REVIEW OF RECENT PROGRESS ON MUSSEL CULTURE IN THE PHILIPPINES

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Sea farming, particularly green bay mussel (Mytilus smaragdinus) culture, in the Philippines has been given emphasis in recent years. With the decrease in hectarage in the farming areas of Bacoor Bay (part of Manila Bay) due to the Greater Manila reclamation project, other areas are being developed. These areas include Samar, Panay, and Negros Islands. Mussel farmers have limited finances and use available local materials like bamboo. Farming is not intensive.

Mussel Farming Areas

1. Bacoor Bay - Located at the southwestern portion of Manila Bay, Bacoor Bay is the biggest mussel producing area in the Philippines, with approximately 1,350 hectares devoted to mussel farming and an estimated yearly production of 33,000 tons of live mussel (Pagcatipunan, 1974). Mussels are also gathered from the wild in other areas of Manila Bay, attached to rocks in brackishwater, old piles of fish corrals, sunken vessels, etc. The price of mussel range from ₱3 to ₱5 per kilo (₱7.35 = US$1), depending on the season and supply.

In areas of 2 to 10 meters depth, farmers utilized bamboo stakes as spat collectors where mussel grow until harvest. The Greater Manila reclamation project, which is expected to be finished within five years, has already reduced the Bacoor mussel farming areas by half. Eventually, deep areas at Bacoor and shores of the provinces of Bulacan, Pampanga and Bataan will have to be utilized. These areas are exposed to the southwest monsoon and are suited for mussel farming. Other areas of the country will also have to be developed as sources of mussel.

2. Northern Panay Area - Northern Panay is a new mussel producing area. Fishermen used to gather green mussels from the wild. Mussel farming was started in 1974 at Sapian, Capiz by the local government with the help of Bureau of Fisheries and Aquatic Resources personnel and a U.S. Peace Corps Volunteer. A big corporation which ventured into the project attained a production of 300 tons of live mussel per hectare per year. Mussel farming easily spread to outlying towns of Capiz. The present culture area in the province of Aklan is approximately 100 hectares. The method of culture widely used is stationary plot made of bamboo, from which synthetic rope nettings, measuring 2 x 5 meters are tied. Production of 50 tons per hectare was attained in this area.

The northern Panay area (Capiz and Aklan provinces) have limited areas for expansion. The bays are small and the potential areas are limited to mud flats of approximately 1,000 hectares which are exposed during low tide. Mussel farmers utilize only the deep portion which is the river path. Due to presence of mussel plots, siltation resulted and changed the course of the river. This condition made these areas shallow and unproductive. There is now a need to develop deeper areas further out the bay.

In Capiz mussel used to sell at ₱1.20 to ₱1.50 a kilogram, live with shell. At present, it is selling at ₱0.60 due to increased production and few outlets in the island. Some are airshipped to Manila (approximately 250 air miles) but shipment cost is higher than the cost of the mussel.

3. Magueda Bay - Maqueda Bay in Western Samar, is another new mussel farming area. The bay includes Villareal Bay and part of Zumarraga Channel which is approximately 87 sq nautical miles with average depth of 4 meters, all potential sites for mussel farming.

Mussels are usually gathered from the wild since these are found in natural beds in the area. Farming was started by a native farmer at Jiabong, Samar. In 1975, the Bureau of Fisheries and Aquatic Resources established a one-hectare demonstration farm in the same town. Now there are new farms established including those in Villareal town at the other side of the bay.

The development of mussel farms in the area is quite slow. There is not much demand for mussel due to the abundance of fish. The area developed is less than 20 hectares. With availability of local materials such as bamboo and farmers' hesitance to spend more on labor, the only method of mussel culture used is staking. The price of mussel range from ₱1 to ₱2 per kilogram.

4. Negros Occidental - Himamaylan in Negros Occidental is another new mussel producing area. The farming method used is the same as that in Capiz. Negros Occidental, however, has limited area for expansion, with a few hectares at the most available for mussel farming.

Research Undertaken

The Southeast Asian Fisheries Development Center (SEAFDEC) in Iloilo is undertaking research on the biology of mussel. The Bureau of Fisheries and Aquatic Resources conducts applied research at its farms on the various methods of mussel cultivation. Attempts to transport and grow mussel seeds and breeders in various areas of the country were green mussel are absent have not met much success.

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GREEN BAY MUSSEL PRODUCING AREAS OF THE PHILIPPINES