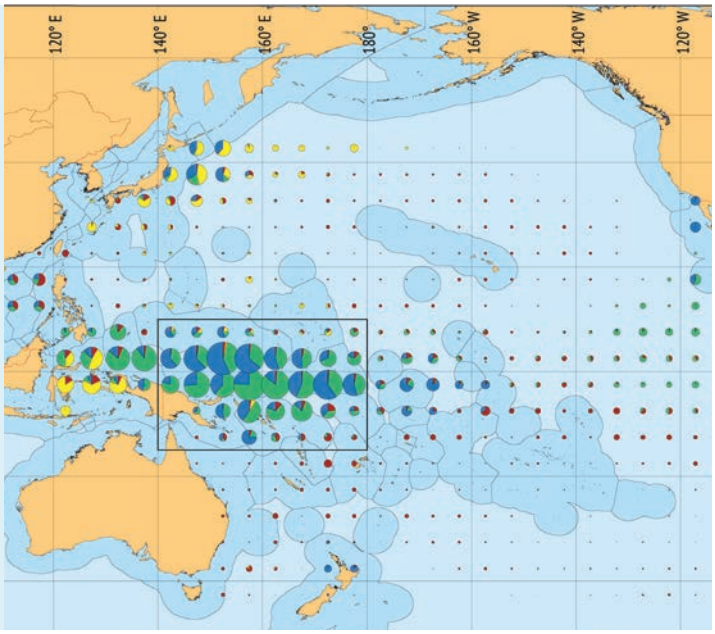
Longline caught tuna destined for the Japan sashimi market (photo: David Power, FFA)

A diagnostic analysis of a transboundary problem:

1. Identifies, confirms and prioritises the **threats**
2. Interprets the environmental and socio-economic **effects** of each threat
3. Finds the practices that drive the **root causes** of each threat
4. Defines proposed potential **actions** for reducing the root causes of threats

A TDA is a technical and factual document that is agreed by the countries involved. It is not a formal policy or action document.

This TDA focuses on the migratory tuna stocks in the Western Central Pacific Fisheries Commission (WCPFC) area. More than 50% of the world's commercial tuna supplies are harvested here. The Western Tropical Pacific Warm Pool ecosystem straddles the WCPFC and provides about 90% of the catch of tuna and other oceanic species in the Convention area.



TDA Notes Current Tuna Fisheries Sustainable Due to Past 20 Years of Action

David Vousden

Professor of Ocean Governance at Rhodes University in South Africa and consultant to United Nations on ocean and coastal management and governance. David was contracted to complete the TDA in 2018.

He says: "There are two important observations that can be made regarding the fishery since the Convention [WCPFC] came into force in 2004. Firstly, all the available scientific monitoring evidence and modelling supports the conclusion that the tuna fishery in the Convention area is sustainable and is currently not being overfished. Secondly, this is down to the fact that the countries, regional fisheries bodies and partnering agencies have been working closely together through this Convention to effectively implement the various activities and requirements in terms of monitoring and managing the fisheries, both within their EEZs and in the high seas as well".

Western and Central Pacific Fisheries Threats, Effects, and Root Causes

Threat	Effects	Root causes
Risk of overfishing due to gaps in scientific understanding, lack of compliance, limitations of data	Collapse in fisheries revenue and livelihoods	1. Weaknesses in management and compliance, especially on high seas 2. Inadequate application of ecosystem management
Bycatch of non-target species (e.g. other fish like Marlin, turtles, sharks, sea birds) unknown or too high	Loss of food sources for PICTs Loss of species important to healthy ecosystems (e.g. sharks at top of food web)	1. Weaknesses in management and compliance, especially in high seas 2. Inadequate application of ecosystem management
Change in the range and distribution of tuna stocks, likely expanding and moving east	Increased access to tuna stocks in the eastern area (e.g. Kiribati) Decreased access to tuna stocks in western area (e.g. PNG)	3. Climate change impacts
Decrease in the ocean's productivity, including the amount of food available for tuna	Lower fishery yields and catch per unit effort (CPUE) Decline in market supply of tuna	3. Climate change impacts
Decline in ecosystem health	Reduced services provided by ecosystem Loss of biodiversity Threats to PICTs' food security and livelihoods Threats to national and regional economies	1. Weaknesses in management and compliance, especially in high seas 2. Inadequate application of ecosystem management 3. Climate change impacts 4. Coastal activities and pollution affecting ocean ecosystem 5. Waste disposal and pollution at sea
Coastal degradation and pollution affecting coastal marine species, which may be important as part of the oceanic food chain, and important for local subsistence and artisanal fisheries	Reduced food available for oceanic food webs Threats to PICTs' food security and livelihoods	4. Coastal and land-based activities and pollution affecting ocean ecosystem
Pollutants and toxins killing target and non-target species	Threats to PICTs' food security and livelihoods	5. Waste disposal and pollution at sea

Range of Actions to Tackle Root Causes

1. Weaknesses in management and compliance, especially in high seas

- Take a precautionary approach with stronger long-term management that includes full implementation of a harvest strategy
- Improve catch documentation and traceability, leading to improved eco-labelling
- Negotiate more effective practices for allocating and managing high seas longline fisheries
- Improve and increase data on catch, effort, bycatch, unloading and transhipment, etc
- Improve and standardise national fisheries' guidelines for reporting, and support with training of staff
- Strengthen PICTs' capacity to comply as flag states, especially as domestic fleets expand
- Integrate e-monitoring and e-reporting into national compliance practices
- Address potential 'conflicts of interest' between smaller and larger coastal fishing states by coordinating regional and subregional strategies and agreements
- Strengthen PICTs' capacity to deal with the increased administrative and management burden
- Strengthen observer programs including: improved health and safety; improved longline fishery and transhipment coverage; and by shifting some responsibility to vessel operators

Observers are needed on vessels and at port to check fish catch

2. Inadequate application of ecosystem management

- Capture and model fisheries data based on interactivity of target and non-target species, rather than focussing on a single species
- Assess the role and impact of bycatch on the ecosystem
- Study the effects of removing top predators (e.g. sharks, tuna) from isolated, unique ecosystems such as seamounts
- Translate and communicate the results and trends of improved data capture and analysis to fishery managers and policy makers

Range of Actions to Tackle Root Causes

3. Climate change impacts

- Expand data capture (over time and space) and modelling of predicted climate change effects on sea temperature, pH, size of Warm Pool, and distribution and access to target tuna species
- Preserve existing baselines for EEZs, where feasible, and be prepared to adapt management of fisheries to changes in tuna distribution and access
- Focus more on collecting data about the productivity of the ecosystem and the availability of tuna feed
- Study the connections between coastal and oceanic changes and impacts
- Assess, on a continuous basis, the likely socioeconomic impacts
- Use all research data to produce and communicate adaptive management guidelines and policy briefs

4. Coastal activities and pollution affecting ocean ecosystem

- Assess the impacts of land degradation and pollution on habitats and species that connect with the ocean ecosystem, and develop an action plan to monitor and mitigate such impacts
- Conduct a feasibility study into subsistence and artisanal fishers becoming more dependent on offshore fisheries as coastal fisheries decline

5. Waste disposal and pollution at sea

- Assess the impacts of marine waste and discharges on the oceanic ecosystem, and recommend mitigation actions
- Produce a strategy for mitigating and reducing the impacts from lost FADs and other fishing gear
- Improve compliance with international agreements to prevent oceanic pollution

Pacific Community scientists are collecting and assessing tissue samples from tuna and associated species to find out more about their biology (Left: François Roupsard, Right: Dr Valerie Allain in SPC's tissue lab, photo: Jenni Metcalfe)

We need to know how feasible it is for artisanal fishers to make more of offshore fisheries as their coastal fisheries decline (photo: Pierre Boblin)

Formulating a Strategic Action Programme (SAP)

A Strategic Action Programme is a road map of priority actions designed to address the threats and effects identified in the TDA. It is negotiated between PICTs and stakeholders, and needs to be endorsed at the ministerial level of the relevant government sectors.

The Pacific Island Forum leaders already have a Regional Road Map with clear goals and strategies. The new SAP will embrace and reflect these.

The structure of a SAP usually includes:

- Description of the system area being addressed by the SAP (in this case, the WCPF Convention area and the Western and Central Pacific Warm Pool)
- Long term vision (e.g. sustainable fisheries, food security)
- Goals and environmental and socioeconomic objectives
- Agreed actions and interventions
- Implementation arrangements in the context of existing regional and national mechanisms
- Monitoring arrangements for SAP deliverables


PACIFIC ISLANDS
OCEANIC FISHERIES MANAGEMENT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