

SOME OBSERVATIONS ON THE FISHERY AND BIOLOGY OF
SARDINELLA GIBBOSA IN COASTAL WATERS AROUND NEGOMBO

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Fishery and biology of Sardinella gibbosa was studied using fish catches from gill net fishery in Negombo collected from March 1979 to December 1980.

There was a 100% increase in fishing effort from 1979 to 1980 and this has resulted in a drop in catch per unit effort. The total production of Sardinella gibbosa dropped from 503 MT in 1979 to 302 MT in 1980.

Length weight relationship for intermediates, males and female were found to be significantly different from one another. The sex ratio was 1 : 1 and there was no seasonal change in sex composition.

The parameters of the Von Bertalanffy's growth equation were $L = 17.0$ cm, $K = 2.2$ and $t_0 = 0.082$. The total mortality was 10.2 and a high exploitation rate of 0.66 was observed. There seem to be two recruitments per year. The study indicates only one spawning period extending from April, May to September.