

D-31: A feasibility study for the culture of tiger prawn, *Penaeus monodon* in earthen ponds adjoining Negombo estuary

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A study was carried out in an area adjoining Negombo estuary from December 1992 to May 1993, to find out the feasibility of culturing tiger prawn *Penaeus monodon* under extensive culture. Three earthen ponds measuring 23 x 48 m, 25 x 42 m and 22 x 47.5 m with a depth averaging 0.90 m were utilized in this study.

A canal connecting the ponds with the Negombo estuary facilitated exchange of water with the changing tidal currents, which enabled maintaining of approximately similar conditions in the water of the ponds and the estuary.

The water quality measurements made during the culture period showed that parameters such as salinity, pH and dissolved oxygen were favourable for the growth of prawns.

P. monodon (6000 prawns/ha) reached an average body weight of 38g and a length of 17 cm in about 4½ months. This is comparable with the results recorded by other workers.

It is concluded that culturing of prawns in earthen ponds adjoining Negombo estuary could be done successfully during the dry period. As heavy rains could cause leaching from the peaty soils making the water quality unfavourable for the growth of prawns, culturing should be planned in such a way that harvesting could be done before the South west monsoon rains.

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