

Coastal Wetland Uses and Related Problems in Muthurajawela Marsh and Negombo-Chilaw Lagoons (MMNCL)

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1. Uses of wetlands and related environmental problems

The major economic activity of both the Negombo and Chilaw lagoons is fisheries. More than 3067 families are supported by the fisheries of these two water bodies (Samarakoon and Van Zon 1991, Anon 1994). The value of the fish production from Negombo lagoon has been estimated to be Rs 100 million/year in 1991 (Samarakoon and Van Zon 1991) and today assuming that the number of families remained constant and a family earns a minimum of Rs 200 per day for 26 days per month, the value of the production is around Rs 187 million/year. However, over-exploitation of fishery resources has been identified as a problem in the Negombo lagoon wetland. So far though, very little work has been done on examining the level of exploitation of fishery resources in the Muthurajawela marsh, despite a significant number of fishermen and their families who are dependent on the marsh and its resources for their livelihoods. The main species caught are snakehead and climbing perch and during part of the year, a small decapod crustacean, a caridine shrimp is caught and sold after sun drying. However, due to lack of data, there is no evidence to conclude that fishery resources in the Muthurajawela marsh are over-exploited.

The use of some fishing gear has contributed to eutrophication of the lagoon wetland (e.g. Brush piles), denudation of mangroves (e.g. Brush piles) and destruction of sea grass beds (e.g. encircling nets, push nets and trawling). In addition, some of fishing gear, such as Kralls, interfere with the migration of fish and other animals between the estuary and sea.

These coastal wetlands are also used for aquaculture. Ponds for shrimp aquaculture have been constructed in Negombo lagoon and Chilaw lagoon wetlands. Attempts have been made to carry out aquaculture in the Muthurajawela marsh but these have been unsuccessful. Results of