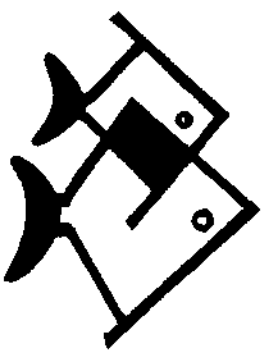
INDIAN FISHERIES

1947 – 1977



ISSUED ON THE OCCASION OF THE FIFTH SESSION OF
THE INDIAN OCEAN FISHERY COMMISSION HELD AT COCHIN FROM
19TH TO 26TH OCTOBER, 1977

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growth and present status

India's Five Year Plans are milestones in the country's economic progress for intensive and extensive use of the national resources, manpower and skill. The First Five Year Plan commenced in the fiscal year 1951–52 and at the beginning of this plan period the fish production was of the order of 0.75 million tonnes. The production increased in a phased manner culminating in the current level which is around 2.3 million tonnes. The production level at different stages of time *vis a vis* that of the financial outlays is given in Table 1.

Table 1. *Progress of fish production through the plan periods* vis a vis *financial outlays*

Financial year of plan period	Financial Outlay (Rs. in million)	Fish production (in million tonnes)
Ist Plan	51.33	0.86
IInd Plan	122.6	0.96
IIIrd Plan	282.7	1.34
IVth Plan	826.8	2.28
Vth Plan	1500.0	2.61 (estimated)

It will be interesting to compare the production level at different stages of time with that of the total World Production (Table 2).

Table 2. *Comparative statement of fish production of India* vis a vis *the world production (in million tonnes)*

	1951	1961	1971	1975
India	0.75	0.96	1.84	2.27
World	25.90	43.60	70.89	69.73

The annual growth rate in production during the ten year period ending 1961 was 2.5% only, whereas in the subsequent ten year block ending 1971, the annual growth rate has been of the order of 6.8%. However, the growth rate is only 6.1% for the period 1971-75. It may also be noted that the world fish production has increased during the corresponding first two periods at the annual growth rate of 2.2% and 5.8% whereas during 1971–75, a minus growth rate was evident. The above comparison indicates that the progress of fish production in India compares well with that of

the world as a whole. For better appreciation of the production trend in India the break-up of marine and inland fish production from 1951 to 1975 as ten-year blocks is given in Table 3.

Table 3. *Marine and Inland fish production (in million tonnes)*

Year	Marine	Inland	Total
1951	0.55	0.20	0.75
1961	0.68	0.28	0.96
1971	1.15	0.69	1.84
1975	1.42	0.85	2.27
1976	1.39	0.87	2.26

The fish availability pattern in India is typical of tropical waters. Indian fishery resource is constituted by a large variety of species of fish and shell fish. Important varieties contributing to the marine fishery are sardines, mackerel, Bombay duck, sharks and rays, perches, sciaenids, carangids, soles, ribbonfishes, white-baits, silver bellies, prawns, cuttle fishes and a variety of other fishes generally grouped as miscellaneous species. Certain other varieties of fishes such as pomfrets, seerfishes, polynemids, flying fish and the tunas and tuna-like fishes also rank as important table fishes although their quantities are not appreciable. Indian marine prawns have become important in the world market as an item of import and contribute substantially to the export earnings from marine products which have shot up to nearly Rs. 2,000 million during the current year. It is this thrust in the unit value that is becoming almost a guiding factor for bringing the Indian marine fishery programmes to the level of an organised industry.

The production of fish from inland waters has been stepped up considerably during the last decade. This was mainly due to the progress achieved in State fishery development programmes and the breakthrough in fish culture techniques and extension programmes and services. It has been projected that the current level of inland fish production of 0.85 million tonnes would be stepped upto 5.0 million tonnes in a period of 25 years through adoption of intensive fish culture in small inland water areas and planned management programmes in the natural and man-made lakes. Although the technology for augmenting fish production through culture is indigenously available, the bottle-necks preventing a real break-through are many. A far-sighted leasing policy for making available water areas to pisciculturists on a long term basis and adoption of modern technology through intensive training for fish breeding, nursery management and conservation of brood fish have been identified as areas which require immediate attention. Although fish seed is produced under natural conditions at very significant levels in the upper Indian rivers their timely utilisation to meet the country's requirements continue to call for improvements particularly in organisation of collection and distribution. A strategy for achieving self-sufficiency in fish seed availability using induced breeding techniques, and with adequate investment is being programmed, as lack of required quantities of fish seed is the most important constraint in achieving high production levels in inland fisheries. Taking the country as a whole, carps constitute 40% and cat fishes 35% of the total inland fish catch, and the rest is contributed by prawns, mullets and other miscellaneous fishes. As regards predominant States in Inland fish production, West Bengal is followed by Tamil Nadu, Andhra Pradesh, Karnataka and Bihar The cold water fisheries of trout, mirror carps, Schizothoracinae and related species form sizable fishery only in Jammu and Kashmir and Himachal Pradesh followed by the North-eastern hill States. Fresh water fishery resource potential is not fully tapped and is an area that attracted attention in the last two plan periods. The maximum inland fish catch is obtained from Asia and India ranks third in production, next only to China and the Soviet Union. The common varieties of inland fish that are cultured are catla, rohu, mrigal and other species of major carps and culture of exotic varieties and air-breathing fishes are also proving to be popular. The migratory species, *Hilsa,* forms an important fishery in the North-eastern rivers (while supporting a minor fishery at other places) and is considered no longer to be a truly anadromous variety like the European salmon.

Brackish water fish culture has shown good promise. It is hoped that extensive culture programmes would be taken by the industry in coastal areas towards the end of the current plan period availing of the technology evolved by national organisations and pilot projects and the excellent market demand for prawns and related species in domestic and export markets.

Most of the inland species, although fast growing, have problems in breeding in confined waters. Marine shoaling fishes of the Indian Seas mostly support zero–year class fisheries. The sharp fluctuations in the

environmental conditions contributed by the monsoons and unique oceanographic features of upwelling and related phenomenon have added to the burden of annual forecasts of availability of fish. This has also kept the industry shy of investing heavily on fishery projects. In addition, the traditional fishing gear being shore-based, limits fishing operations to near shore areas. The introduction of purse seines and similar types of fishing gear from crafts which could go after the fish shoals in offshore areas and employment of modern techniques for detection and estimation of availability of fish have to some extent overcome the difficulties of production means. It is only during the current Five Year Plan that India ventured on a serious attempt for offshore and deep sea fishing with the introduction of large trawlers and the creation of infrastructure facilities. A programme of training of technical manpower is under implementation by the concerned institutions, to synchronise with the fishing vessel acquisition programme so that trained manpower and fishing harbours are available when deep sea fishing vessels are procured for introduction in Indian waters. Mapping and charting of fishing grounds through exploratory surveys are being stepped up to facilitate pre-investment decisions and economic evaluation of deep sea fishing ventures which are capital-intensive. Financial assistance through Shipping Development Fund is being widely availed of by those handicapped by financial constraints and international funding and financing agencies have also shown active interest to support integrated programmes of fishery development. It may also be remembered that joint ventures in selected areas of deep sea fishing have been accepted by the Government as a guideline for the accelerated programme of exploitation of deep sea fishery resources in the Indian Economic Zone, particularly in areas where Indian expertise is inadequate. Research and survey organisations received considerable fillip in the current plan period and project oriented approach to problems have brought results more quickly and made research and training more action packed and directly aimed to meet the "users requirements". The marine products exports reached an all time high level and an integrated programme of fishing, processing and marketing has been accepted as the pattern of commmercial ventures, by the fishing industry.