Demand and supply are the major factors determining the price of any commodity. Unlike other agricultural commodities where demand decides the price, in marine fisheries supply plays a major role in price determination. In India, marine fish is supplied from 2244 landing centres located along 8085 km of coastline. The inland fish supply comes from about 27,000 km of rivers, 1,13,000 km of canals, 1.75 m.ha of tanks, ponds and derelict water spread areas. The growth of fish production and overall development of fisheries sector depends largely on an efficient marketing system. Fish marketing in India is characterized by monopsony and oligopsony conditions and hence, the fishermen are unable to get maximum advantage of high price prevalent in the markets.

There is a continuous increase in demand and price of fish both in domestic and export markets. The increase in fish prices is comparatively higher than the increase in prices of food grains and other livestock products. In the domestic market, there has been two to three fold increase in wholesale prices of different fish varieties during the last two decades. For instance, the price of seer fish increased from Rs 19 to Rs 58 per kg, barracudas from Rs 11 to Rs 30 per kg, tunas from Rs 10 to Rs 30 per kg between 1973 and 1993. During the same period, the retail prices of all commercially important varieties of fish have registered a similar trend. In export market the quantity supplied by India increased from about 1 lakh tonnes during 1988-89 to about 2.37 lakh tonnes during 1993-94. The unit value realised increased from Rs 60 to Rs 104 during the corresponding period.

About 90 per cent of the fish catch is channelised in the domestic market for consumption in fresh, frozen and canned forms. During 1992-93 it was found that 44 per cent of the fish catch was consumed as fresh, 31 per cent in dry form, 12 per cent in canned form and the remaining 13 per cent diverted to fish meal plants. The fish consumption pattern depends on the level of income, food habits of
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the people, form of disposal and availability. Fresh fish consumption in earlier days were confined to the landing centres and its adjoining areas. Now, about 50 per cent of the fish is consumed in fresh form around the landing centres, 45 per cent in places located at a distance of 50-200 km from the coast and the remaining five per cent in places located beyond 200 km. The extent of wastage of fish at landing centres and at various points of distribution channels has been reduced considerably due to widespread use of ice, technological improvements in processing and transport facilities.

There has been a considerable variation in the fishermen’s share in the consumers rupee for different varieties which is influenced by the marketing margins. Various studies conducted by the Socio Economic Evaluation and Technology Transfer Division of CMFRI on fish marketing during 1973-93 have revealed that, fishermen’s share in consumer’s rupee ranged from 31 to 72 paisa for different varieties. The wholesaler’s margin ranged from 15 to 37 paisa and the retailer’s from 11 to 25 paisa. Marketing expenses accounted for 4 to 14 paisa. It was found that fishermen got higher share for those varieties which were having high consumer preference.

The global demand for sea food has been estimated at 110 million tonnes by 2000 A.D. against a supply of 100 million tonnes. India has a good scope in sea food export as it is seen from the export earnings which has increased from Rs. 384 crores in 1983-84 to Rs. 2433 crores in 1993-94. Now about 10 per cent of our marine production is being exported to over 59 countries with Japan ranking first. Among the various sea food items exported, prawn accounts for a major share in the revenue with about 70 per cent of the earnings. The export of prawns is expected to increase further with the development of aquaculture industry in India.

India’s share in the $48 billion global sea food trade is about 1.2 per cent. There is stiff competition from other exporting countries in the international market. The consumers in developed countries mostly prefer ready to cook or ready to eat sea food items. Hence, product diversification and more emphasis on value added products will help to enhance our share in sea food exports. Since the production of value added products is highly capital intensive, suitable collaboration with other countries who have the technical expertise in this field may be explored, utilising the benefits of the new economic reforms introduced in the country.

The export of live items has been gaining momentum in the recent years. Of the live items exported, lobster and mud crab command high demand and price in South East Asian countries. The lobsters with 1 to 1.5 kg weight get a price of about Rs. 1200-1500 per kg at the landing centres. Similarly sea hourse having medicinal value fetches about Rs. 75 per piece of 10-14 cm length. Sea cucumbers of high quality command a local price of Rs. 400 per kg. The pharmaceutically important marine products should be assessed and a catalogue of such varieties can be prepared to obtain maximum benefit. The by products of marine fishing industry can be scientifically utilised to provide better returns to fishermen. Prawn shells and head wastes thrown out from processing industries is estimated at 50,000-60,000 tonnes annually. This can be utilised for chitin extraction which commands high price and has diverse uses.

Infrastructure facilities form the basic requirement for development of fishery sector. In India, there are 248 freezing plants, 23 canning plants, 129 ice plants, 23 fishmeal
plants, 921 pre processing centres, 321 cold storage units, two agar plants and 52 IQF plants. After ensuring the capacity utilisation of these plants, further establishments may be made considering the requirements.

The fish marketing in India is gradually transforming from traditional to modern system. Inspite of this the involvement of a large number of middlemen affects the interests of both the fishermen and consumers. Hence, proper provisions should be made in the fish marketing policy to reduce the impact of middlemen. Announcement of suitable support prices for commercially important fish varieties will safeguard the fishermen as well as the consumers. Encouraging local fishermen to form cooperative fish marketing societies may be thought of. Considering the importance of sea food as a potential foreign exchange earner and a supplementary protein diet for the vast majority of domestic population more emphasis need to be laid on fish marketing strategies for the development of fishery sector in India. Studies on fish marketing is conducted by a team comprising Dr R.Sathyadhas, Shri R. Narayana kumar, Shri A.Bastion Fernando and Shri A. Kanakkan of SEETT Division.

New nesting ground for turtle located

Fishermen from Mullur fishing village near Vizhinjam in Kerala coast have reported the existence of a good nesting ground for sea turtle, Olive ridely. About 20 hatchlings were brought by them to the Vizhinjam Research centre of CMFRI which were released back into the sea by the scientists after making external examination.

The sea turtle olive ridely (Lepidochelys olivacea) was caught accidentally in the hooks and lines and gill nets operating at 50-55 m depth at a distance of 10 km from the shore.

Harvest of edible oyster

The second lot of 8 tonnes of shell-on oyster yielding 500 kg meat was harvested in September 1994 under the pilot project on oyster culture at Tuticorin. Earlier, 17 tonnes of shell-on oyster yielding 1243 kg meat was harvested from 0.75 ha in July 1993. The meat was sold to the Integrated Fisheries Project, Cochin at Rs 30 per kg. Thirteen tonnes of shell-on oysters were also sold locally. The project initiated in September 1994 is partly funded by NABARD.

Sale of pearl oyster spat

CMFRI has been producing pearl oyster spat since 1981 at its hatchery at Tuticorin. These spats were used for Institute’s pearl culture and sea ranching programmes and also were given to other government departments for their R & D activities. In August 1994 about 1.35 lakhs pearl oyster spat of length 8.6 to 16.4 mm were supplied to the Gujarat State Fisheries at Rs 10 per spat.

The spats were transported successfully from Tuticorin to Sikka (Gujarat) in aerated polythene bags designed by the Institute.

Dr A.C.C. Victor, Senior Scientist, successfully transported 2000 pearl oyster spat and 800 nucleated oysters from Tuticorin by rail and road to Cochin and Calicut without any mortality.

Successful harvest of ranched clam seed in the Ashtamudi

Under the project on the hatchery production of clam seed and ranching them in coastal waters sponsored by MPEDA a total of 20,000 seeds of P.malabarica produced at the Institute’s hatchery at Tuticorin and measuring 13.1 mm