

## ABSTRACT

The exotic Oreochromis mossambicus (Peters) accounts for about 80% of the inland fish production in Sri Lanka at present. The bulk of the production comes from the capture fishery in reservoirs and is mainly based on the monospecific gill net fishery. The indigenous species represented in the commercial catches are mostly limited to Barbus sarana, and in certain reservoirs Labeo dussumieri also occur in catches. However, apart from these species there is a large population of minor cyprinids in perennial reservoirs, which remain untapped at present.

The indigenous minor cyprinids could be broadly categorised into two groups depending on the catchability by gill nets of 15mm range and 30mm range respectively. These minor cyprinids essentially inhabit the deeper areas of the water bodies as the adult population of O. mossambicus. The minor cyprinid fauna differed marginally from reservoir to reservoir. The main species of minor cyprinids that were present are B. sarana, B. dorsalis, B. chola, B. filamentosus, Amblypharyngodon melettinus and Rasbora daniconius. Thus with the use of the two categories of gill nets viz. 15mm and 30mm range, the minor cyprinids could be harvested without any detrimental effect on the O. mossambicus fishery. The possibility of introduction of a small meshed gill net fishery for minor cyprinids is based on detailed analysis of catch curves of each minor cyprinid species.

Commercial trials show that an average production of 705 kg ha<sup>-1</sup> yr<sup>-1</sup> of minor cyprinids could

be obtained. This indicates the possibility of introducing a viable subsidiary fishery based on minor cyprinids without effecting the existing fishery. The preliminary indications are that the minor cyprinids also has a considerable economic potential in that it could serve as a food fish and also as a raw material for the fish meal industry.