



No 41 | 2023

POLICY BRIEF

The general results and policy implications of the Benefish Study 4

Purpose

This policy brief highlights the major cross-sector results of the recently completed study on fisheries in the economies of Pacific Island countries and territories (PICTs) (Benefish Study 4), which is the latest in a series of similar publications examining in detail a range of benefits from fisheries in the region. The study presents key fisheries statistics for each country and territory under the following categories:

- the value and volume of recent annual fishery harvests from: (1) coastal commercial fishing, (2) coastal subsistence fishing, (3) locally based offshore fishing, (4) foreign-based offshore fishing, (5) freshwater fishing, and (6) aquaculture;
- the fishing contribution to gross domestic product (GDP);
- fishery exports;
- government revenue from the fisheries sector;
- fisheries employment; and
- fisheries contribution to nutrition.

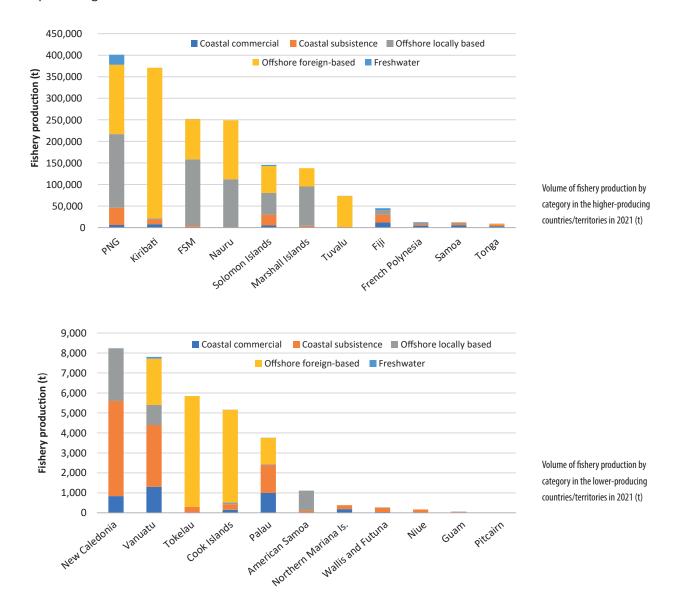
The above features across all PICTs were analysed, drawing out associated major policy issues and recommendations to preserve and/or enhance benefits.

1 The full Benefish 4 report is available at: https://fame.spc.int/resources/documents/fisheries-economies-pacific-island-countries-and-territories



Fisheries production in the region in 2021

The two figures below show the volume of fishery production for 2021, by fishery category for each country and territory. Data are presented in two member groups (higher producing and lower producing) so that the amounts for the lower-producing PICTs are discernible.







Key messages on fisheries production

Key messages from the Benefish Study 4 relating to fisheries production in the region include:

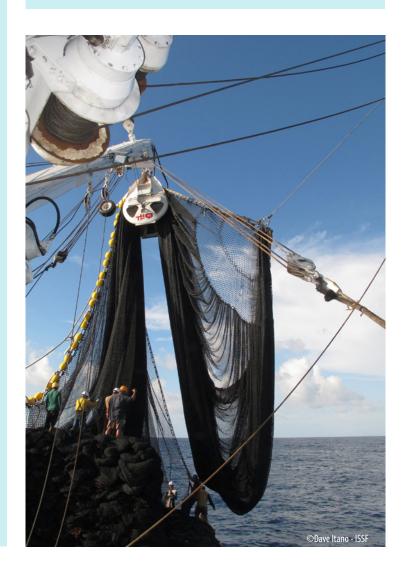
- Fisheries are of major significance to the people and economies of PICTs. The total fishery and aquaculture production of the zones of the 22 PICTs in 2021 was estimated to be worth about US\$2.5 billion. To express the total production in volume is more difficult due to the use of different units of measurement; fishery production is usually expressed in tonnes, while aquaculture production is expressed in both tonnes (e.g., tilapia) and pieces (e.g., giant clams). The total volume of fisheries production in the region in 2021 was estimated to be 1.56 million tonnes and the aquaculture production was 7,573 tonnes and 8,825,931 pieces.
- Coastal fisheries provide the vast majority of fish from the region for consumption by PICT residents as almost all offshore fisheries production is shipped out of the region. This annual supply of coastal fish, which was 13.8 kg per capita in 2021, is crucially important for nutrition and food security.
- In 2021 the total production by volume from offshore fisheries of the region was almost nine times that of coastal commercial and coastal subsistence fisheries. By value, it is only about 50% greater due to the high unit value of coastal fishery production.
- The volume of coastal subsistence fisheries production (i.e., coastal fish that is not sold) is almost 2.5 times greater than that of coastal commercial fisheries production.
- Coastal fishery statistical systems are poorly developed in the region, with government fishery agencies giving low priority to the collection of data on coastal catches. This contrasts with offshore statistical systems that are in relatively good condition at both PICT and regional levels.
- Total aquaculture production in the region, other than pearls and shrimp, remains insignificant relative to wild fisheries.

In addition to considering fisheries production in the region, the study quantified the benefits generated by fisheries: contribution of fishing to GDP; exports; government revenue; employment; and nutrition.

Key messages on fisheries benefits and related policy actions

One of the most significant issues of the present study concerns coastal fisheries, which provide most fish from the region for consumption by PICT residents. The annual per capita supply of coastal fish is among the highest in the world and therefore crucially important. In 2021, this supply was 13.8 kg per capita, a decline of 14% over the period 2007–2021, which is cause for major concern. Urgent policy action is required to obtain improved coastal fisheries production data to better understand the causes of this decline and assist in developing efforts to address it.

The original intention of documenting the contribution of fisheries to PICT economies was to stress the importance of fisheries, a sector whose contribution to these economies was thought to be underestimated. While the series of Benefish books was able to document the importance of fisheries, another aspect arose during the studies: the usefulness of information on the various types of fishery benefits for informing decisions on fisheries management and development. The Benefish Study 4 provides examples of how data on fisheries employment, fish consumption and aquaculture production, could assist in informing decisions and weighing trade-offs that are required in fisheries decision-making processes.



Other important issues on fisheries benefits and associated messages and policy actions are:

Area	Key message	Policy action
Annual reports of fisheries departments	A comprehensive and timely fisheries department annual report is one of the most important tools for understanding the PICT fisheries sector and key changes over time. These reports can provide useful information to other government agencies, as well as researchers, donors, media, and the general public. Annual reports can also promote the profile of the fisheries sector and provide some degree of accountability and transparency. Previously, more annual reports were produced, but this is no longer the case for many PICTs	Governments should commit their fisheries departments to produce good annual reports (i.e., a report that gives accurate and concise information on the activities of the agency and on fisheries of the country or territory and which is produced in a timely manner). The annual reports of the fisheries agencies in the Marshall Islands and Tuvalu could be used as positive examples.
Fishing contribution to GDP	Using a production approach to calculate the fishing contribution to GDP, the Benefish Study 4 made an independent estimate for each country/territory. Those estimates were in some cases very different than the official estimates (both greater and less).	Government fisheries officials should become more involved in GDP issues (e.g., development of appropriate methodology for the fishing sector, checking the GDP estimates made by statistics offices), because despite its imperfections and limitations, GDP is still a useful tool for determining the relative importance of an economic sector to a PICT economy. Changes in a sector's contribution to GDP can help determine whether sector-specific policies and initiatives are effective, as well many PICT governments pay close attention to a sector's GDP contribution and associated changes when making decisions on budgetary allocations. The study's re-estimate of fishing contribution to GDP represents an
		alternative to the official method. This alternative can be used as a comparator to gain additional information on the appropriateness and accuracy of the official methodology — and possibly a need for modification.
Fishery exports	There are obvious errors in the official fishery export data of many PICTs (e.g., exports of species [both coastal and oceanic] that do not exist in a member's waters).	Government fisheries department staff should scrutinize the species, volumes, and values of fishery exports in the official customs department data for erroneous information and omissions. If major errors are detected, the staff of fisheries and customs departments should cooperate to identify the causes of the errors and formulate mitigation measures.
Government revenue from fisheries	Access fees for foreign fishing increased greatly between 2007 and 2021. In real terms (i.e., inflation adjusted), the access fees for the region increased 475% during the period — but this increasing trend is untenable.	Efforts to diversify the benefits from offshore fisheries, including the areas of GDP (i.e., local basing), exports, employment, and local landings for food, should receive increased attention, similar to previous efforts to expand catches and increase access fees.
Fisheries employment	The employment information presented in the country and territory chapters is a heterogeneous collection of various types of data. The reality is that fisheries employment is harder to measure (and harder to compare) than the other forms of fisheries benefits.	The impact of fisheries management and development decisions on employment is critically important. Such decisions involve trade-offs, and it is important to determine how many people will be impacted, both positively and negatively. Government fisheries departments should be encouraged to collect fisheries-related employment data in the important sub-sectors (e.g., sea cucumber harvesting and processing, aquaculture) in a standard format.
Fish consumption	Determining per capita fish consumption in the region is currently very inexact. Comparisons between different fish consumption studies must be done cautiously, or even avoided, unless the methods used by the studies are known and they are either the same or can be corrected so that equal features are being compared.	Government fishery departments need to recognize the importance of per capita fish consumption data in determining the impacts of policy changes and management interventions, especially on small-scale fishers. Protection of village fish food supplies is arguably one of the most important objectives of the management of subsistence fisheries in PICTs. Monitoring per capita fish consumption is one important way of determining how well this objective is being achieved.
Statistics departments	A surprisingly large quantity of fisheries information is produced by PICT statistics offices. This includes data from surveys of fishing companies for GDP and employment purposes, export statistics, and PICT census work, that provides information on participation in fisheries. It is becoming increasingly clear that government statistics offices have an insufficient understanding of what fisheries-related information is most useful in determining the benefits of fishing. Considerable technical knowledge of the sector is required to collect meaningful information.	Governments should commit to having much greater cooperation between fisheries departments and statistics agencies. Fisheries departments should take the initiative to begin this enhanced collaboration.