Status of the Artisanal Fisheries of Montserrat

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The island of Montserrat in the Leeward Islands is situated between Antigua, Nevis and Guadeloupe. Montserrat consists of two volcanoes and a high green saddle of fertile land in the center. Once the market garden of the Caribbean, it is today shifting emphasis to development of light industry, resorts and other tourist related activities. The estimated population of the island is 12,500.

Data on fish landings are available until 1976, but no statistics have been collected since. It is estimated that about 175,000 lb of fish are landed annually in Montserrat. This amount is far from what is required to satisfy the needs of the people. Fish products imported in 1978 amounted to 16.4 lb per individual, of which salted fish was the main contributor. To meet the total population demand, a total of 700,000 lb is needed. The unsatisfied demand for fish and related products does not permit any exportation.

The Industry.--The fishing grounds accessible to the small craft are limited. There are, however, productive offshore banks which would be accessible to larger vessels, but out of reach of the traditional inshore craft. The pelagic and oceanic resources which presently are not exploited locally to an appreciable extent include species like tunas, kingfish, cavalli, jacks and dolphin. These species are regarded as the steak type fish and if not caught will migrate elsewhere.

It is known that foreign fishing vessels fish in these waters. For example, the Japanese carry away large quantities of fish that could be taken by Montserrat fishermen, and the fishermen of neighboring islands.

The fishing industry in Montserrat has not reached the stage where it is possible to utilize its offshore resources. The gear and methods used today are the same as in years gone by. The introduction of outboard engines has been a great improvement, but it is believed that our fishing banks have reached their maximum output, though there is evidence that the area is not as efficiently fished as it could be.

Montserrat has an estimated total of 80 fishing boats. These boats range from 12 to 25 feet in length. Of the total fleet, at least 95% are powered with outboard engines. Most of these boats combine hook and line fishing while others do purely line fishing or beach seining.

The general pattern is that the seine fishery drops off during the cold months September to December. Occasionally, abundant schools of pelagic fish may appear and cause heavy catches. The pot fishery does not fluctuate as much as the seine fishery, although the hot months tend to be less productive.

Seine fishing is confined to the leeward side of the island because of heavy seas on the eastern and southern sides. The nets (seines) are operated by crews of four to six men depending on size. Most nets used today are made from nylon twine which with proper handling should last about 5 years. There are about 21 net owners on the island. Stretch mesh of the nets should not be less than 1.5 inches. These net operators spend an average of 4 to 6 hours at sea before returning to land. Usually, the boat owner is the net owner but may not necessarily participate in the fishing.

Mostly the Z-type pots are used (6 x 3 x 1.5 ft) made of wire, not less than 1.25 inch in mesh size, framed with sticks. Synthetic ropes and buoys are sometimes used. Each crew may operate 5 to 10 pots on the average. Pots are usually pulled two to three times per week depending on the season and the location. The pots' average catch is 10 to 20 lb each in some areas. The fish pot properly constructed is not a cheap gear. Fishermen are anxious to have their catches and income increased. Increasing the pot fishery within the operational range of the small inshore craft is economically doubtful.

Presently, two beaches have proper sheds, i.e., Plymouth and Carr's Bay, with a third expected soon. These sheds are used for storing fishing gear, selling fish, etc. This means that instead of travelling long distances with gear it can be left at the shed.

The government operates a small ice making machine which produces about 400 lb of ice per day, which is far from meeting the needs of our fishermen. As a result, fishermen are forced to pay very high prices for ice which is of a poor quality. There are cold storages available in Plymouth only for storage of fish, but priority is given to chicken and other perishable products because there is hardly a need for such facilities.

The present level of fish production and its location in relation to the distribution of population in the island does not cause much of a problem now in marketing and distribution of fish. Fish is retailed by fishermen themselves either on the beach or up in the villages. There is no need for a middleman.

Development of Inshore Fisheries.--The Government of Montserrat has undertaken a project with funds from C.I.D.A. to develop its inshore fishery. In 1980 several derelict vehicles were dumped at sea in an effort to attract fish. In 1982 the C.I.D.A. made a grant available to Montserrat for further development of our artificial reef; assistance in this area also came from the Caribbean Environmental Research Association. Since then the project has proven to be a real success. Pelagic species have been attracted to our inshore fishing grounds; these include dolphins, kingfish and others. There are over 24 different species of fish living on the new reef made up of bottom water modules and midwater modules. These modules are made from motor tires and old cars.

The main emphasis of the fisheries development program will be directed towards upgrading the skills of existing fishermen so that they can increase their current catch levels. The training required will focus on making modest improvements to known

fishing techniques thereby reducing the cash expenditures which fishermen will necessarily have to make as they are encouraged to utilize their fishing gear more intensively and fish more effectively.

Basic methods and techniques, which fishermen will apply to greater advantage, are trolling, longlining, shark fishing, use of gill nets, hand line fishing, and the more effective use of baited fish pots. To implement this training program, it is hoped that the services of a gear technologist can be secured for a minimum 2-year period. In the meantime, the Government of Monterrat will take steps to train its own specialists in fishing gear technology.

Supporting measures designed to develop the fishing industry will include a central facility for the storage and marketing of fresh fish, an ice machine producing 5 tons per day and proper arrangements for the storage and protection of fishing gear at individual beaches.