

**FISHERY COUNTRY
PROFILE****Food and Agriculture
Organization of the United
Nations**

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PAYS****Organisation des Nations
Unies pour l'alimentation
et l'agriculture****RESUMEN INFORMATIVO
SOBRE
LA PESCA POR PAISES****Organización de las
Naciones Unidas para la
Agricultura y la
Alimentación****THE REPUBLIC OF MAURITIUS****GENERAL ECONOMIC DATA**

Area:	1 996 km ²
Shelf Area:	3 046 km ²
Length of continental coastline:	276 km
Population (2004):	1 243 588
GDP at purchaser's value (2004):	US\$ 6 263 million
PCE per head (2004):	US\$ 5 031
Agricultural GDP (2004):	US\$ 522,9 million
Fisheries GDP (2004)	US\$ 307 million

FISHERIES DATA

2003	Production	Imports	Exports	Stocks variation	Total Supply	Per Caput Supply
	'000 tonnes liveweight					kg/year
Fish for direct human consumption	11.0	80.9	54.2	0	37.7	19.8
Fish for animal feed and other purposes	8.6	-	3.1	-	-	

Estimated Employment (2004):	
(i) Primary sector (including aquaculture)	5 100
(ii) Secondary sector:	6 800
Gross Value of Fisheries Output (2004):	\$US 106 million
Trade (2004):	
Value of Fisheries Imports:	\$US 106 million
Value of Fisheries Exports:	\$US 112 million

STRUCTURE AND CHARACTERISTICS OF THE INDUSTRY

Marine Fisheries

Mauritius has an Exclusive Economic Zone (EEZ) of 1.9 million km² extending from the coasts of the islands of Mauritius, Rodrigues, St Brandon (Cargados Carajos Shoals), Agalega, Tromelin and Chagos Archipelago. The EEZ has a reasonable stock of various fish, including pelagic and demersal species. Fisheries resources exploited include the island-based artisanal fisheries, the offshore demersal fishery of the banks of the Mascarene Plateau and the Chagos Archipelago, and the tuna fishery in the Western Indian Ocean. Fresh fish is landed along the coast of Mauritius at 61 fish landing stations by the artisanal fishermen, who fish inside the lagoon and in the vicinity of the outer reef. The gear used include basket traps, hook-and-line, harpoons, large nets and gillnets. The main species caught are the lethrinids, scarids, sigannids and mullets. In 2004, there were 2 256 active fishermen in the artisanal fishery. There were 1 898 fishing boats in Mauritius and 900 in Rodrigues. The artisanal fishers have boats of 8 to 25 hp, mainly powered by outboard motors. There are also some fishers that use oars and sails or wooden poles. In 2004, total fresh fish production from the artisanal fishery was 1 043 t. The average catch per fisherman-day was 4.2 kg.

With a view to reducing fishing effort in the overexploited lagoon, fishers are being encouraged to catch large pelagic fish around Fish Aggregating Devices (FADs) moored around the island. The FADs are placed 5 to 10 n.mi. outside the fringing reef wherein the traditional fishers have learnt their craft. The FADs are currently being maintained and renewed by the government so as to encourage lagoon fishermen to venture into the outer reef fisheries. Government is providing incentives and appropriate training to fishermen willing to operate around FADs.

A major source of frozen fish for the Mauritian market are the shallow banks located on the Mascarene Plateau, lying about 500 km north of Mauritius. Fishing occurs in depths of 30 to 60 m on the St Brandon groups of islands, Saya de Malha, Nazareth and Albatross banks, which have sandy and coral bottoms. The fishermen operate from dories, which are transported by mother vessels. The main species caught is *Lethrinus mahsena*. A fishing campaign lasts for 30 to 60 days at sea. In 2004, eight vessels operated in the fishery, catching 2 680 t of fish, which was frozen on board and landed in Port Louis. The whole of the production is consumed locally and the production of the fishery represents around 30% of total fish consumption in Mauritius.

The tuna fishery is the major industrial fishery of Mauritius and exploits the tuna resources in the South West Indian Ocean. Land transshipment constitutes a very important related activity, and in 2004, a total of 14 255 t of tuna and tuna-like species was transshipped at Port Louis by licensed and non-licensed longliners, which effected 256 calls. Most of the product transshipped consisted of albacore tuna. Three Mauritian vessels were involved in the longlining fishery, and they landed a total of 1 117 t. European purse seiners operating in the Western Indian Ocean landed 47 705 t of tuna, which went to the local cannery. Artisanal fishers operating around FADs land about 300 t of tuna annually, while catches from sport fishery have been about 350 t annually.

Aquaculture

Commercial aquaculture consists of the production of giant freshwater prawn

(*Macrobrachium rosenbergii*), red tilapia (*Oreochromis* sp.) and marine red drum fish (*Scyanops ocellatus*). Total production from aquaculture activities was 361 t in 2004. A marine fish farm using floating net cages started operation during the year and production of red drum amounted to 325 t.

UTILIZATION OF THE CATCH

All the artisanal fisheries catch and 90 percent of the banks fisheries catch is consumed domestically. The fish from the artisanal fishery is consumed fresh, as delivery is rapid from the 61 landing sites to sales points inland. About 100 t of chilled fish is landed by the semi-industrial chilled-fish fishery. The fish is retailed from chilling cabinets or iced. The catch from the banks fishery is stored in cold stores (-18°C) ashore for distribution to retail outlets in urban areas and villages equipped with frozen storage facilities. Salted fish is produced in St Brandon for shipment to Mauritius. Sun-dried octopus and salted fish products formerly produced in Rodrigues have over the years declined to negligible levels. Princes Tuna Mauritius (PTM), a canning factory employing about 2000 persons, processes some 50 000 t of canned tuna for export to the EU market. The Thon de Mascareignes, a joint Mauritian-Spanish venture, started operation in 2005 with a projected production of about 50 000 t of loins annually.

ECONOMIC ROLE OF THE INDUSTRY

Fish is an important source of protein in the local diet and the per capita consumption of fish stands at 20 kg (representing one quarter of animal protein intake). The fisheries sector, like any other sector, has undergone fundamental changes and development in terms of technological advance and innovation. It accounts for one percent of GDP and employs some eleven thousand people. Although local production does not suffice to cover market needs, it provides employment and returns for inhabitants of coastal regions, and yielded around US\$ 112 million in export earnings in 2004. The value of imports in 2004 amounted to US\$ 106 million, so the balance of trade in the fisheries sector is positive. The sector also generates revenue for the national budget in the form of foreign licence fees, import permit licence fees and sale of produce. In 2004, there were more than 250 tuna vessels that called into port for transshipment, bunkering, repairs, maintenance and dry docking, and this generates significant revenue for the country. Mauritius is an attractive platform for transshipment and for value-added seafood activities.

DEVELOPMENT PROSPECTS

Exploitation of traditional resources has reached a high level, and no further increase in yield can be expected. Research efforts therefore concentrate on the management of resources for sustainable production, while investigating other areas of possible development.

There is a potential of about 26 000 t of small pelagic fishes on Nazareth and Saya de Malha Banks, which could be exploited. Deepwater shrimp, *Heterocarpus laevis*, could be exploited at a depth of 600 to 800 m on the shelf of Mauritius and Rodrigues. The sustainable catch from this fishery stands at around 200 t/year. An increase in the catch around FADs is possible with fishing techniques using live bait, and more fishermen could fish around FADs.

The development of a semi-industrial fleet for swordfish is possible. Recent demonstration trials have shown a potential catch of 0.6 to 0.9 kg/hook. Taking into account the quantity of tuna caught in the Western Indian Ocean, tuna fishing seems to be an area where one would have expected more local involvement. However, joint ventures with foreign partners must be encouraged due to high investments in this sector.

Fisheries Management

The overriding principle in government strategy for fisheries is managing capture fisheries within sustainable limits while ensuring continuous and even supply of fish and fishery products for the local market. In overexploited stocks, the fisheries are closed to newcomers and existing fishers are being encouraged to move to other fisheries. In the case of capture fisheries where the resources are not being optimally tapped, development incentives are given to prospective investors. Coastal and banks fisheries are closed to foreign companies. For the highly migratory tuna, fishing agreements are in place with the EU, Seychelles (on a reciprocity basis) and Japan for fishing within the Mauritian EEZ. All foreign vessels need to have a licence to fish in Mauritian waters. Local investment and joint ventures are also encouraged in tuna fisheries.

The fishing effort in the traditional sector needs to be substantially reduced to ensure sustainability of the resources. Consequently, fishers are being trained to participate in the offshore fisheries and to enable them to seek employment opportunities on foreign fishing vessels fishing in the EEZ under licence in the longline and purse seine fisheries. Some 1 000 fishers may need to be trained to meet the requirements of the industry in the next decade. Government policy in the fisheries sector focuses on sustainable resource use and protection of the marine environment (i.e. management aspects) and on maximizing returns from existing fisheries through value addition. In parallel, government policy seeks sound development and improvement of the economic and social status of the fisher community. Mauritius is party to, *inter alia*, the United Nations Conference on the Law of the Sea (UNCLOS); the UN Agreement on Conservation and Management of Straddling and Highly Migratory Fish Stocks; the Convention on Biological Diversity (CBD); and abides by the principles enunciated in the FAO Code of Conduct for Responsible Fishing.

Mauritius is a member of COMESA and SADC, and both bodies have as main objectives an increase in fish production in order to attain self-sufficiency, as well as to promote trade in fish and fishery products within and outside the SADC and COMESA regions.

Legal Framework

The Fisheries and Marine Resources Act 1998 (FMRA) provides the necessary legal framework for fisheries and marine living resources management. It makes provision for registration of fishers; collection of fisheries information; setting up of marine protected areas (fishing reserves and marine parks and reserves) and fish farming; prohibition of fishing by use of poisonous substances, spears or explosives; closed periods for net fishing and fishing of oysters; prohibition of fishing of undersized fish, crabs or lobsters in the berried state, turtles and marine mammals; prohibition of sale of toxic fish and fish products unfit for human consumption; import of fish and fish products; import of fishing vessels; and licensing of nets and fishing implements. Provisions are also made for licensing of local and

foreign boats and vessels. A local boat or vessel needs a fishing licence to fish within Mauritian waters or on the continental shelf, in any fishery on the high seas and in the fishing zone of a foreign state. The Fisheries Protection Service and the National Coast Guard enforce provisions of the FMRA. Catch quotas for the banks fisheries have been imposed since 1994 and the number of vessels operating on the smaller banks is limited through a licensing system.

AID

FAO/UNDP successfully implemented an FAD development fishery project in the 1980s. A survey for assessment of the deepwater shrimp stocks in the waters of Mauritius was carried out with the assistance of FAO/UNDP in 1990. FAO is currently assisting fisheries through a two-year project for stock assessment of the St Brandon fishery.

Japan has assisted fisheries through a five-year project for monitoring of the lagoon ecosystems for sustaining capture fisheries. Japan has also assisted in mariculture development. India is currently assisting in aquaculture projects.

Several fisheries projects are being implemented with EU assistance and bilateral agreements.

ADMINISTRATION AND INSTITUTIONS

Responsibility for fisheries matters in Mauritius lies with the Ministry of Agro-Industry and Fisheries. Its Fisheries Division is responsible for research and collection of statistics, and has assumed responsibility for management and policy advice, as well as development of near-shore and offshore fisheries and aquaculture. Since 1982, the research arm of the Ministry has been housed at the Albion Fisheries Research Centre. In 2004, a Fisheries Training and Extension Centre (FiTEC) was constructed at Pointe aux Sables to provide training to fishers, with the support of funds from the Government of Japan. FiTEC has as its primary objective to enhance the knowledge and skills of fishers to operate in the outer lagoon fishery, ensure safety at sea and create awareness of fisheries management and marine conservation. The Fisheries Protection Service, with a staff of 264 officers, is responsible for the enforcement of all fisheries law and regulations. All fisheries are managed on the basis of FMRA.

CONTACTS

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INTERNET LINKS

<http://fisheries.gov.mu>