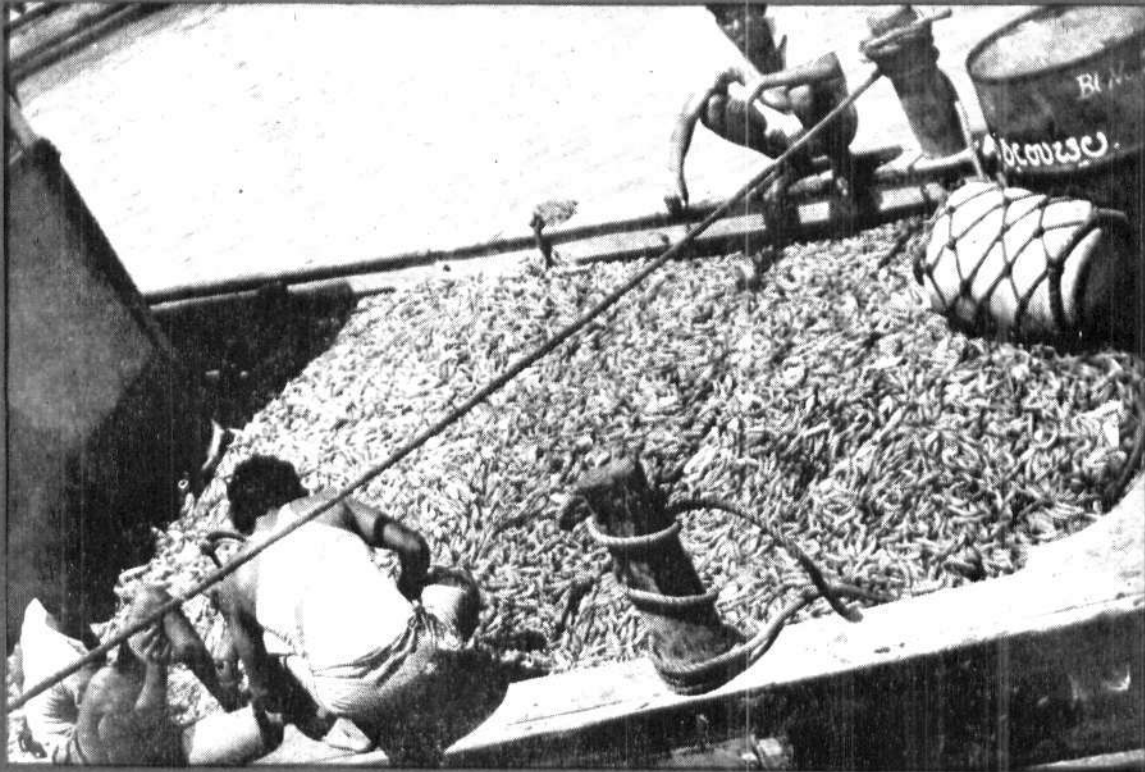




MARINE FISHERIES INFORMATION SERVICE



No. 65

OCTOBER, NOVEMBER
DECEMBER
1985

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 the rapid dissemination of information on marine and brackish water fishery resources and allied data available with the National Marine Living Resources Data Centre (NMLRDC) and the Research Divisions of the Institute, results of proven researches for transfer of technology to the fish farmers and industry and of other relevant information needed for Research and Development efforts in the marine fisheries sector.

Abbreviation – *Mar. Fish. Infor. Serv. T & E Ser.*, No. 65: 1985

HEAVY LANDING OF *PARAPENAEOPSIS STYLIFERA* (M. Edw.) AT BOMBAY DURING POST-MONSOON 1984*

New Ferry Wharf is a major fish landing centre in Greater Bombay where fishing activity generally resumes in September after a period of lull during the south-west monsoon. This centre accounted for an annual (July-June) average of 7,530 tonnes of penaeid prawns of which *Parapenaeopsis stylifera* constituted 59.6%. The peak period of fishery for this species was observed to occur during September-December. The month-wise catch in tonnes and CPUE in kg in parenthesis (fishing trip is unit effort) during this period of different years are given below.

Year	Sept.	Oct.	Nov.	Dec.	Total
1979	188.6 (91.7)	388.7 (186.2)	317.6 (162.6)	821.4 (352.8)	1716.3 (202.2)
1980	189.8 (92.7)	703.3 (292.8)	1166.2 (507.5)	967.5 (377.6)	3026.8 (325.1)
1981	324.9 (209.7)	439.3 (191.5)	531.6 (245.1)	168.3 (73.2)	1464.1 (176.1)
1982	1246.2 (501.9)	515.8 (180.7)	206.6 (115.3)	305.9 (107.5)	2274.5 (228.0)
1983	530.1 (276.0)	1881.1 (415.2)	409.6 (128.8)	421.7 (174.8)	3242.5 (296.2)
1984	2548.9 (842.6)	1386.0 (382.1)	—	—	—

It could be seen that the peak of the fishery occurred in November or December during 1979-82 whereas in the subsequent years it was in September or October. During September, 1984, exceptionally heavy landings were recorded. The area of operations was off Bombay-Janjra-Murud (about 80 km coastline) in depths of 20 to 25 m. The size (total length) of *P. stylifera* ranged from 58 to 103 mm for males and from 63 to 118 mm for females with the modal size at 83 mm and 103 mm for the respective sexes. About 10% of females was found to be in mature condition. The male-female

*Prepared by S. Ramamurthy and A. Y. Mestry, Bombay Research Centre of CMFRI, Bombay.

ratio was worked out to be 1:1.68. There was no significant departure in the biological features of the fishery from those of the earlier years.

The price of the species per tonne at the landing centre ranged from Rs. 4 to 6 thousand. During the glut period, there was heavy demand for ice at the landing site and as a result the price of ice per tonne shot up from Rs. 200 to 500. The catches were transported to Porbandar and Veraval factories in Gujarat since the supply was too large to be handled by the local processors.

It is of interest to note that during September, 1984 the best landings were observed from 14th to 28th when the catch per unit varied from one to 1.5 tonnes. Simultaneously at Sassoon Dock, another major base for trawlers in Greater Bombay, the catch per unit varied from one to three tonnes. The 'dol' (fixed bag net) netters of the Alibag zone (Raigad District) stretched about 50 km south of Bombay were also reported to have netted *P. stylifera* in abundance (1.5 to 1.8 tonnes per unit of two hauls) during 23rd to 28th September, 1984. The catch that was landed in that zone was transported to Ratnagiri/Goa, the price of raw material being of the range of Rs. 1.5 to 2 per kg. Further south, in the Mangalore area (Karnataka), heavy landings of *P. stylifera* were reported more or less synchronising with this period. (Personal communications from K. B. Waghmare, J. P. Karbhari and K. K. Sukumaran). The incidence of such huge catch all along the coast at about the same time was probably triggered by some oceanographic factors such as large scale upwelling of oxygen minimum layer which might have pushed the stock towards the shore. (Vide Ramamirtham, Fishery Oceanography, CMFRI; 20th Anniversary Souvenir, 1967). Unfortunately no data are available on these aspects to confirm.

Thanks are due to the Fishery Resources Assessment Division of CMFRI for making the catch data available.

