

## Assessment of Trash Fish and By-Catch yield of Coastal Fisheries in Selected Landing Sites of Jaffna District

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Abstract: Jaffna fishery contributes a total fish production of 7% in Sri Lanka in 2016. The current study aims to collect recent updates on the Trash fish and By-catch yield concerning gears in selected landing sites of Jaffna from Dec 2018 to Mar 2019. Primary data were collected through direct observations and questionnaires and the Secondary data from the records of the Department of Fisheries, Jaffna. Total Catch, Species composition, and Fishing craft usage were collected weekly. A sum of 28 species, representing 22 families were identified. Outboard Fiber Reinforced Plastic Boats were primarily used. The highest total fish production was observed in Math gal with an average of 24.5 tons/month and lowest in Ponnalai with 9 tons/month. Higher target fish yield was observed from a ray net with 86.54% gear efficiency and lower in disc net with 38.72%. By catch was observed high in crab net with 41.625% and lower in ray net of 10.84%. Casting net and ray net yields higher and lower trash fish of 30.18% and 2.62% respectively. The results of the present study suggest a need for development in existing facilities. Keywords: By- catch, Coastal fishery, Fishing crafts, Fish production, Gear efficiency

## I. INTRODUCTION

Sri Lanka's total marine fish production was 456,990 Mt in 2017 and it's contribution in the National GDP was 1.3% (NARA 2016). Jaffna peninsula contains shallow continental shelf Pedro bank, pearl bank, prawns bank and brackish water of 11,917 hectare and mangrove areas of 7,070 hectares (Soosai, 2006). Jaffna District has 14 fishery inspector division and 100 landing sites (Statistical information of the Northern Province, 2014). Fishermen of this area engage various kind of fishing methods varies from gear, crafts and different fishing techniques (NARA. 2008). Fishing activities of these areas were regulated by the local fishing communities and fishermen societies (Raguparan, 2013). The marine resources are greatly varied in this areas from finfish, shellfish, cuttlefish, sea cucumber, sea pens, shrimp and sea weed.



(Plate 1.0)