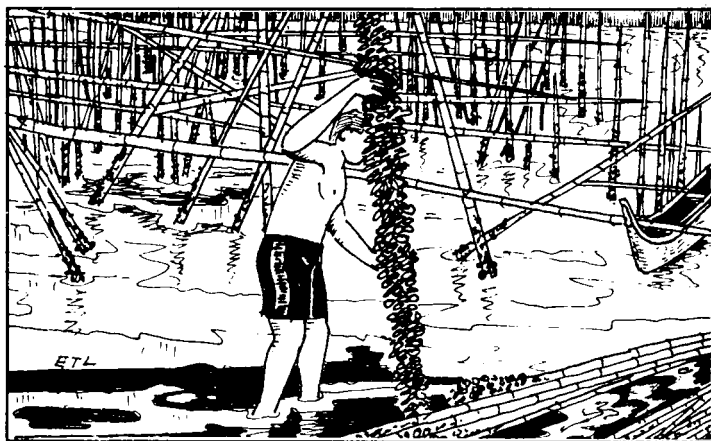


Oyster and mussel farming



Philippines

In western Visayas, oysters and mussels are farmed mostly by small-scale fishermen in estuaries, bays, and other sheltered coasts. Farm size is about 3000 square meters.

Culture starts with spat collection. Farmers have their own methods of forecasting spatfall. The indicators for oysters include barnacles on spat collectors, yellowish and itchy water, mixing of seawater and freshwater, and water bubbles. Farmers note that barnacles, fat mussels, and itchy water indicate mussel spatfall in 2-3 weeks. Visual inspection confirms spatfall.

Oyster spat is collected year-round. Mussel spat is collected in May-July and October-January. Spat collectors for oyster include empty oyster shells, stones, bamboo poles, nipa petioles, palm wood, mangrove branches, and old tires. For mussels, they can be bamboo poles.

Oysters and mussels are mostly farmed where they are collected but some are transplanted to better growing areas.

The stake method is preferred for oyster culture because it is cheap and productive. The stakes are easy to manage and can not be easily stolen. In this indigenous technology, rows of stakes are arranged less than a meter apart, with 86 stakes per row and 35 rows per farm.

The stake and raft methods are popularly used for mussel culture. In the stake method, bamboo poles 10 meters long are staked 1 meter apart and tied to 3-5 horizontal braces. Poles may also be tied wigwam style in a 2-meter circle. Rafts measure 9 x 12 meters and are made of 40-50 bamboo poles. During the first 2-3 months, the rafts are allowed to float within the confines of a rectangle of bamboo posts. Thereafter, when the mussels become heavy, the raft is tied to the posts at a fixed position in the water column. Posts may be added to

further support the heavy raft. Raft culture in western Visayas differ from the Japanese system where floats and anchors are needed.

The stake and the raft methods allow for easy harvest and can yield high returns at less expense. The raft method causes less siltation than the stake and bottom methods of farming oysters and mussels.

Management of oyster and mussel farm include thinning out stocks and removing attached pests and visiting predators.

Oysters are harvested as early as 6 months and mussels at 8 months, but usually 10-12 months after spat collection. Oysters are harvested when they are 7-8 cm long and 5 cm wide, mussels when 6 cm long and 3 cm wide. Harvesting is usually done in the morning and lasts from 1 to 4 hours. The oyster or mussel farmer harvests 4 to 5 times a week during the harvest months. Oysters may be harvested year-round but mussels for only 2 months.

Source: GPB Samonte, WG Gallardo, RF Agbayani, SV Siar, RS Ortega, RE Tumaliuan, DZ Bermejo, and LAT Espada. *Socioeconomics of oyster and mussel farming in western Visayas, Philippines*. Report submitted to the Asian Fisheries Social Science Research Network based at the International Center for Living Aquatic Resources Management, Makati, Metro Manila, Philippines. 1993.