

**FISH YIELDS OF SOME DOWN-STREAM RESERVOIRS OF THE
MAHAWELI BASIN**

by

U.S. Amarasinghe

National Aquatic Resources Agency, Crow Island, Colombo 15

Fish yields and fishing pressure in down-stream reservoirs of the Mahaweli basin vary considerably from each other. In Parakrama Samudra, where the fish yield was recorded to be one of the highest ($376 \text{ kg ha}^{-1}, \text{ ye}^{-1}$) in the south east Asian region, the annual fish yield in 1985 was 46 kg/ha . This declining trend is due to over-fishing. High fish yields ($441 \text{ kg ha}^{-1}, \text{ ye}^{-1}$ in 1985) were recorded in Pimburettewa where the fishery is optimally exploited.

Indigenous fish species such as Labeo dussumieri and Barbus sarana which have been recorded to be contributed considerably to the commercial catches during rainy seasons, are presently insignificant in the landings. Tor kudree longispines has almost entirely disappeared in the reservoir fish catches. This could possibly be due to the river damming which would interrupt reproductive strategies of indigenous riverine species.

Although the major constituent in the Sri Lankan reservoir fishery is Oreochromis mossambicus, in some down-stream reservoirs of the Mahaweli basin, O. niloticus appears to become dominant. After intensive stocking of O. niloticus fingerlings, the conditions were probably more favourable in these reservoirs due to the receipt of water from the Mahaweli river diversion project. Future research needs on the reservoir ecosystems in relation to fisheries management are discussed.