1. The Study

The dawn of the Planning era heralded the modernisation of the fishing industry. The mechanisation of fishing boats was taken up on a large scale and the deep sea fishing Programme was launched in 1958. The operation of a large number of mechanised boats and trawlers created navigational hazards in commercial ports. The need was felt for developing separate, full-fledged fishing harbours in the vicinity of major commercial ports with facilities like fish landing quay, dredging, berthing basin, supply of fuel, ice water and other accessories like a slipway, internal roads, processing of catches and auction hall, etc. The centrally sponsored scheme of construction of fishing harbours was introduced in 1966-67. Since the State Governments were short of experience and expertise in conducting the required investigations and surveys, Pre-Investment Survey of Fishing Harbour Projects was set up at Bangalore in 1968 for preparing techno-economic project reports. Upto March, 1979 the Government of India had sanctioned five major fishing harbours, viz Cochin, RoyChowk (Calcutta), Madras, Visakhapatanam and Bombay and 81 minor fishing harbours.

At the instance of the then Ministry of Agriculture and Irrigation, the Programme Evaluation Organisation undertook in 1979-80 an evaluation study of 5 selected fishing harbours. The study report was published in September, 1981.

2. Objectives

The objectives of the study covered the following aspects;

i) The extent to which harbour facilities were created and investments made;

ii) Increase in the number of fishing boats and efficiency in operation since the creation of the harbour facilities;

iii) Increase in the fish landings due to the creation of additional facilities;
iv) Marketing and distribution pattern;

v) Types of benefits flowing as a result of creation of the facilities and also the extent to which small fishermen were being benefited with regard to employment, earnings and acquisition of assets; and

vi) Problems of traditional fishermen vis-a-vis operators of mechanised boats and deep sea fishing vessels.

3. Sample Size/Criteria for Selection of Sample

The 5 fishing harbour projects selected for the study included two major harbours of Cochin (Kerala) and Visakhapatnam (Andhra Pradesh) and three minor harbours of Karwar (Karnataka), Port Blair (Andaman & Nikobar Islands) and Tuticorin (Tamil Nadu).

Primary data were collected from boat owners who were listed under three categories: (a) mechanised boat owners, (b) Purse-Seine and/or trawler owners and (c) traditional boat owners. It was proposed to take a sample of 10 mechanised boat owners, 5 purse-seine/trawler owners and 10 traditional boat owners through circular sampling method. However, due to non-availability of these categories in one harbour or the other, the total sample size had eventually to be limited to 40 mechanised boat owners, 10 trawlers/purse-seine boat owners and 40 traditional boat owners. Port Blair Harbour did not contribute to the sample for canvassing of respondents in the categories of mechanised boat owners and traditional boat owners.

4. Reference Period

The field survey was initiated in March 1979 and completed in April, 1980. The tables contained data regarding the pre-project period and the post-project period. Nonetheless, most of the data and observations presented in the report related to the period 1972-73 to 1978-79.

5. Main Findings

1. Three of the five selected harbours, viz, Cochin, Karwar and Visakhapatnam were being fully utilized and even beyond their targeted capacities. The Tuticorin Fishing Harbour was yet to come up to the envisaged capacity whereas Port Blair Fishing Harbour
constructed at a cost of Rs.68 lakhs remained largely unutilised due to the lack of basic infrastructure. The latter was being utilised mainly for berthing of inter-island passenger ferries and cargo boats. Major commercial houses had already started showing interest in the development of fishing industry as had been seen in Cochin, Visakhapatnam and Port Blair.

2. There was a huge time over-run in the completion of the selected fishing harbours which ranged from 24 months in the case of Port Blair to 78 months in the case of Cochin. The resultant price escalation forced a cost over-run (of actual expenditure over the envisaged expenditure) varying from 34% in the case of Cochin to an astronomical 177% in the case of Port Blair. There was a noticeable time lag between the initiation of project formulation and the date of clearance of projects which was mainly attributed to the non-finalisation of project reports on time. The tardy progress of construction was imputed to the non-availability of land, problems in securing the services of suitable contractors, escalation in input prices, delay in the sanction of revised estimates, lack of co-ordination between different departments of the state Govts. in regard to the provision of infrastructural facilities like water, power, drainage etc. and procedural delay in sanctioning the construction of complementary facilities.

3. The selected harbours, excluding Port Blair, showed an impressive track record in several aspects. First, there was an increase in the number of mechanised boats, which ranged from 94% to 410%, leading to a considerable increase in fish landings. Secondly, there was a sizeable increase in the exports of marine products ranging from 22% to 99%. The graph of export value was kept rising also by the sharp rise in the international price of shrimp. Thirdly, the switching over to mechanised fishing led to an increase in employment per catch which varied from 31% to 100% at different harbours. Fourthly, the approximate monthly income per mechanised boat increased by 289% in the case of Karwar, 634% in case of Tuticorin, 460% in Visakhapatnam and 225% in Cochin when compared to the approximate income per boat prior to mechanisation.

4. Concealed in this bright scenario was the predicament of the traditional fishermen. Increased operational activities of mechanised boats and trawlers near the coastline adversely affected the fish catch and earnings of the traditional fishermen. The conditions for grant of loans were such that the relatively well-off sections of the Community were mostly benefited. The role of fisheries co-operatives was very limited. Traditional boat owners did not have any organised facility for fish landing nor did they have any arrangement for registration of non-mechanised boats, nor
the services of any extension organisation.

5. Visakhapatnam and Cochin fishing harbours were administered by the respective Port Trusts. These Trusts imposed different charges and levies for berthing, landing and water supply and for the maintenance and upkeep of the harbours. Karwar and Tuticorin fishing harbours were controlled by the respective State Fisheries Departments which were ill-equipped for the purpose. The jetty at the Port Blair fishing harbour was looked after by the Port authorities. No levy was reported to be charged by the administrative authorities of Karwar and Port Blair fishing harbours.

6. Institutional finance for acquisition of mechanised boats was provided by the commercial banks through medium-term loans on rigid conditions. It was observed that some small mechanised boat owners had to de-commission their boats due to difficulties in replacement of worn-out engines.

7. The marketing of fish was dominated by middlemen and commission agents. In Karwar, however, the District co-operative Marketing Federation, which managed the sales of fish landing on 6% commission at prices fixed by a committee of the fishermen, the purchasers of fish and the officials of the federation did an exemplary job.

8. The respective State Governments had developed training facilities for the traditionally backward coastal fishing community. Nevertheless, the shortage of trained personnel was highly felt.

6. **Major suggestions**

1. Integrated credit service should be provided to the fishermen so as to link credit with marketing of fish catches. This is necessary to eliminate the presence of middlemen or commission agents from the marketing of fish landings.

2. User charges should be levied to defray the administrative and maintenance expenses of the harbours.

3. A separate administrative authority should be instituted for efficient planning, supervision and running of the fishing harbours. This authority should be entrusted with the responsibility of registration of boats, maintenance of statistics relating to the operation of boats, specie-wise landing of fish catches and marketing intelligence.
4. The lot of the traditional fishermen should invariably be improved. The suggestions mooted in this regard include (a) demarcating areas for traditional boats, mechanised boats and deep sea vessels; (b) initiating legislation on lines of a `model bill', as was suggested by the Government of India, to enforce fishing zones; (c) providing fish landing facilities and auction centres in the form of mini-harbours meant exclusively for the traditional fishermen; (d) crafting specific programmes for traditional fishermen which enable them to acquire traditional boats under self-employment schemes; (e) advancing co-operative loans to them for consumption purposes; (f) providing registration facilities at a nominal rate; and (g) forming fishery extension organisation to train them.