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CATAMARAN FISHERY FOR *HILSA TOLI* AT TUTICORIN*

Every year some traditional fishermen from Kanyakumari migrate to Tuticorin with their catamaran craft to fish with various gears according to availability of fish groups in the area. During 1988 these fishermen developed a nylon fish net with 4 to 5 cm mesh size to catch large quantities of *Hilsa toli* Fowler locally called 'Kalar' available near the Hare Island fishing grounds at depth range from three to four metres. Regular monitoring was done from 1988 season to the end of 1991 season. Though *Hilsa toli* formed 57.8% of the catch other fishes like sciaenids, mackerel, *Otolithus*, *Pellona* and crabs also were caught by these nets (Table 2).

During 1988 modest *Hilsa toli* landings were noticed during October and November. Heavy landings of 33.5 tonne were recorded during December, with catch per unit of 22.2 kg. The 1989 fishery for *Hilsa toli* started in February and continued till May. Good landings were recorded during April with 8.4 t. Total landings during 1990 came to 8.59 t. Moderately good landings of 3.6 t and 3.9 t respectively were observed during October and December. A total of 68.7 tonne were caught during three months of fishery in January, November and December in 1991 (Table 1).

Observations were made on the size groups of *Hilsa toli* caught by catamaran (Table 3). Most of the fish caught were in the size groups from 14.0 cm to 21.5 cm. Dominant size groups were

TABLE 1. Estimated catch of *Hilsa toli* landed by catamaran at Tuticorin South fish landing centre

Year and month	Fishing days	Estimated catch of <i>Hilsa toli</i> in kg	Number of units operated	Catch per unit in kg
1988				
October	26	715	208	3.4
November	26	741	182	4.1
December	27	33552	1512	22.2
Total	79	35008	1902	18.4
1989				
February	23	567	161	3.5
March	26	3415	260	13.1
April	25	8433	750	11.2
May	27	2952	324	9.1
Total	101	15367	1495	10.3
1990				
October	12	3632	72	50.4
November	26	1001	52	19.3
December	24	3960	168	23.6
Total	62	8593	292	29.4
1991				
January	9	31301	618	50.6
November	8	24622	504	48.9
December	2	12859	210	61.2
Total	19	68782	1332	51.6



Fig. 1. *Hilsa toli*.



Fig. 2. Day's catch before auction.

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TABLE 2. Catch composition of important fish groups in 'catamaran hilsa net' unit during 1988-1991 in tonnes

Species	Years							Rank
	1988	1989	1990	1991	Total	Average	%	
<i>Pellona</i> sp.	0.4	4.3	2.1	1.5	8.3	2.1	3.8	5
<i>Hilsa toli</i>	35.0	15.4	8.6	68.8	127.8	31.9	57.8	1
<i>Chirocentrus</i> sp.	0.7	0.7	00	00	1.4	0.4	0.7	9
<i>Sphyræna</i> sp.	00	0.6	00	0.1	0.7	0.2	0.4	12
Carangids	3.9	2.0	00	00	5.9	1.5	2.7	7
Mackerel	13.4	5.8	00	1.8	21.0	5.3	9.6	3
Sciaenids	16.7	10.1	00	2.8	29.6	7.4	13.4	2
<i>Otolithus</i> sp.	9.5	1.7	00	0.9	12.1	3.0	5.4	4
<i>Sillago sihama</i>	00	0.6	00	0.2	0.8	0.2	0.4	13
Lethrinids	00	1.7	00	00	1.7	0.4	0.7	10
Other perch like fishes	00	3.2	00	00	3.2	0.8	1.4	8
Crabs	3.1	2.5	00	1.2	6.8	1.7	3.0	6
Miscellaneous	00	1.3	0.3	00	1.6	0.4	0.7	11
Total	82.7	49.9	11.0	77.3	220.9	55.2	100.0	



Fig. 3. Catamarans ready for next day's fishing.

at 16.5 cm during 1988, 17.5 cm in 1989, 16.5 cm in 1990 and 16.5 cm in 1991. Major portion of *Hilsa toli* fishery comprised of fish between 15.5 cm and 19.5 cm.

As seen from the foregoing the *Hilsa toli* fishery at Tuticorin appears to be seasonal and highly fluctuating. Nearly the entire catch was packed with ice and transported to Kerala to fetch better price.

TABLE 3. Length (mm) frequency (nos) of *Hilsa toli* at Tuticorin (1988-1991)

Size groups mm	1988	1989	1990	1991	Total
110	—	—	7	2	9
115	1	—	7	—	8
120	—	—	2	—	2
125	2	—	1	—	3
130	—	—	—	—	—
135	—	—	—	—	—
140	—	1	—	2	3
145	2	2	2	8	14
150	4	2	1	—	7
155	6	2	3	13	24
160	18	7	7	13	45
165	43	18	22	40	123
170	31	38	15	19	103
175	11	44	19	30	104
180	14	35	20	21	90
185	4	4	10	32	50
190	8	9	12	27	56
195	7	3	2	10	22
200	2	1	3	1	7
205	6	—	2	10	18
210	2	1	—	—	3
215	2	1	—	—	3
220	1	—	—	—	1
225	1	—	—	—	1
Total	165	168	135	228	696