

What is fisheries economics? Fisheries economics generally refers to the contribution that the fisheries sector makes to an economy. In economics, we typically discuss the value of fisheries products that are captured, produced or traded and what contribution the fisheries sector makes to an economy in terms of value of production, employment, exports* and government income.

Fishing and aquaculture are primary production* activities, but the fisheries sector also includes private sector processing and trading businesses and fisheries-related public sector jobs.

How do fisheries contribute to Pacific Island economies?

Fisheries contribute to the economies of the Pacific Islands:

- i. by adding to the gross domestic product (GDP)* of an economy. Fishing and aquaculture add to total domestic productivity;
- ii. by generating government income from the sale of fishing licences to foreign fishing companies and through taxes that are applied to traded fisheries products;
- iii. by creating employment for Pacific Islanders (see Teachers' Resource Sheet 22: Job opportunities in fisheries);
- iv. by creating opportunities to export, which is an important source of foreign income and contributes to GDP growth. Government income can also be generated from tax on exports.

Three major fisheries that contribute to Pacific economies

In the Pacific, the three main fisheries include:

- i. the industrial tuna fishery*;
- ii. small-scale fisheries; and
- iii. aquaculture.

The industrial tuna fishery

The industrial tuna fishery refers to commercial fishing* vessels that capture large quantities of fish (mostly tuna) that are sold to canneries or high-value foreign markets. There are four main categories of fishing vessels operating in the industrial tuna fishery (Fig. 1).



Figure 1. Four main categories of industrial fishing vessels operating in the Pacific.

Four species* are of major commercial importance in the Pacific's industrial tuna fishery (Fig. 2).

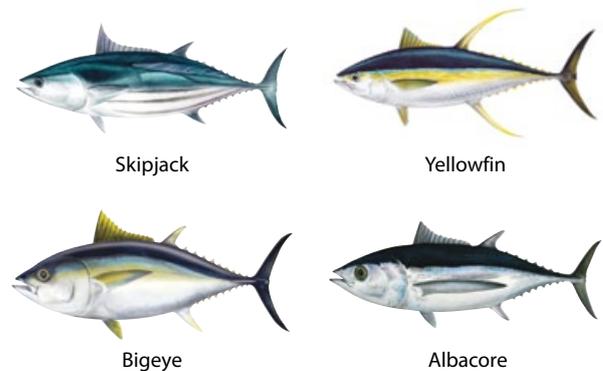


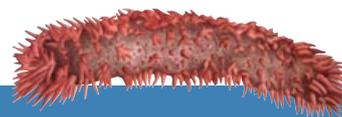
Figure 2. Four main target species* of industrial fishing vessels operating in the Pacific.

Small-scale fisheries

Small-scale fisheries can be subsistence or commercial in nature, supplying fish for local consumption and export markets. They generate income, provide food and make an important contribution to Pacific economies.

In the Pacific, the main small-scale fisheries that provide food and income to Pacific Islanders include:

- i. small-scale pelagic* fisheries capturing tuna, wahoo, mahi mahi and other pelagic fish;
- ii. small-scale coastal fisheries capturing sea cucumber, trochus, reef fish, marine ornamental products and invertebrates*;
- iii. demersal fisheries capturing snapper and other deepwater fish; and
- iv. sport fishing tourism generating income from charter operations.



Aquaculture

Aquaculture involves marine and freshwater production systems. Aquaculture plays an important role in food security and income generation for Pacific Islanders. Some of the important aquaculture products that are produced in the Pacific include:

Mariculture	Freshwater aquaculture
Marine shrimp	Tilapia (Nile, Mozambique, or genetically improved farmed tilapia (GIFT))
Pearl oyster	Freshwater prawn
Milkfish	Grass carp
Seaweed	
Marine ornamentals (giant clam, coral, live rock)	
Sea cucumber	

In the Pacific, in terms of income generation, the production of pearls and marine shrimp is the most valuable. In terms of economic contribution, aquaculture plays an important role in boosting domestic productivity (i.e. contributing to GDP), but also by providing foreign income from export of aquaculture products.



Businesses in the fisheries sector

There are many different types of businesses in the fisheries sector – some large and some small. Some businesses are involved in production (e.g. fishing vessels, aquaculture farms), some are involved in processing (e.g. tuna canneries, restaurants), while others are involved in the trade (e.g. local market sellers, exporters) of fisheries products.

Irrespective of the activity or size of a business, collectively fisheries businesses are very important to the Pacific Island economies in the sense that, as outlined above, they positively contribute to GDP, employment, exports, food security and tourism development.

