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CATCH AND REVENUE OF GILLNETTERS OPERATING FROM RATNAGIRI FISHING HARBOUR, INDIA

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ABSTRACT

This study was undertaken to understand the sustenance of fisherfolk operating gillnet along the Ratnagiri coast. Data was collected during year 2003-04 from the motorized boats fitted with either one cylinder Outboard Machine (OBM) of 15 hp capacity or two cylinder Inboard Machine (IBM) with 20 hp capacity. Over all length of gillnetters varied from 8.20 to 12.54 m whereas breadth 1.22 to 2.31 m. Indian mackerel contributed maximum in catch (28.13 %) as well as in revenue (45.97 %) for OBM gillnetter whereas seerfish was the major contributor in catch (38.59 %) with revenue (71.15 %) for IBM gillnetters. While considering catch and revenue, October and December months were most productive months for OBM and IBM gillnetters respectively. Pelagic fish group had maximum representation with respect to catch at 63.53 per cent and 83.18 per cent for OBM and IBM gillnetters respectively. OBM gillnetter earned total revenue of Rs. 2,65,943/- whereas IBM gillnetters earned Rs. 5,79,203/-

Key words : Catch, Revenue, Gillnetters, IBM, OBM.

Catch composition study of any fishing operation gives an idea about the varieties of fishes and shellfishes caught by the gear, which intern helps to understand biodiversity of that region. In addition to this quality and quantity landed by any gear plays an important role in it's economic viability. The price of fish varies regularly as it is perishable material and also according to variety.

Many workers have studied these aspects of gillnet operated in different part along the Indian coast (Silas *etal*., 1984; Sathiadhas and Panikkar, 1988; Sathiadhas and Benjamin, 1990; Koya and Vivekanandan, 1922; Iyer, 1993; Sathiadhas *et al*., 1993) but no one has made an attempt to study these aspects with respect to gillnet along the Ratnagiri coast.

The studies undertaken hitherto have categorized the vessels according to their size to study the variation in catch composition, but in the present study the vessels are grouped into clusters according to there vessel and engine specifications to understand the catch composition and revenue generated by gillneters operated along the Ratnagiri coast.

MATERIALS AND METHODS

Mirkarwada fishing harbour ($17^0$00'Nand 73^0 16'42"E) situated near Ratnagiri city was selected for the present study. Vessel and engine specifications were collected from 25 In-Board Machines (IBM) and Out-Board Machines (OBM) gillnetters operating along the Ratnagiri coast. The gillnetters were classified in to two clusters, depending upon their vessel and engine specifications, by K-mean clustering (Johnson and Wichern, 2001) by using SYSTAT 7.0. The data was collected from 15th August 2003 to 31st May 2004 which was considered as one fishing season. The quota of five vessels per week was fixed and due care was taken to cover all size and types of gillnetters landing their catches at Mirkarwada fishing harbour.

Specieswise catch statistics and revenue of five sampling units in a week was recorded by visual observation. The recorded values were averaged to get per day catch statistics and revenue, which was further projected to get weekly and monthly catch statistics and revenue of gillnetter. The data was analysed by using appropriate statistical methods (Snedecor and Cochran, 1967).

RESULTS AND DISCUSSION

Altogether 60 gillnetters were operating from the Mirkarwada fishing harbour. Out of them, 52 were motorized gillnetter and their size varied from 8.20 to 12.54 m in length and 1.22 to 2.31 m in breadth. They were fitted with one cylinder (15hp) and two cylinder (20hp) engines. Most of the FRP constructed OBM vessels were operating monofilament nylon net whereas wooden with FRP coated IBM vessels were operating multifilament nylon net. Monofillament nylon net was made