



MARINE FISHERIES INFORMATION SERVICE

No. 186

October, November, December 2005



TECHNICAL AND EXTENSION SERIES

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

COCHIN, INDIA

(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)

The Marine Fisheries Information Service : Technical and Extension Series envisages dissemination of information on marine fishery resources based on research results to the planners, industry and farmers and transfer of technology from laboratory to field.

Abbreviation - Mar. Fish. Infor. Serv., T & E Ser., No. 186, October, November, December 2005

1142 Heavy landings of mullet *Mugil cephalus* by bag net at Chennai Fisheries Harbour

Edavalai (bag net) is operated for pelagic fish shoals along the Coromandel coast. During the post-tsunami months (February- March) the edavalai was predominantly operated along the Chennai coast, which supported the livelihood of fisherman. The edavalai (mesh size:15mm) used for catching anchovies and sardines is locally called 'arunthavalai' and the one (mesh size:25 mm) used for catching mackerels and mullets is called 'penthavalai'. Usually two large catamarans (8 meter OAL) (or fiberglass boats) in co-ordination with two small catamarans are used for operating the edavalai. The catamarans, carrying the crew of 5 person each, sight the shoal, encircle it and drive the fish into the net. The net is dragged nearer to one of the boats and the catch hauled into the boat.

During June 2005, when the nets were operated at a distance of 3-5 km from the Chennai Fisheries Harbour at a depth of 5-10 m, there was heavy catch of the mullet

Mugil cephalus. Heavy landings were recorded on 01.06.2005 (8.7t), 03.06.2005 (10.6t), 14.06.2005 (8.6t), 15.06.2005 (9t) and 16.06.2005 (7.1t). The mullet landings by edavalai in Chennai Fisheries Harbour during 2003-2005 are given in Table 1. Higher catch and CPUE were noticed in the months of September- October, January – February and May- June.

Analysis of length frequency of *M. cephalus* collected on 3.6.05 revealed that the catch comprised of immature fish with length range of 105-139 mm and weight range of 12-28 g. Whereas fish collected on 15.06.05 indicated that the fish were in pre-adult stage with 180-244 mm length range and 70-140g weight range. Females were dominant in the catches.

By operating edavalai in the near shore waters, the fishermen realized a revenue of Rs.5244/- to Rs.6384/- per boat during the first fortnight. The income ranged between

Table 1. Mullet landing by edavalai at Chennai Fisheries Harbour during July 2003-June 2005

2003-2004				2004-2005		
Month	Catch [t]	CPUE (kg)	%	Catch [t]	CPUE (kg)	Per.in edavalai
July	2.4	13.7	2.9	4.3	11.0	1.7
August	4.2	30.0	0.6	0.8	9.0	1.0
September	7.7	112.3	54.9	35.1	35.1	0.6
October	18.8	121.1	16.4	6.5	28.0	6.4
November	1.0	7.1	1.1	0.0	0.0	0.0
December	4.3	43.8	6.8	0.2	74.4	100.0
January	16.6	98.7	24.3	No fishing	No fishing	No fishing
February	6.4	198.6	100.0	0.0	0.0	0.0
March	6.6	187.0	100.00	0.2	19.3	1.9
April	0.0	0.0	0.0	0.0	0.0	0.0
May	55.9	146.2	32.6	7.8	68.0	15.6
June	3.0	3.4	0.3	74.2	222.0	20.8
Total	126.9	-	-	129.1		

Table 2. Landing and price of *Mugil cephalus*

Date	Effort [units]	Landings [kg]	CPUE [kg]	Length range[mm]	Weight range [g]	Price [Rs/kg]	Total Value (Rs.)
01/06/05	10	8740	874	105-139 [122]	12-28 [18]	6	52440
03/06/05	10	10640	1064	-	-	6	63840
14/06/05	12	8640	720	180-249 [207]	70-140 [95]	32	276480
15/06/05	10	9000	900	-	-	32	288000
16/06/05	12	7100	592	-	-	32	227200
Total	54	44120	4150	-	-	-	907960

Rs. 19933/- and Rs. 28800/- per boat during the second fortnight on account of the large size of the fish. During the 5 days of observation in June 05, a total of 54 units earned more than Rs.9 lakhs (Table 2).

Prepared by : Rajapackaim S., S.K. Balakumar, S. Mohan and S. Rajan, Madras Research Centre of CMFRI, Madras