Financing Fisheries Management in India

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At the expert consultation on low-cost fisheries management strategies held in Georgetown, Guyana in September 2007, a paper was presented on the financing of fisheries management in India. Here is a condensed version of the paper.

In the mid-1980s, India undertook a series of reforms to minimize state interference in business and liberalize the economy. The New Economic Policy of 1991 marked a clear shift from pro-planning to a pro-market growth model based on the principles of liberalization, privatization and globalization of the economy.

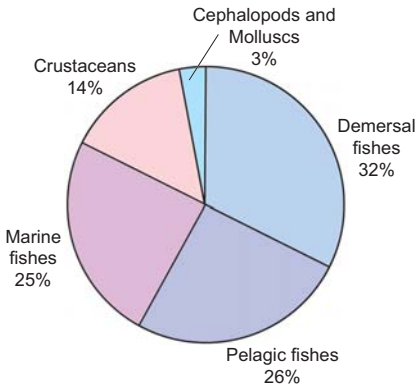
India is now the third largest economy in the world in terms of purchasing power parity (PPP) and the second fastest growing major economy in the world (a GDP growth rate of 9.4 percent for the fiscal year 2006–2007).

Despite industrial development, agriculture is a major economic player. It contributes about 20 percent of the Gross Domestic Product (GDP) and employs about 60 percent of the labour force in the country. (Industry contributes about 26 percent of the GDP and employs about 12 percent of the labour force.). Fisheries is also a major foreign exchange earner, through export of marine products.

Trends in fish production and catch composition

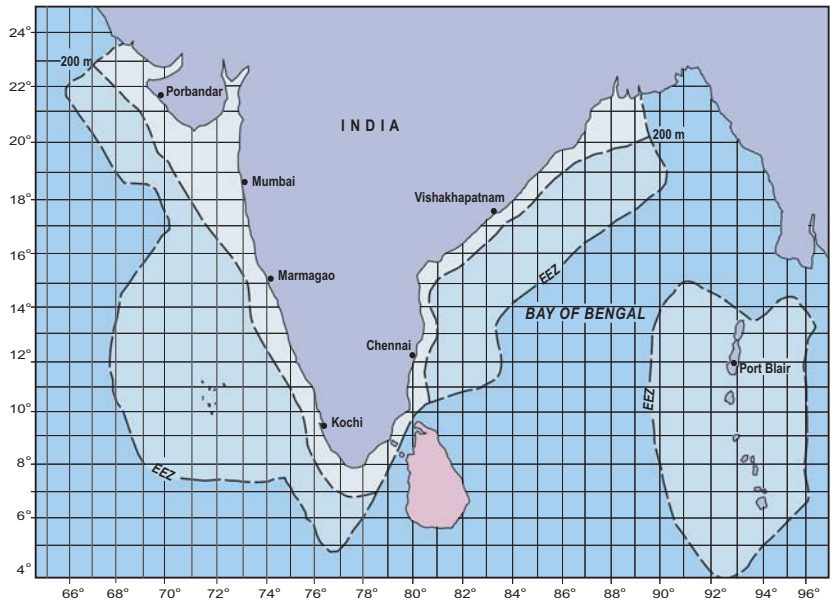
Fish production in India touched the record of 6.57 million tonnes in 2005-06. Marine fisheries contributed 2.82 million tonnes, inland fisheries 3.75 million metric tonnes.

India's marine waters harbour 1 707 species of fish, of which over hundred species are commercially harvested. There have been considerable variations in catch through the period 1950-2005. More species are being harvested, catch composition has changed, some



species have declined. Broadly speaking, during the 1950s and 1960s, Indian oil sardines, natantian decapods, mackerels and Bombay duck constituted the majority (more than one-third) of the landings. But since 1970s, the share of Bombay duck has declined steadily, so have the shares of other dominant species such as clupeids and hair tails. On the other hand, a phenomenal rise

Exclusive Economic Zone of India



occurred in the landings of prawns, shrimps and other marine crustaceans.

Marine fisheries resources

The country has a long coastline of 8 118 kms and an equally large area under estuaries, backwaters and lagoons, etc. The continental shelf area amounts to 5 30 000 sq. kms of which 71 percent area is available in the Arabian Sea (west coast) and the remaining 29 percent in the Bay of Bengal (east coast). After declaration of the Exclusive Economic Zone (EEZ) in 1977, the area available to India is estimated at 2.02 million sq. km, comprising 0.86 million sq. km on the west coast, 0.56 million sq. km on the east coast and 0.60 million sq. km. around the Andaman and Nicobar Islands.

The fish production potential in India as per current estimates is 8.40 million tonnes per annum. Potential yields from inland fisheries and marine fisheries are estimated at 4.50 million tonnes per annum and 3.92 million tonnes per annum respectively. India presently exploits 83 percent of potential yield in inland fisheries and 72 percent of potential in marine fisheries.

Fishing fleet

The marine fishing fleet comprises about 2 80 491 fishing craft of which 2 25 862 are of traditional types (including about 44 578 motorized traditional craft). The mechanized fishing fleet comprises 29 241 trawlers, 983 purse seines, 14 183 gill-netters, 8 862 *dol*-netters and 1 020 other type of boats. As seen by the number of traditional craft and small-mechanized vessels, the major fishing activities are still concentrated in the areas within 0 to 70-80 meter depth zone. As compared to the west coast, concentration of traditional craft (including motorized) is more on the east coast (about 57 % of the total). In the case of mechanized vessels, the trend is reverse. The scale of mechanization is also reflected in the total fish landings of the two coasts.

At the national level, the mechanized sector contributes about 67 percent of the landing. In 1969 it was a mere 20 percent. Motorized sector contributes about 25 percent and the balance 8 to 10 percent is contributed by the traditional crafts. With the advent of mechanization, use of traditional harvesting gear like bag net, cast net, small meshed gill net has declined and more efficient gear like purse seines have became popular.

Allocation of funds to fisheries management

Fisheries management in India is mainly concerned with increasing production both in capture and culture fisheries, R&D support to increase production in a sustainable manner, human resource development, improving the operational efficiency of various schemes, and capacity-building in fisheries.

Until the Seventh Five-Year Plan (1985-1990), the Government was mainly concerned with increasing

Fishing craft operating in the coastal States and Union Territories

Sl. No.	State/ Union Territory	Traditional crafts	Motorized traditional crafts	Mechanized boats	Total
1	Andhra Pradesh	53 853	4 164	8 642	66 659
2	Goa	1 094	1 100	1092	3 286
3	Gujarat	9 222	5 391	11 372	25 985
4	Karnataka	19 292	3 452	2 866	25 610
5	Kerala	28 456	17 362	4 206	50 024
6	Maharashtra	10 256	286	8 899	19 441
7	Orissa	10 993	2 640	1 276	15 854
8	Tamil Nadu	33 945	8 592	9 896	52 433
9	West Bengal	4 850	270	3 362	8 482
10	Andaman & Nicobar Islands	1 180	160	230	1 570
11	Daman and Diu	252	350	805	1 407
12	Lakshadweep	594	306	478	1 378
13	Pondicherry	7 297	505	560	8 362
	Total	**181 284**	**44 578**	**53 684**	**280 491**

Total includes 810 FRP Catamarans and 135 Beach Landing Crafts

Source: Handbook of Fisheries Statistics-2004, Government of India.

fish production and promoting capitalization of the fishing fleet. It was only during the Eighth Five-Year Plan (1992- 1997) that fisheries management figured in the Plan budget.

Management measures being considered include a ban on fishing during the monsoon, standardization of mesh sizes in different categories of fishing gear and conservation of aquatic bio-diversity in accordance with the FAO Code of Conduct for Responsible Fisheries.

Expenditure on fisheries management can be classified into expenditure on various components of management (research, capacity building and human resource development, etc) and allocation of funds to the States/ Union Territories.

Both the Central and State Governments finance fisheries. Plan outlays for fisheries have gone up from Rs 19 600 million (1951-56) to Rs 19 688 150 million (2002-07).

State Government funding is mainly for fisher welfare. Some schemes are funded entirely by State Governments; and for some centrally sponsored schemes, State Governments provide 50 percent of the outlay.

Non-government funding for fisheries management activities

Non-government sources of funds for fisheries in India are mainly external – various regional and inter-governmental organizations, and the UN system (agencies such as the FAO, UNDP, IMO, World Bank).

Institutional finance: the National Bank for Agriculture and Rural Development (NABARD) refinances bank credit for fisheries. Deep-sea fishing and aquaculture have been funded by institutions such as the Industrial Finance Corporation of India, the Industrial Development Bank of India, the Shipping Credit and Investment Company of India, State Finance Corporations and the National Co-operative Development Corporation.

Credit support from financial institutes is available for almost all fisheries activities and for infrastructure creation. But middlemen, merchants and occasional moneylenders continue to play an important role. Liberalization of banking may mean more public finance for fisheries.

Costs of fisheries management

Costs related to MCS and conflict management are said to have increased, although no specific data are available. The government believes that the money directed at MCS is inadequate. The mechanism of cost-sharing for fisheries management is minimal. License fees are levied in the mechanized sector, but fees are low, so are penalties for offences. These sources of revenue are insignificant in relation to the cost of resource management.

Fishermen cooperative societies are exempted from income tax. Two possible explanations are that farmers are exempted from income tax; and that the cost of tax collection in a highly disaggregated sector like fisheries is too high in relation to the possible revenue.

Seafood exporters were exempted from income tax until recently. Now they are charged a fee of 0.3 percent of the FOB value of seafood exports (the fee was 0.5 percent earlier).

Packing fish in ice at Vizag Fishing Harbour, Andhra Pradesh, India

The collected tax is used to finance the MPEDA, and currently stands at about US$ 4 million per annum.

At present, the governments of various coastal States/ UTs license only mechanized fishing vessels. The system of licensing must be extended to motorized and non-motorized craft as well. Licensing will enable an inventory of all categories of fishing vessels. New vessels should be permitted only to replace vessels of equal size and capacity. The priority of licensing should shift from revenue-earning to regulating the number and type of fishing vessels. Licensing will also enable better implementation of sea safety norms in small-scale fishing vessels.

The ability-to-pay mechanism

In theory, an ability-to-pay mechanism is possible in marine fisheries. But politics and the politics of fisher unions are hurdles. A majority of the fishers are small-scale and poor. Non- payment of rent is common, and there is no mechanism in place to penalize defaulters. Result: very little rent accrues from the users of landing and berthing facilities. Because of political compulsions, it is becoming difficult for management bodies to rationalize the fee and fund better maintenance and upkeep of infrastructure facilities such as fishing harbours and fish landing centres.

The role of private players in fisheries management is limited. The Tenth Five-Year Plan document emphasises the importance of private/ public partnership to strengthen the infrastructure, diversify fisheries and aquaculture, and enhance fish production and productivity. Greater investment is also needed to strengthen research and training, post-harvest and marketing structures. More Minor Fishing Harbours and Fish Landing Centres need to be set up.

The private money lender can be a significant player in fisheries management, though he finds no place in management policy. The private moneylender acts as a cushion for fishers and fish farmers during lean periods. Since timely institutional credit is not available, fishers depend mostly on private moneylenders – who serve as inputs suppliers in aquaculture and as wholesale buyers in capture fishery.

In conclusion, the plus points of management in India lie in the modernization of fisheries, particularly aquaculture, in increased fish production (both from inland and capture fisheries and aquaculture), and in greater export earnings. Technology is being made use of for fisheries management; and transaction costs have been going up for conflict resolution, MCS and safety at sea, especially in relation to small-scale fishers.

But there are questions over the sustainability of both capture and culture fisheries in India. Marine capture fisheries confronts the issues of open access and overfishing. Small-scale fishers have still to be pulled out of the poverty trap. Livelihoods are being threatened in many fishing communities along the coastline. The management is largely top-down, although a participatory approach to management is often discussed.

The challenge of today lies in optimal utilisation of resources and in strategies like co-management which can increase the role of fishers and other stakeholders in day-to-day management of fisheries.