

<b>FISHERY COUNTRY PROFILE</b>	<b>Food and Agriculture Organization of the United Nations</b>	<b>FID/CP/DMI</b> <b>Rev.3</b>  <b>April 2002</b>
<b>PROFIL DE LA PÊCHE PAR PAYS</b>	<b>Organisation des Nations Unies pour l'alimentation et l'agriculture</b>	
<b>RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES</b>	<b>Organización de las Naciones Unidas para la Agricultura y la Alimentación</b>	

## THE COMMONWEALTH OF DOMINICA

### GENERAL ECONOMIC DATA

Area:	750km <sup>2</sup>
Coastline:	148 km
Maritime Claims: EEZ:	200 nm
Population (2000 estimate):	71 727
GDP (2000):	US\$266.67 million
Agriculture (value added):	US\$40.72 million
Per capita income (2000):	US\$3502

(Based on an exchange rate of US\$1 = \$EC 2.7169)

### FISHERIES DATA

#### Commodity balance (2000):

	<b>Production</b>	<b>Imports</b>	<b>Exports</b>	<b>Total supply</b>	<b>Per <i>caput</i> supply</b>
	Tonnes live weight equivalent				kg/yr
Fish for direct human consumption	1142	454.8	N/A	1596.8	20.24

Fish for animal feed and other purposes	n.a.	n.a.	n.a.	n.a.	
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### Estimated employment in fisheries (2000):

(i) Primary sector:	2843 registered fishermen, 40% full-time
(ii) Secondary sector :	approximately 60 vendors and processors
Gross value of Fisheries Output(2000, estimate) :	US\$ 13 million
Trade (2000):	
Value of imports	US\$3.1 million
Value of exports:	N/A

## STRUCTURE AND CHARACTERISTICS OF THE FISHING INDUSTRY

### Fleet structure

The Dominica fishing industry is small-scale and of an artisan nature. The fishing fleet has increased from only 913 vessels in 1994 to more than 1100 in 2000. There has been a marked transition from the traditional dugout canoes to the more advanced keelboats and most recently, to the fibre reinforced plastic (FRP) vessels. The majority of new entrants are investing in the latter two types. These vessels are propelled by outboard engines that range from 15HP to 225HP, with 48HP the average size being used.

The vessels range in size from 15 - 30 feet. A few of the larger craft have been rigged with tuna longline reels and tackle boxes to accommodate the fishing gear. There are presently 10 tuna longline fishermen (equipped with longline gear) on the island, which target the migratory pelagics during the peak season of August to December. This gear is used to target the marlin and yellowfin tunas. Other fishermen however use vertical lines to target the same species. Significant increases in landings of migratory pelagic species have been recorded since the upsurge in the use of fish aggregating devices (FAD's), which are widely used by fishermen to land large catches of migratory pelagics. Large aggregations of fishing boats are commonly seen associated with these structures along the coast of Dominica.

There are still a large number of fishing activities involving the use of fish traps which target the demersal species. Lobsters are targeted for the hotel and tourism industry, due

to the high prices they fetch. Weekly retrieval of fish traps (Antilles Z-type), especially along the west coast, has seen a reduction in the size of fish and the number caught. Beach seine activities target the coastal pelagic species, such as sardines and jacks. Gill nets are commonly used to capture the schooling species, such as mackerel, ballyhoo and small tunas. There is a closed season for lobster.

### **Inland fisheries**

The only inland fishery presently being practised is the fresh water prawn (*Macrobrachium rosenbergii*) culture industry. The government hatchery which had been taken over by Taiwan Province of China has recently been out of operation. The purpose of the facility was to provide the local farmers with post larvae for culture on their private holdings. There are six farmers on the island involved in this industry, which only supplies the local market. There are considerable opportunities for the prawn farming industry on the island, if it were properly managed and operated in a more businesslike manner.

Tilapias have also been cultivated alongside the prawns, but they have not been a popular choice of fish by the locals.

Tetiri is another fishery of some economic importance to a few villages in Dominica and particularly the western village of Layou. These are the Goby fry which are caught at the river estuaries. The period from July to April is the more abundant period for this species, which are caught on an average of three days every month. The cycle is based on the phases of the moon.

### **Utilization of catch**

All the fish caught is for local consumption. Most fish landed in Dominica is sold directly to the public at the landing sites. Since 1997, following the completion of the Roseau Fisheries Complex (built with the assistance of the Japanese Government), fishermen have been selling their catch directly to the Complex, particularly in times of heavy glut on the market. The damage caused by Hurricane Lenny in 1999 on the Roseau Fisheries Complex were very obvious during the following fishing season when there was a marked increase in tuna landings, although the lack of storage facilities posed a major problem in terms of selling the catch. This resulted in wastage and the loss of revenue by fishermen. Inadequate storage facilities have been a great handicap to the fishermen of Dominica. The Fisheries Division has assisted the fishermen by distributing containers to some of the rural landing sites, in order to permit the overnight storage of fish, prior to moving the catch to the Roseau Fisheries Complex the following day.

The Roseau Fisheries Complex houses fish storage as well as retail vending facilities. The vendors act as middlemen for some of the rural fishermen. The landings are not sufficient to support an export market. During the off season, some fish is also imported to offset the shortage.

### **State of the industry**

Great emphasis is being placed on infrastructure development, which is vital to the development of the industry. The Government of Japan is presently repairing the Roseau Fisheries Complex. Cold storage facilities are being replaced, as well as the slipway/ramp for the hauling of boats onshore. There are two other such facilities earmarked for future funding from the Japanese: Portsmouth and Marigot. There have been ongoing gear and technology training workshops, run in association with the Caribbean Fisheries Training and Development Institute (CFTDI) of Trinidad, with assistance from Japan. Fishermen have

been introduced to vertical and bottom longline technology through these programs. The Fisheries Division staff also assists in facilitating these workshops and the follow-up activities.

The OECS (Organisation of Eastern Caribbean States) has recently funded the Coastal Resources Inventory Project (CRIS), which will enable the Division to more effectively assess the status of the marine resources and the effects of other environmental factors.

### **The Dominica Rural Enterprise Project (DREP)**

This is a micro-enterprise project sponsored by the Caribbean Development Bank (CDB) and the International Fund for Agricultural Development (IFAD). The project provides support in the areas of fish landing site development, the boat revolving scheme (BRS) and institutional strengthening. Under the BRS, fishermen are given access to funding with limited security and at fairly reduced interest rates, to enable them to invest in boats and equipment for their fishing activities. Many new entrants to the industry have been able to take advantage of this venture, providing they could meet certain criteria.

The industry has undergone considerable improvement in the use of modern technology, particularly with the new entrants to the industry. Greater investments have been made in more modern equipment, such as GPS and advanced fibreglass boats, as opposed to the dugout canoe, which had previously been the "starter vessel" for new entrants.

### **Fisheries cooperatives**

Although there are only six fishermen's cooperatives on the island, considerable emphasis has been placed on group strengthening and group dynamics, as part of the Fisheries Division's work programme. There are seven fisheries study groups that form the basis for the development of cooperatives.

### **Economic role of the fishing industry**

With the rapid decline in the major cash crop (bananas), many farmers began moving into the fishing sector. If properly managed, the returns from fishing can be considerable. The price of fish ranges from \$5.00 - \$7.00/lb, depending on the village where it is landed. Prices are of course lower in the more rural districts. Beneficiaries from fishing range from the providers of bait to the vendors, the boat builders and repairers, the engine repairers and the net menders.

The establishment of the Fisheries Complex in Roseau has improved the quality and presentation of the fish catch, making it more appealing to the market. The use of ice and the cold storage facilities have contributed to providing a better product to consumers. Under-utilized species like ballyhoo and triggerfish (boose) are boned and filleted, respectively, and then sold to local supermarkets vacuum-packed.

### **Demand**

There is a much greater demand for fish at the present time as a major source of protein. Production has considerably increased and fish is more readily available to Dominican consumers. There is a positive correlation between the increased demand for fish and the increase in the number of tourist arrivals to the island. Hotels have increased their buying quotas. Presentation of the under-utilized species in a manner more palatable to the customer has also contributed to this increase in demand. During the off season, a small number of fish vendors import tuna, marlin and kingfish to supply the local market. Prawns are also a very important source of protein and have been in great demand, in spite of their high price.

## **Resource management**

Fisheries Act No. 11 of 1987 is based on OECS harmonised legislation. It provides for conservation measures such as closed seasons, gear restrictions, the prohibition of noxious chemicals or explosives for catching fish and the establishment of marine reserves. The Territorial Sea, Contiguous Zone and Exclusive Economic Zone legislation establishes the 12, 24 and 200nm limits of these three zones, in accordance with Fishery Zones Act No. 26 of 1981.

## **DEVELOPMENT PROSPECTS**

The fishing industry has been faced with considerable challenges, due to the rugged terrain of the Dominican coast, the limited foreshore space, the unsheltered bays and the high-energy waves on the east coast. Infrastructure development has therefore been one of the Fisheries Division's greatest priorities. The other two proposed fisheries complexes at Marigot and Portsmouth will serve as regional facilities to accommodate fishermen from the various neighbouring landing sites. These facilities will also serve as hurricane shelters/dry docking facilities for the users. In addition, by-laws are being drafted, so that landing sites will be categorised, based on the magnitude of development that will be allowed.

Plans are also afoot for the formation of a northeastern Fishermen's Cooperative that will unite the fishermen of the northeastern district in one representative body. Another project is under way to incorporate all the fisheries cooperatives into one national fisheries organization.

The fisheries sector, due to its vulnerability to hurricanes, is continuously trying to recover from the damages caused by these storms. The Division hopes to establish a disaster relief fund to which fishermen will contribute and which would help provide recovery costs. Some funding agencies have begun the practice of charging fishermen for their replacement gear and the proceeds placed in a revolving fund.

## **RESEARCH**

Research on large cetaceans has recently been conducted in the waters around Dominica. Some fifteen sightings were reported in February 2000. Another such research effort was conducted earlier this year.

There is ongoing collection of length frequency and catch and effort data for the main commercial species.

## **AID**

Most of the assistance being received at present is through funding from the Japanese government. One fishery complex has thus far been built and an additional two have been earmarked. Technical assistance in gear technology and overseas training (both long- and short-term) also form part of this aid package.

The OECS presently has three projects being funded in Dominica: the Coastal Resources Inventory System (CRIS), the Layou Fishermen's Project and the Support Project for Local Area Management Authority (LAMA).

Dominica is an active member of the WECAFC Ad Hoc Working Group on Flying Fish in the Eastern Caribbean, which was established in 1999. The principal goal of the Group is to develop a co-operative approach to managing a locally important and shared pelagic resource.

FAO recently assisted Dominica in replacing gear that had been lost during Hurricane Lenny in 1999. Technical assistance is also being offered through overseas as well as local training.

Dominica is also participating in the following two current regional FAO Technical Co-operation Projects:

- An Approach to Facilitating the Expansion of Domestic Fisheries for Large Pelagic Fishes in CARICOM Countries, May 2001 to July 2002; TCP/RLA/0070.
- Development of Standards for the Construction and Survey of Small Fishing Vessels in Barbados and OECS Countries, April 2000 to January 2001; TCP/RLA/0069.

## **INTERNET LINKS**

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