

## SEA-FARMING AND CONSERVATION OF MOLLUSCAN RESOURCES OF INDIA

By M. Devaraj

Central Marine Fisheries Research Institute, Cochin - 682 014, INDIA

### ABSTRACT

Aquaculture, depuration, sea-farming, conservation, and landing of molluscs in India are reviewed. Greater emphasis is placed on the activities of the Central Marine Fisheries Research Institute (CMFRI). Pearl oysters, *Pinctada fucata* and *Pinctada margaritifera*, give maximum revenue per unit area when compared to other aquaculture systems. The edible oysters *Crassostrea gryphoides* and *Crassostrea madrasensis* are cultured in Indian waters. With raft culture technique the production reaches 60-80 t/ha/year. Seed production and raft culture of mussels (*Perna uiridis* and *Perna indica*) have been developed by the CMFRI. Culture and harvest of clams are confined to *Anadara granosa*, *Villorita cyprinoides*, *Meretrix meretrix*, *Meretrix casta*, *Paphia malabarica*, *Katelysia opima*, and the giant clams *Tridacna crocea*, *Tridacna maxima*, *Tridacna squamosa*, and *Hippopus hippopus*. The annual yield of clams is estimated at 45,000 - 50,000 t. In 1993-94 a total of 769 t of frozen clam meat (mostly *P. malabarica*), valued at US\$ 0.74 million, was exported. Fishery independent factors are a source of major concern in the management of clam resources. Fishermen are conscious of the need for the management and conservation of clam resources. The overall harvest of chank, *Xancus pyrum* is about 1,256,000 individuals per year. The annual harvest of top shell (*Trochus niloticus*) is estimated at 400-600 t and turban shell (*Turbo marmoratus*) at 100-150 t. The total quantity of whelk meat (*Babylonia* spp.) exported from India during 1993-94 was about 300 t. Culture of squids has been attempted, but provision of live food was considered a major constraint for the success. However, the potential squid fishery within the Indian EEZ is estimated at 1.8 x 10<sup>5</sup> tons.