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**ENVIRONMENTAL PARAMETERS AND FISH
ABUNDANCE IN NEGOMBO LAGOON**

A PROJECT REPORT PRESENTED BY

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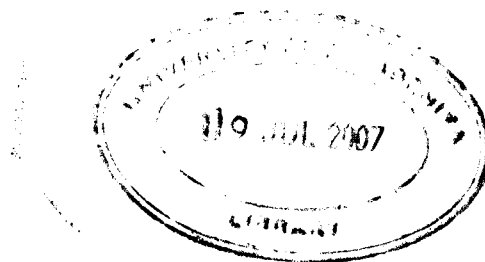
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The Negombo lagoon fishery mainly targets juveniles and the pre adults of penaeid shrimps, which utilize the lagoon for their nursery life. Fisheries for shrimps inside the lagoon is mainly conducted using five principal gear types: drag nets, cast nets, brush piles, trammel nets, and the stake-seine nets. *Penaeus indicus* accounted for a substantial portion of the total prawn catches in the Negombo region especially from the lagoon. Though fisheries for penaeid prawns operate inside and outside the lagoon, *P. indicus* catches were higher in the lagoon. For all most all the gear types operating in the lagoon, the shrimp catch rates showed considerable seasonal variations over the study period. Generally the spring and autumn months were the most productive, particularly the latter. This is apparent with the catch rates of all the fishing gear operating inside the lagoon, particularly in 1999, except for stake-seine net catches which fluctuated throughout the study period. The influence of the environmental parameters on prawn yields from different gear types operating in the system provide sufficient evidence to justify the claim that salinity has a great influence over shrimp catches from the lagoon. In general, the catch rates increase with increasing salinity. Prawn catches from the sampling sites associated with high salinity waters were greater than the rest suggesting that the low salinity made prawns less abundant or available for capture. An inverse linear relationship was observed, between prawn catch rates and temperature. Chlorophyll abundance was not found to have a reasonable influence over lagoon catches.