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## NOTE ON THE EXPLOITATION OF EDIBLE OYSTERS IN KOVALAM-MUTTUKADU BACKWATERS, MADRAS\*

Existence of edible oyster beds in the backwaters, lagoons and estuaries along both the coasts of India is well known. Exploitation of these beds is irregular and erratic and nowhere a sustenance fishery for these molluscs exists at present. Moreover, fishing of oysters is done mainly for the value of shells.

Unusually heavy exploitation of the beds of edible oysters was observed at Kovalam-Muttukadu backwaters, near Madras, where existence of rich beds of edible oysters was reported recently. Of the six beds demarcated, the bed to the west of Muttukadu bridge was observed to be the most extensive. The total area of the bed was 26,068 m<sup>3</sup> with an estimated biomass of 417 tonnes. The dense population of oysters was found to form a reef. The bed was subjected to exposure during extreme low tides.

During the period from 25th January to 21st February, 1987, the above bed was fished by men and women folk from nearby villages of Kunnakadu, Padur and Thaiyoor. Those who were exploiting the bed were not traditional fishermen but were mostly agriculture labourers, who took to fishing of oysters as an off-season venture to supplement their income.

Fishing was carried out during day time only on all the days, when the tide was low. Oysters available in clusters and heaps in the bed were removed using crow bars. Dislodged oysters were kept in heaps on the bed itself (Fig. 1), till they were removed to the shore using catamarans (Fig. 2). A maximum of eight catamarans were engaged during the peak period of exploitation. The oysters kept on the shore were sold to entrepreneurs of lime industry at the rate of Rs. 4/per one basket of 50 kg capacity. Each fisherman/woman could fish upto 8 to 10 baskets per day thus earning a remuneration of Rs. 32 to 40. The oysters were then, kept in open to allow the flesh to decompose and the shells to dry (Figs. 3 & 4). Later, they were transported by trucks to lime kilns at Palavakkam, Koyalam and Tambaram.

From 25-1-'87 to 21-2-'87, a total number of 476 persons were engaged in the fishing, landing 364 tonnes of oysters from the bed. The size range of oysters was 11-183 mm, indicating removal of adult oysters as well as spat.

It was understood from the fisherfolk that such exploitation of oyster beds at Kovalam-Muttukadu backwaters was done once in four or five years, when the oyster beds were exploited to the maximum extent possible. Even the subfossil deposits are not spared during these operations. This year it was noticed that 87.3% of the total biomass of oysters was removed, which may lead to denudation and may prevent further formation of oyster beds in the area. Apart from the removal of live oysters the quarrying of subfossil deposits on such occasions may prove to be destructive to the beds in the long run. This has to be guarded against.

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Fig. 3. Oyster heaps on the shore. Fig. 4. A closer view of the oysters.