

**CENTRAL MARINE FISHERIES  
RESEARCH INSTITUTE**

**Activities and Achievements**

**Veraval Research Centre**



Veraval is situated in Saurashtra Coast (Lat. 20° 54'N, Long. 70° 22'E) about 185 Km from Rajkot and is one of the largest fish landing centres of Gujarat. Realising the importance of Veraval in the fisheries map of India, Veraval Research Centre of Central Marine Fisheries Research Institute was established in 1954 as a Survey Centre. It was upgraded as Research Centre in 1959 and with addition of more research programmes and personnel over the years, it was delinked from the Bombay Research Centre since January, 1985 to which it was attached earlier.

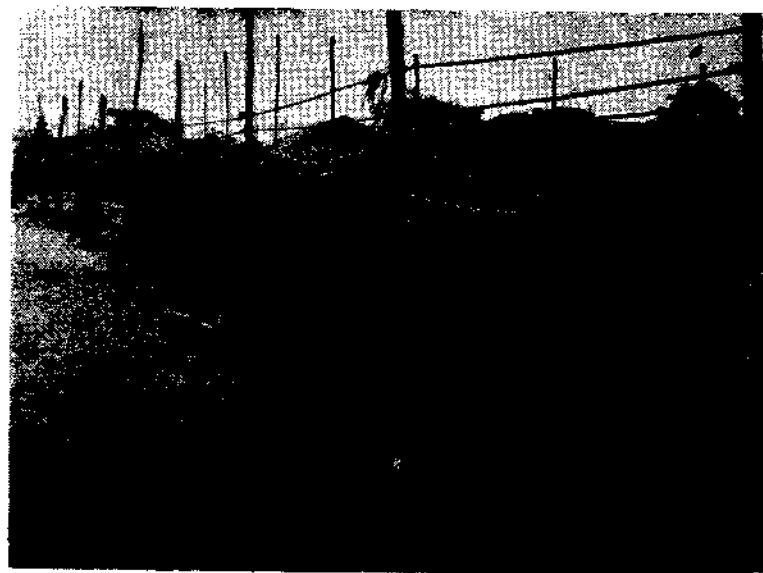
#### **MAJOR ACTIVITIES AND ACHIEVEMENTS**

The activities of the Research Centre include estimation of marine fish landings along the Gujarat Coast and attending to various research projects on capture fisheries. Studying the biology of selected fish groups, monitoring the resource characteristics for stock assessment of major pelagic and demersal fish groups and experimental dol net fishing have been the major interests of the Research Centre. At present, the Research Centre is actively involved in the following Research Projects.

#### **DEMERSAL FISHERY RESOURCES**

The objective of the project is to assess the effect of trawling on the fishery resources off Veraval. The study

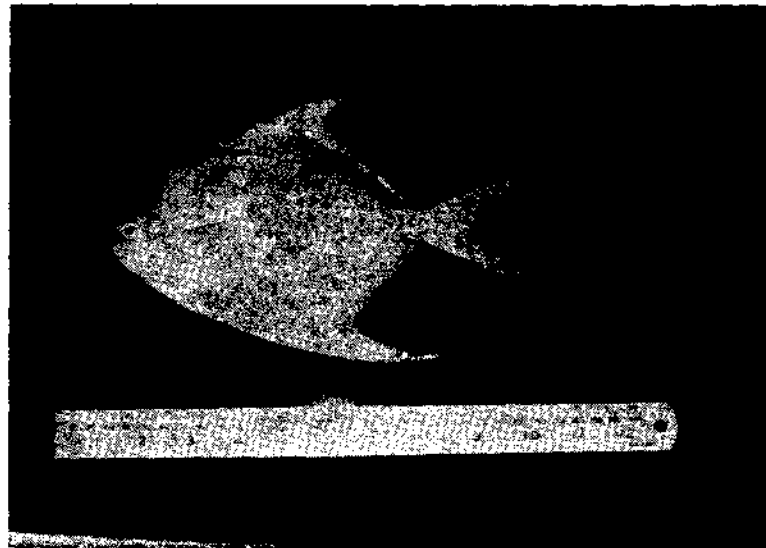
helps in regulation of efforts and mesh size of commercial trawlers in the presently trawled areas off Veraval and also to advise the Government and the industry on the maximum sustainable yield of important resources. The project also helps in prediction of availability of resources in space and time.



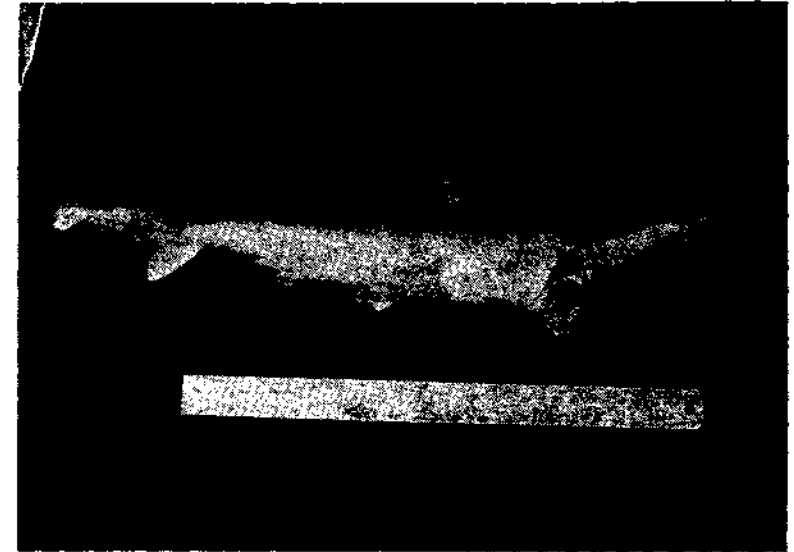
*Drying Ribbon fishes*

For this purpose, the Research Centre has been engaged, for the past two decades, in collection and analysis of catch, effort and species composition of selected groups

viz. pomfrets, ribbon fishes, elasmobranchs, lizard fishes, threadfin-breems, sciaenids, cat fishes, prawns, lobsters and crabs. The investigations are conducted on the landings of the commercial trawlers in the two important landing centres at Veraval i.e., Old Light House and Bhindya. The annual total landings at Veraval is about 50,000 tonnes from about 600 trawlers. The sciaenids, ribbon fishes, penaeid prawns and cephalopod landings

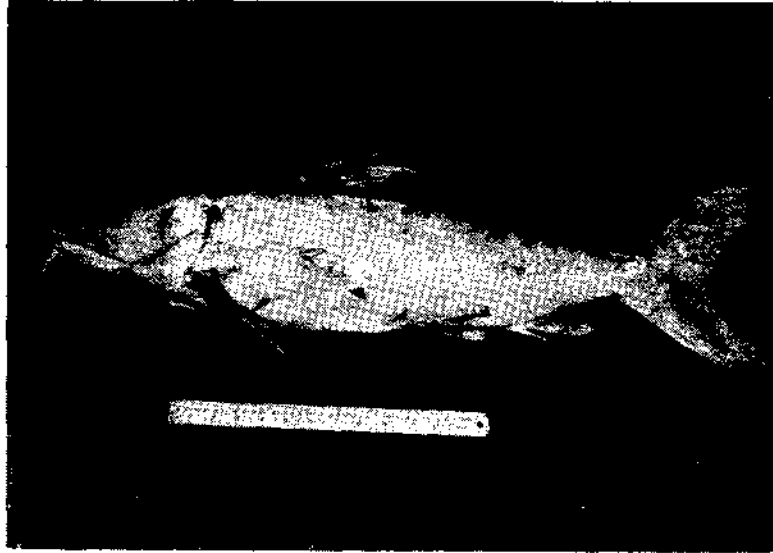


*Pampus argenteus*



*Scoliodon laticaudus*

are about 11,000, 6,200, 3,300 and 2,200 tonnes respectively. Based on the length frequency method, the growth, mortality and total stock of a few species in the above mentioned selected groups have been estimated. Estimation of annual landings and of the total stock provides status of exploitation, leading to suggestion for management policies on regulation of fishing effort and end mesh size of trawl nets.



*Tachysurus dussumieri*

#### **DRIFT NET FISHERIES**

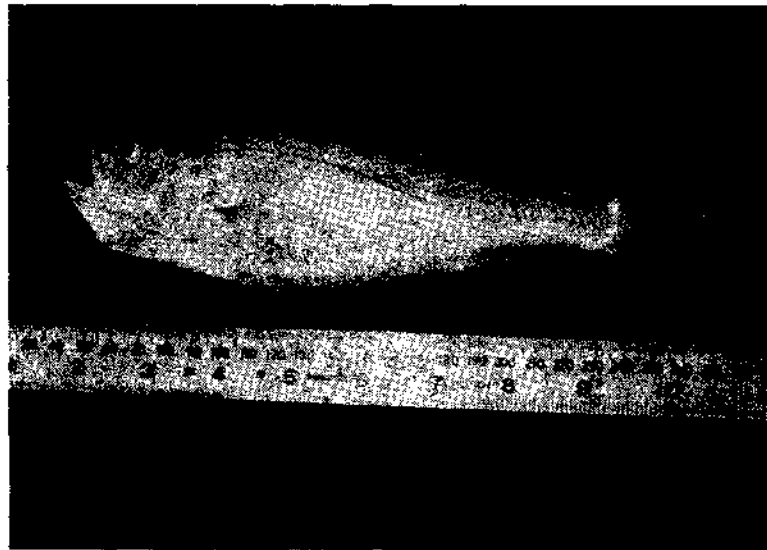
As drift net fishing has become widely prevalent during the last few years bringing catches of high unit value fishes and also since the use of outboard motor fitted crafts has increased recently, the study on drift net fishery is of importance. A study on the fishery will be useful for understanding the composition, abundance and viability of drift net fishing.

The landings from drift net/set gill net at Veraval has been monitored for many years. The annual average landings from this gear is about 5,000 tonnes. The catch,

catch rate, species composition and length frequency of pomfrets, elasmobranchs and cat fishes have been closely monitored so as to assess the population characteristics of the target species in drift net fishery. Length frequency study on these selected groups is expected to yield valuable information on the movement pattern of the fishes to deeper areas of the sea for feeding/breeding purpose.

#### **"DOL" NET FISHERIES**

Dol net contributes to about 18% of total marine landings of Gujarat. The pattern of landings has been



*Otolithes cuvieri*

monitored in Nawabunder, Rajpara and Jaffrabad landing centres. The dominant groups landed in these centres are Bombay Duck, Sciaenids and non-penaeid prawns. Studies have revealed that the area between Jafrabad and Rajpara at a depth range of 25-30 m is the most productive area for dol netters. The Bombay duck landings from this area are 100-140 kg/haul, in the size range of 15-390 mm. The catch rate has been high during September-January. The MSY of Bombay duck off Rajpara has been estimated as about 18,080 tonnes with an optimum effort of 1,38,000 hauls. In the past few years, the effort ranged around 1,00,000 hauls and the catches around 12,000 tonnes, which indicates that the effort could be marginally increased in Saurashtra Coast so as to obtain higher yield of Bombay Duck.

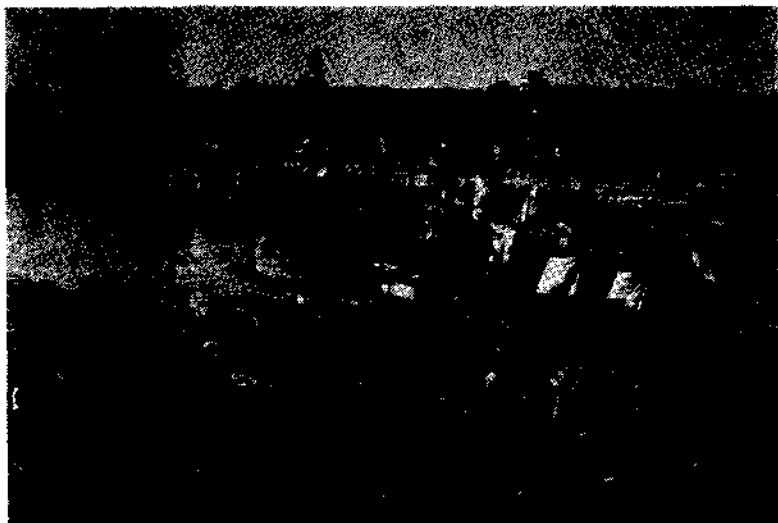
The results obtained in the research projects have been disseminated through various publications. A few of the fishery management policies recommended for Gujarat Coast are : (1) An addition of 150 units of trawlers may be made in Jamnagar and Kutch region so as to increase fish landings. (2) An addition of 75 units of drift/set gill netters may be made in South Gujarat and Jamnagar regions. (3) In Saurashtra an additional 100 units of dol netters may be introduced at a rate of 50 units per year.



*Sorted prawns being carried to the freezing plant through bullock-cart*

### **STAFF STRENGTH AND INFRASTRUCTURE FACILITIES**

The Research Centre has 2 survey centres, one at Jamnagar and the other at Rander (Surat) to collect fish land-



*Fisheries harbour, Veraval*

ings in Upper Saurashtra and South Gujarat Coast respectively. Presently the Research Centre has the following staff pattern : Scientific 4, Technical 11, Ministerial 1 and Supporting 4. There is a museum and library with books and periodicals on marine fisheries and allied subjects. A jeep adds to the infrastructure facilities. The Research Centre is at present situated in a rented building. Work on construction of a permanent building has commenced in the Bhidiya Fishing Harbour area.

### **FUTURE PROGRAMMES**

Work on the above mentioned research projects will be intensified with emphasis on stock assessment of major resources. With the completion of construction of permanent buildings for the Centre and addition of more facilities, projects on environmental monitoring are proposed to be handled so that the changing pattern of the fisheries could be correlated to environmental parameters.



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