

Indian Fisheries over the past 50 years (Part II)

Coastal Industrial Aquaculture

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The first part of this article (*in Kachhapa #2*) covered the impact of mechanisation on Indian fisheries. Here, I try to cover the effects of coastal industrial aquaculture on traditional fishing communities and on fisheries.

The Coastal Regulation Zone Notification

When Shrimati Indira Gandhi was the Prime Minister she wrote to all the chief ministers asking them to protect the coastal zone ranging from 0-500 m area of the coast from sea. In 1991, the GOI issued a Notification called CRZ Notification under section 3(1) and section 3(2)(V) of the Environment (Protection) Act, 1986. For the first time, it recognized the right of traditional fisher people over the coast. There were 13 prohibitions in this zone like Industrial pollution, dredging, constructions etc. Though initially the GOI did not see the implications, it later wanted different amendments because of the pressure from the Hotel and Industrial lobbies. But the fisher people resisted this move and the SC insisted upon the strict implementation of CRZ Notification without diluting it.

Industrial Aquaculture - CRZ violation

On one hand, the GOI came out with the CRZ Act, but on the other, it was also encouraging activities against its own law. The Marine Products Export Development Authority (MPEDA) with the Ministry of Commerce took the lead in promoting shrimp industries violating all the protections to the coastline enshrined in the CRZ. The economic policy of the GOI, which was desperately looking for foreign exchange, also invited multinational corporations and other capitalists to establish industrial

aquaculture all along the coastline, with the sole purpose of export. Now aquaculture has become a big business not only in India but in many developing countries in Asia and elsewhere.

The "Rape and run" approach

India has an estimated area of 1.19 million hectares of brackish water, of which 8,25,000 hectares are now under shrimp culture. According to official reports about 6,046 prawn ponds covering about 10,860.93 hectares of coastal land were used for shrimp culture by October 1994. But as per non-official estimates, more than 20,000 hectares of coastal land came under shrimp culture. The MNCs have had no qualms in acquiring prime agricultural lands and converting them into intensive shrimp ponds which have maximum life of only 5 to 10 years. Abandoned farms can no longer be used for shrimp farming or for agriculture. The shrimp industries then move on to other areas, continually leaving devastated people and lands behind them.

Development for whom?

Aquaculture has been hailed as holding "much promise for meeting increasing food demands" and as providing "important economic and nutritional benefits to many regions of the developing world". The questions that need to be asked are:

1. For whose nutrition is the food produced?
2. Who benefits from the sale of the produce?
3. How does it affect agriculture and marine fisheries?
4. What are the ecological hazards?
5. How are human rights (of small farmers and

fisher people) upheld or violated ?

Ecological Degradations

Salination of ground water

One ha. of industrial shrimp farm requires 120,000 cubic meters of sea water annually. This 12 meters of saline water over and above the water in coastal ecosystems creates serious problems of ground water salination, resulting in drinking water famine. Women are forced to walk long distances to secure drinking water. A study carried out by the Central Institute of Brackish Aquaculture (CIBA) in 1995, in Nellore district, found the salinity figures to range from 410 to 4900 PPM.

Salination of land

The seepage from the aqua farms creates salination and water logging of neighbouring agricultural farms. Nellore, which is named after "nello" which means rice in Telugu, is now totally destroyed through the impact of shrimp farms. The Cauvery delta is another fertile area in which agricultural land is being converted into shrimp farms.

Pollution, destruction of mangroves and coastal Forests

Factory farming of shrimp requires 4-6 tons per hectare of artificial feed. Only 16.7% of this feed is converted into shrimp biomass. The rest is converted into pollution, which deteriorates water quality inside the pond and in the ecosystem. It is this build-up of pollution that is responsible for the collapse of shrimp production in a short period and for the destruction of the productivity of estuarine and coastal waters. The cumulative pollution over a production cycle can be devastating. Mangroves are the nurseries of marine life. Shrimp farms destroy the mangrove ecosystems, not only by the waste being sent into the sea but also by direct conversion of mangroves into shrimp farms. The destruction of mangroves increases the risk of cyclones and

floods.

Depletion of marine fisheries

Marine fisheries are destroyed in three ways by industrial shrimp farms;

1. Wild fry is the major source of seed in shrimp farms. For every single fry of commercially desirable *Peneaus monodon* (Tiger prawn) caught, several other marine species are wasted as "fry by catch".
2. Fish caught at sea is a major source of shrimp feed. Each ton of industrial shrimp requires ten times its weight in marine fish for conversion to feed.
3. The pollution from shrimp farms, also kills fish life and destroys marine resources.

Human Rights Violations

Displacement of traditional fisher people, small farmers and agricultural labourers

People have a right to work and live in their own place. While they also have a right to migrate where they want to, they should not be forced to do so. For centuries the small fisherfolk, farmers and agricultural labourers have been living in harmony with nature while at the same time providing food for themselves and for others. They are skilled people by their own right. They should be helped to develop appropriate technology to improve their work and life. Instead, industrial aquaculture has created conditions by which they can no longer survive in their own place. They are forced to leave their homes and hire themselves out as unskilled labourers.

Creation of unemployment

Aquaculture can provide direct employment to only 2 persons per hectare and 110 man days per hectare for initial construction. The World Bank Aqua Project in India with a 3 billion Rupee outlay creates employment for only 14,000 people. Most of these jobs go to outsiders (skilled

persons), leaving the bulk of the local people unemployed.

The struggles against industrial aquaculture

The people who were affected by the shrimp culture came together and protested. The movement got strengthened by many organizations like Campaign Against Shrimp Industries, PREPARE, PROFAM, the Orissa Krushak Mahasangh and many others, both at the grassroot level and at the level of scientific research and legal aids. They waged a war both in the land and in the court. Finally the Supreme Court in its landmark judgement in December 1996 ordered the demolition of all the aquaculture farms because it was a violation of CRZ notification of 1991 (details of the judgement can be obtained from the author).

The Aquaculture Authority Bill

Instead of carrying out these directions of the Supreme Court, the Agriculture Ministry drafted an Aquaculture Authority Bill (AAB). This Bill was tabled in the Rajya Sabha on March 19, 1997 and passed at its last session on March 20, 1997 without keeping in mind the judgement of the Supreme Court. The Aquaculture Authority Bill is one of the most anti-people legislation ever introduced in the Indian Parliament. It is contrary to the Environment Protection Act and to the Environment Policy of the Central Government reflected in the CRZ Notification. It is also contrary to the welfare of the rural population living in the coastal areas. Whether the Shrimp industrial aquaculture farm is large or small, the livelihood of more than a 100 million people living in the coastal areas and who were given protection by the Supreme Court judgement will be adversely affected by the introduction of Aquaculture Authority enactment.

The struggle continues

The demands of the present agitation (from July 1, 1998) of the fisher people include:

- That the Aquaculture Authority Bill of

1997 pending before the Lok Sabha be withdrawn.

- That the Notification dated July 9, 1997 issued by the Ministry of Environment & Forest amending the CRZ notification of February 10, 1991 be withdrawn.

- That steps to implement in total the Supreme Court judgement of December 11, 1996 on Aquaculture be taken.

- That all the existing Joint / Lease licenses be cancelled and that the Government should continue holding meetings with the National Fisheries Action Committee Against Joint Ventures (NFACAJV) for the implementation of all the recommendations of the Murari High Power Committee.

- That there should be a monsoon trawl ban in all the coastal states at the same time for the conservation of fish resources.

Misleading "Success Stories"

Often the industrial and export oriented fisheries and related sectors publish their "Success Stories" with impressive figures. For example the Marine Products Export Development Authority (MPEDA) has reported its achievement of having crossed US \$ 1 billion mark for the fourth consecutive year. It further says that in 1972-73, the year of its inception, the total volume of marine products exported from India was 38,903 tonnes valued at Rs. 59.72 crores which have by 1997-98 touched 3,85,818 tonnes valued at Rs. 4,697.48 crores. What is suppressed under these 'achievements' is the plight of the workers, mostly women, engaged in the sea food export industry. Around 1 lakh women, mostly contract and migrant workers are enslaved in these processing industries. Their extremely strenuous and hazardous work conditions violate all labour laws. And this maximization of work-time combined with meagre cost of maintenance of the confined migrant labour force, goes to form the "success story" of MPEDA.

True development and progress

True development or progress should include the

following factors:

- It should lead to fulfilling the basic needs of the poorest.
- The prior rights of the local people and their natural knowledge should be respected
- The developmental activity should involve the people who are already traditionally engaged in fishing and are dependent upon it for their livelihood.
- It should be sustainable.
- It should respect the environment and eco-balance.

World Forum of Fish-harvesters and Fishworkers (WFF)

The problems of the fisher people all over the world is similar. The United Nation's Food and Agricultural Organization's reports of 1995 and 1996 have found unequivocally that the fisheries of the world are undergoing the most serious crisis ever recorded. At least seventy-five percent are in or verging on a state of collapse due to the ravages of over-fishing, destructive fishing gears - most particularly by factory trawlers - and the effects of coastal industrial aquaculture, industrial and domestic pollution, and the myriad consequences of global warming. The fishing communities all over the world are under the threat of extinction. So the fisher people's organizations from 35 countries came together in New Delhi from November 17 – 21, 1997 and

formed the World Forum of Fish-harvesters and Fishworkers (WFF). The objective of the Forum is to protect the fish resources and the fishing communities by promoting sustainable development of fisheries through eco-friendly gears and methods and to work for a global ban against all destructive fishing (particularly factory trawlers), coastal industrial aquaculture and coastal industrial pollution. India has been chosen as the co-coordinator. The WFF has declared November 21, the foundation day of the WFF, as World Fisheries Day. On this day, every year, all over the world, actions, campaigns, studies, etc will be organized with a view to protecting the fish resources, and the fishing communities through sustainable small fisheries and to evoke public awareness.

Conclusion - The challenges before us

We need to continue our struggles against all kinds of destructive gears and methods of fishing in order to conserve fish resources. We need to step up struggles against coastal industrial aquaculture and against all kinds of coastal pollution. We need to see that the fisher people who are solely dependent on fishing should own the sea and the water bodies and gear. The ocean is a living organism. The life of the planet and the dependent health and welfare of humanity must not be sacrificed to the greed of the few.

SYMPOSIUM 2001 ANNOUNCEMENT

The 21st annual symposium for sea turtle biology and conservation will be held at Philadelphia, Pennsylvania, USA from February 24 – 28, 2001. Details are available at <http://www.seaturtle.org>. Symposium announcements can be obtained by post mail by contacting the Symposium Registration Coordinator, Donna Broadbent (**E-mail:** zenith@citlink.net ; **Tel:** + 1-304-947- 5366, **Fax:** +1-304-947-5364, 480 Williamsport Pike, Suite 3, Martinsburg, West Virginia, 25401, USA). Registrants who cannot access the Internet and who require a personal invitation letter to attend can request this letter by contacting the Symposium Secretary, Sheryan Epperly-Chester (**Email:** sheryan.epperly@noaa.gov; **Tel:** +1-305-361-4207; **Fax:** +1-305-361-4478; **Address:** NOAA/NMFS, 75 Virginia Beach Drive, Miami, Florida 33149, USA).