

Present status of the Yellowfin tuna (*Thunnus albacares*, (Bonnaterre, 1788)) fishery in Sri Lanka

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Yellowfin tuna (*Thunnus albacares* (Bonnaterre, 1788)) is an important commercial fish species which significantly contributes to the seafood trade in Sri Lanka. Due to the great importance of the fishery as well as to the vulnerability due to overfishing, it is imperative to assess and monitor the resource periodically with available data. Hence, the study aimed to analyse the present fishery status of the Yellowfin tuna (YFT) in Sri Lanka using available data of the Indian Ocean Tuna Commission (IOTC) from 2013 to 2020. Accordingly, the relative contribution of the YFT production to tuna, tuna-like species and bill fish production in Sri Lanka has increased from 23.7% in 2013 to 36% in 2020, while 70 - 80% of the YFT catch comes from the longline fishery. The percentage YFT catch in gillnet fishery for the same period has markedly reduced from 20.4% to 6.3% and 14.5% to 2.6% in coastal areas and high seas respectively. The YFT production showed a positive trend (Mann-Kendall trend test), both in high seas and coastal fishery (Sen's slope values estimates were 1228.6, 82.8 and 1291.0 for total production, high seas and EEZ respectively). The total length (TL) of the YFT ranged from 47 cm to 287 cm in the offshore gill net fishery and 47 cm to 305 cm in the longline fishery on high seas from 2016 to 2020. In the EEZ, the TL varied from 29 cm to 266 cm in the coastal gill net fishery and from 26 cm to 272 cm in the longline fishery during the above period. The lowest percentage of immature YFT was reported in the offshore longlines (0.4%) and coastal longlines (1.7%). The results of this study could be used to find the direction for means of complying with IOTC resolutions and management of the fishery resources in Sri Lanka.

Keywords: coastal fishery, fish production, high sea fishery, Yellowfin tuna

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