

D-74: Preliminary observation on clam distribution and on maturity size and fishery for *Meritrix casta*, in the Negombo Estuary

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There are 5 species of clams in the Negombo Estuary, viz. *Meritrix lusoria*, *M. casta*, *Larkinia rhombea*, *Gelonia coaxnas* and *Gari veriegata*; of which *M. casta* is the most dominant species. It is distributed close to the east and west banks around the central region of the estuary. The length of *M. casta* present in the estuary ranged from 3 - 40 mm. Microscopic examination of the ovaries and testis indicated that the length of mature males was 24 mm. and that of females 27 mm as determined by gonad smears and sections. There are 2 major spawning seasons per year for *M. casta* in the Negombo estuary extending from May to June and November to December.

The total biomass of mature *M. casta* in the estuary was, 7,100 mt of which only 236 mt was exploited by the fishermen annually, mostly during the southwest monsoon period, 42 and 79% of males and females exploited by the fishermen were immature. The distribution of all species of clams was related to the pattern of distribution of all species of clam was related to the salinity and temperature of the estuarine waters and the nature of the bottom sediment. Except *M. casta* the other 4 species were mostly confined to the lower one third of the estuary.

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