BEACH SEINE FISHERY IN THE NORTHWESTERN COAST OF SRI LANKA

P.A.T. Fernando*

Marine Biological Resources Division, National Aquatic Resources Research and Development Agency, Crow Island, Mattakkuliya, Colombo 15, Sri Lanka

ABSTRACT

A preliminary analysis of the beach seine fishery along the northwestern coast of Sri Lanka is presented. This study was carried out from Udappuwa to Mampuri from October 1992 to May 1994. In the past Wooden paru and fibreglass Vallam were used with nets made of coir ropes with removable kuralon cod ends. Recently more effective types of nylon beach seine nets have become popular in this area.

Fishing operations are seasonal; they start in September/October and last until April/May of the following year. The average annual effort and the average annual catch rates recorded for the 1992 to 1994 period were 5252 operations and 260.3kg/operation. Catch per man-hour and catch per unit area were 2.41kg/hour and 48.69kg/ha respectively. A total of 45 species were identified among the catches. Sardinella spp. (41.4%), Amblygaster sirm (13.2%), Leiognathus spp. (7.7%), Carangids (7.3%) and Rastrelliger kanagurta (7.2%) were the major contributors to the beach seine catches.

The annual production from the beach seine operation was estimated as 1160MT and the average monthly income varied from Rs. 80,700 to Rs. 322,700. Average expenditure varied from Rs. 35,000 to Rs. 40,000. Presently, around 3000 fishermen are directly involved in this fishery.

INTRODUCTION

This study was a part of an integrated fishery monitoring programme carried out in the Puttalam/Mundel Lake and associated coastal waters in the northwestern region of Sri Lanka. The coastal fishery survey covered a coastline of 44km from Udappuwa to Mampuri in the Puttalam district. Various craft and gear combinations were used to exploit the small pelagic and demersal fish varieties in the study area. This paper describes the beach seine fishery carried out in the adjacent coastal waters.

Availability of suitable calm sea conditions and trawlable fishing grounds with high catch rates in the study area have made beach seine popular in the fishermen to carry out beach seining in this area (Canagaratnam and Medcof, 1956; Binduhewa, 1990). A majority of these fishermen are migrants from adjacent areas of the west coast, while the rest are permanent residents of the area (Fernando, 2001). The ability of these fishermen to maintain their Territorial User Rights in Fisheries (TURF) has controlled the use of their lands for other fisheries (Kulatunga, 1995). Therefore, unlike in other parts of the country, where beach seine fishery is in a declining trend, this fishery has been the major contributor (65%) to the small pelagic fish production in the study area (Fernando, 1994).