# 7d. FISHER FOLK IN TAMILNADU

The fisheries sector, both marine and inland, plays an important role in Tamilnadu's economy. And fish resources are of utmost importance for food security.

Tamilnadu has a long coastline of about 1000 kms, accounting for about 17% of the Indian coastline. Of this, the Coramandal coast covers about 350 kms, the Palk Bay about 270 kms, the Gulf of Mannar about 320 kms and the west coast about 60 kms. The continental shelf of Tamilnadu has got an area of 41,412 sq.kms. The exclusive economic zone of Tamilnadu is 1.9 lakhs sq.kms.

The Tamilnadu coast has nearly 26 big and small urban centres and 556 marine fishing villages located along the 12 maritime districts. Marine fish landing takes place in 362 centres. The major landing centres in Tamilnadu coast are Ennore, Chennai, Cuddalore, Port Novo, Nagappattinam, Athirampattinam, Rameswaram, Pamban, Thoothukudi, Kanyakumari and Colachel.

Besides the coast, there are 5 major rivers, 51 reservoirs and innumerable lakes, ponds and tanks in Tamilnadu, providing much scope for inland fishing. The State has a potential of 3.74 lakh hectares of culturable water-spread for developing inland fisheries.

Clear statistics with regard to even the number of fisherfolk population in Tamilnadu are not available. As per the last Census of marine fisherfolk in 1986, there were 4.64 lakhs marine fisherfolk, out of whom, 1.01 lakhs were actively engaged in fishing. In 1993, as per the statistics of the Department of Fisheries, the fisherfolk population of Tamilnadu was calculated at 5.15 lakhs of whom about 1.81 lakh fishermen were actively involved in fishing. As per the latest Census of marine fisherfolk (completed in 2000 and still being compiled), it is about 6.70 lakhs, of whom about 2.62 lakhs are actively engaged in fishing.

Besides, as per State Planning Commission estimates, there were 2 lakh inland fishermen in 1995-96, of whom 47000 fishermen were actively engaged in the process. The Fisheries sector, both marine and inland, plays an important role in Tamilnadu's economy. And fish resources are of utmost importance for food security On the other hand, private agencies have estimated the figure at 9 lakhs fisher folk and an overall 20 lakh people depending on the coast for their livelihood.

As of 1994, 45,763 fishing crafts were engaged in fishing along the Tamilnadu coast, of which 4500 were mechanized, 3298 were motorized and 37,965 were traditional catamarans. About 2000 trawlers are calculated as operating along the Tamilnadu coast. At present, as per the Policy Note 2000-2001, there are about 10,000 mechanised fishing crafts and about 43,000 traditional crafts, engaged in marine fishing.

In 1992, the Fisheries Department had 7 ice plants, 7 cold storage units, 13 seafood manufacturing units and 6 marine training centres; the Tamilnadu Fisheries Development Corporation (TNFDC) operated 2 freezing plants, 3 ice plants and 3 cold storage units; and the Marine Product Export Development Authority (MPEDA) had 30 freezing plants, 20 ice plants, 40 cold storage units, 53 seafood manufacturing units and 9 marine and inland training centres.

The estimated marine fish production in Tamilnadu in 1997-98 was 3,56,547 tonnes (compared to 2,30,531 tonnes in 1980-81). In that year, Ramanathapuram district led in marine fish production with 83,000.40 tonnes. In 1996-97, Ramanathapuram (23.9%), Nagapattinam (21.2%), Pudukottai (14.3%), Thoothukudi (9.7%) and Kanyakumari (9.2%) districts accounted for 78.3% of the total marine fish production in the State.

The estimated inland fish production in 1998-99 was 1,09,000 tonnes. In this category, Thiruvalluvar district led with 7000.60 tonnes of fish production in 1997-98.

Tamilnadu's share of fish production in India was 8.9% in 1996-97.

Roughly one fourth of all marine exports from the country is from Tamilnadu, as confirmed by the Department's latest policy note. Monetarily, exports of fish and fish products from Tamilnadu were worth Rs 719 crores in 1995-96, Rs 1076 crores in 1996-97 and Rs 1220.05 crores in 1997-98. Prawns accounted for 42% of the total value of exports of fish and fish products.

It is interesting to note that in the 1990's, while growth rate has been significantly low, the values of fish production and export have shown significant increase! It is obviously the result of a policy that places the interests of short-term profit oriented enterprises over those of coastal communities and long-term coastal ecological balance.

"The present trend in marine fisheries in Tamilnadu indicates that the catch per unit effort (cpue) of the most of the important fisheries are either stagnating or declining. The increasing level of conflicts among fishermen is an indication of this situation."

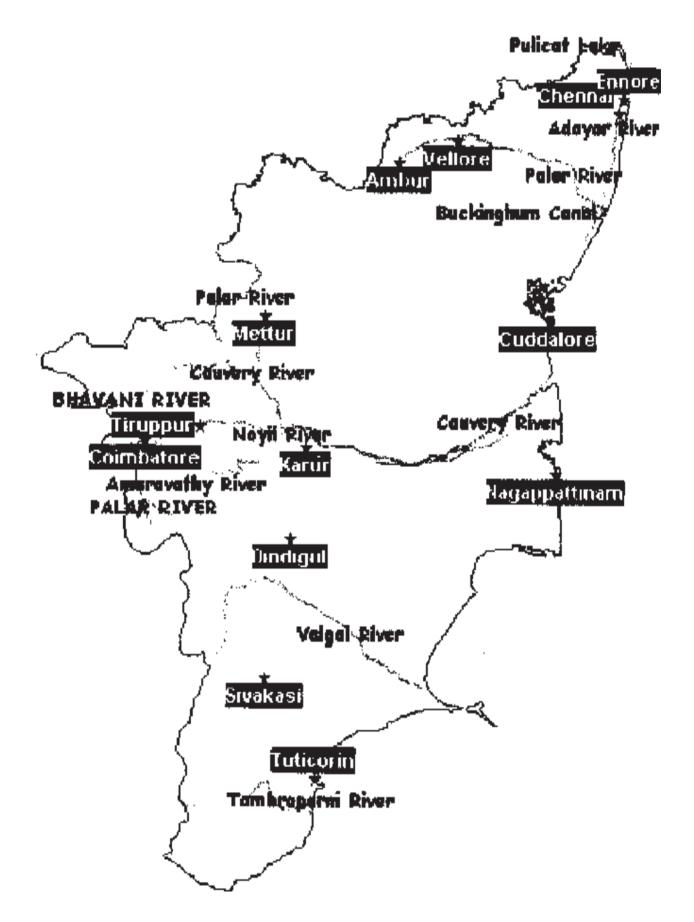
- Ninth Five Year Plan Tamilnadu : 1997-2002

There have been no serious efforts towards sectoral studies regarding poverty / health / education / housing / social development situation of fisherfolk in Tamilnadu. Most of the traditional and small fisher families surely barely sirvive, as can be seen by the statement,

"There are 56169 members in 245 Inland Fishermen Cooperative Societies in Tamilnadu. Most of them are living below the poverty line".

Policy Note 2000-2001.

Over the 1990's, while the growth rate of fishing has been significantly low, the values of fish production and export have shown significant increase. It is obviously the result of a policy that places the interests of short-term profit-oriented enterprises over those of coastal communities and long-term coastal ecological balance



### **Coastal Ecology**

"Increased pollution of coastal waters through dumping of raw and partially treated sewage, garbage, industrial effluents, agricultural pesticides, thermal pollution and residues and decreased flow of freshwater into the sea have adverse effects on the quality of coastal waters and may eventually result in depletion of fishery resources."

- Ninth Five Year Plan Tamilnadu : 1997-2002

Over the last decades or so, the Tamilnadu coast has been under attack by the forces of globalisation and export-oriented developmental policies of the State and central Governments. Rapid industrialization and huge infrastructure projects have posed an increasing threat to both the livelihood of fishing communities and the ecological balance of the sensitive coastal sphere. Mega Chemical & Petro-Chemical, Pharmaceutical, Industrial complexes, Aquaculture shrimp industries, tourist resorts, farm houses, hotels, entertainment parks, Power plants, Mega Ports etc...have played a devastating role in the degradation and destruction of the coastal ecology and coastal communities. Ecologically important Pitchavaram mangrove forest near Chidambaram, Muthupet near Vedharaniyam and mangrove forests in Ramnad coast have been badly degraded.

### COASTAL REGULATION

The coastal stretches of water bodies affected by tidal effect are declared as Coastal Regulation Zones (CRZ). The 1991 Coastal Zone Regulation Notification by the Ministry of Environment and Forests (MOEF) classified various coastal zones into CRZ I-IV, and prohibited certain activities and regulated certain other activities within 500 m of the high tide line (HTL).

The prohibited activities included setting up of industries or fish processing units, dumping of untreated industrial effluents and waste materials, land reclamation, mining land/ rock etc.

The activities that were regulated and needed clearance from MOEF were construction activities related to defense requirements, ports, thermal power plants or any other activity with investment exceeding five crore rupees. Over the last decade or so, the Tamilnadu coast has been under attack by the forces of globalisation and export-oriented developmental policies of the State

The 1994 Supreme Court verdict, ordering that all construction activities within 500 m. of the HTL be stopped, has not stopped the process of continuous dilution of the Notification through amendments. The amendments have sounded the deathknell to coastal communities and coastal ecology

The 1991 Notification has been diluted, through amendments and court judgements, further and further (in 1994, 1997 and twice in 1999) and observed mostly in its breach, not withstanding protests from environmental groups and fishing communities.

The 1994 Supreme Court verdict, ordering that all construction activities within 500 m. of the HTL be stopped, has not stopped the process of continuous dilution of the Notification through amendments. The amendment of August 1999, calling fisherfolk and fisher villages as merely "local inhabitants" has sounded the deathknell to coastal communities and coastal ecology.

Among some of the serious violations of the CRZ laws in Tamilnadu are:

- Constructions and development projects on the eastward side of the East Coast Road between Chennai and Cuddalore
- The expansion project of North Chennai Thermal power Station
- The construction of the Ennore Satellite Port and its expansion
- The proposed Petro-Chemical industrial complex in Kattupalli, Thiruvallur district
- The proposed NTPC Thermal plant at Cheyyur, Kancheepuram district
- The proposed Rs 6000 crores Thermal Power Project at Cuddalore

## EAST COAST ROAD

The East Coast Road, linking Chennai and Kanyakumari along the Tamilnadu Coast, is proving to be a major World Bank funded ecological nightmare along the Tamilnadu coast. The project has been planned in 3 phases. The first phase linking Chennai to Cuddalore is over and the second phase linking Cuddalore to Thoothukudi is on.

The first phase led to more than 5000 big and ancient trees being cut down and thousands of houses were adversely affected. (Rf report of Public Hearing on 27.02.1999 at Cudddalore). Based on the persistent protests from various quarters, the Chennai High Court laid down the following conditions:

- The road (tarred section) must uniformly of 7 metres width, with 2 metres side space on each side
- Old and ancient trees must not be cut
- The road should not result in any displacement of people, without adequate alternative arrangements
- On the eastern side of the road, adjoining the coast, no industries or tourist resorts should be allowed

To this day, these conditions have not been adhered to by the government. Nor has the government has brought out the detailed report on the impacts of the First phase, as promised.

Meanwhile, the second phase is on. To distract the attention of people, the second phase has been renamed, "Tamilnadu Road Development Scheme – Phase I". The Highways Department and the Ministry of Road Transport have initiated works on the 375 kms stretch from Cuddalore to Thoothukudi, through Nagai, Thiruvarur, Thanjai, Pudukottai and Ramanathapuram. The scheme is planned to cost a monumental Rs 1.5 crores per kilometer.

The plan document itself accepts that 28,200 persons will be displaced by the scheme. The document accepts, further, the ecological disturbances that the phase will result in.

While even those who were displaced by Phase I have not been adequately compensated or rehabilitated, this raises further dislocation of life. Besides such massive displacement of people, the second phase is set to further upset the fragile ecological balance of the area, as it passes through well known mangroves and bird sanctuaries in Pitchavaram, Muthupettai etc.

On 22 March 2000, Union Environment and Forests Ministry, based on two expert committees, has modified conditions imposed by the court, including ,"no hotel or industry should be allowed east of ECR." Now developmental projects in the seaward side of ECR, which require a huge quantity of water (more than 10,000 litres of water per day 0, will need clearance from the State Ground water agency. The modification will pave the way for the clearance of a host of tourism-related project proposals (amusement parks, aquariums, health resorts, aqua sport and leisure centres) worth over Rs. 800 crores along the Chennai-Cuddalore ECR.

The plan documents themselves accept that great number of families will be displaced and also accept the ecological disturbances that the phase will result in According to the second modification, the road should be 7.5 m wide and tar-topped, with 1.2 metre shoulder on each side.

The statutorily required Environment Impact Assessment has become a casualty or a ritual, with hardly any participation of those affected by the scheme

Given these factors, the following legitimate demands have been raised by various environmental groups and peoples' organizations:

- The Phase II should be stopped immediately
- The Govt must fulfill immediately all the conditions set by the High Court, regarding phase I
- The statutorily required Environment Impact Assessment has become a casualty or a ritual with hardly any participation of those affected by the scheme. Public hearings, where peoples' representatives are given a major say, should be properly organized before the report is submitted to the ministry of environment and forests, for the environmental clearance.

#### AQUACULTURE

"Ever since the Central Government's Marine Products Export Development Authority (MPEDA), spurred by the export-oriented New Economic Policy, identified shrimp farming as a thrust area, aqua farming has proliferated. With the trebling of prices since 1991, there has been a rush into aquaculture, laying waste to mangrove forests and lagoons in South Arcot and Nagai Quaid-e-Milleth districts. NEERI, which evaluated the state's Aquaculture status, has come out with starting revelations on the damage done to agriculture and the coastal ecosystem."

- Tamilnadu Peoples' Manifesto, 1996

Areas in the districts of Thanjavur, Karaikal and Nagai, that had come under massive onslught of aquafarms, have witnessed serious degradation of agricultural fields and reduction of fish yield in the long run

Modern Aquaculture is a typical "Rape & Run" industry. With the sole aim of quick profits and foreign exchange earnings, aqua farms have proved to be major ecological disasters – leading to degradation of soil and water, destruction of agricultural fields and quick destruction of all biodiversity. The areas in the districts of Thanjavur, Karaikal and Nagai that had come under massive onslaught of aqua farms have witnessed serious degradation of agricultural fields and reduction of fish yield in the long run. Even the fisher folk's right to movement gets violated given big fenced farms along the coast. By 1994, the situation on the coastal belt by the mushrooming prawn farms had become critical, resulting in deterioration of quality of life of the coastal communities in no small measure. The farm labourers and fisherfolk in the coastal belt of Thanjavur and Nagapattinam were the most affected by the desertification of fertile lands in the villages. The Bhagwati Environment Development Institute, Dindigul, reported that an analysis of water samples from 6 villages in Sirkazhi taluk had shown a disturbing degradation in the quality of groundwater.

The worsening situation led to massive protests by affected communities and environmental groups.

On 11.12.1996, the Supreme Court had declared that all shrimp farms and shrimp industries located with in the 500 metre space between HTL and LTL, coming within the purview of CRZ Notification must be forthwith removed or destroyed.

Still shrimp farms proliferate. Hundreds of shrimp industries continue to function, even along creeks, lagoons and estuaries, clearly in violation of CRZ laws and the 1996 Supreme Court judgement banning Aquaculture shrimp industries along the coast.

There is an urgent need to close down existing aqua farms coming under the Supreme Court Notification, but also to ensure that the cost of the ecological destruction caused by the farms be forced on the industrialists as well as compensation to all those whose right to livelihood and jobs have been seriously violated.

### CHENNAI

A recent study done by the Tata Energy Research Institute (TERI) ranked Chennai second only to Mumbai as the most degraded coastal ecosystem. According to studies done by the Institute of Ocean Management, Anna University, the steep increase in residential, commercial and industrial built up area and polluted discharges into the Adyar and Cooum rivers have taken their toll on the coastal water quality. An assessment of Chennai coastal waters showed a steep increase in heavy metals. Hundreds of shrimp farms continue to function, even alongcreeks, lagoons and estuaries clearly in violation of CRZ laws and the Supreme Court judgement

A recent study done by the Tata Energy Research Institute (TERI) ranked Chennai second only to Mumbai as the most degraded coastal ecosystem A perceptible change in forest and wetland use for aquaculture, plantation, degraded wasteland and agriculture coupled with unsustainable exploitation of coastal resources have reduced the extent of mangrove cover, especially Pichavaram. A study of Adyar estuary and Ennore creek mangroves clearly suggest the magnitude of human influence on the nutrient concentration in the mangrove waters. Maximum phosphorous loading was recorded at the Adyar estuary from domestic effluents besides laundry operations.

#### ENNORE... PULICAT LAKE... KATTUPALLI... ISLAND

**Pulicat lake,** spread across Tamilnadu and Andhra Pradesh, is the second largest brackish water lagoon in India, covering an area of 461 sq.kms, with a unique biosphere with its flora and fauna.

The Supreme Court, in the 1996 Shrimp Industry case, had decreed that 1000 metres beyond the Pulicat Lake shall be a no-development zone, including the bird sanctuaries Yedurapattu and Nelapattu. Further, the 1996 Tamilnadu Coastal Zone Management Plan classifies the entire Pulicat lake as CRZ I, implying a fragile area and a no-development zone. Taking into consideration the significant biodiversity and other dimensions of ecological importance, the system has been recently declared as a Ramsar site of international importance by the International Union for the Conservation of Nature. The WorldWide Fund for nature (WWF) has classified Pulicat Lake as a protected area.

About 1,00,000 people, spread across about 30 agricultural villages and 15 fishing villages, depend (directly or indirectly) on the ecosystem of the area for their livelihood. The fishermen of 15 villages on the Tamilnadu side around the lake operate about 800 country crafts. The average annual production is approximately 350 tonnes of which shrimp constitute 30 to 40%.

**Kattupalli Panchayat**, with an area of about 18 sq.kms, to the South of Pulicat lake, consists of about 2250 families. The essentially sandy island has human settlements, with paddy cultivation in pockets, surrounded by palmyra palms and a diversity of vegetations including mangroves along the Buckingham canal to the West and the Ennore creek to the South. In the multi-ecosystem environment of the island, there is a great biodiversity of flora and fauna.

Out of the original three fishing villages on this island, two (Mukhadwara Kuppam and Ennore Kuppam) have already been displaced in 1990-91, and the third (Kattupalli Kuppam) is awaiting displacement any day. The fishermen complain of acute depletion of fish and prawn in the coastal waters, upto a depth of about 10 metres, from the shore.

**Ennore Creek**, situated near the village Kathivakkam, is again another fragile eco-system. It sustains a whole range of salt pans. Pollutants let out by industries, municipal sewage, tar, oil, chemical effluents and the filth of the city have mauled the once pristine Ennore creek. And now, the industrial effluents and sewage gets concentrated because of the closure of the creek due to sand accretion caused by port construction.

Now all these three, (the Pulicat Lake, Kattupalli village and the Ennore Creek) with all their inhabitants and environmental systems, are under siege by forces of profit-oriented mega enterprises and the Port Policy of the Government of Tamilnadu. The major policies, as per the Port Policy (1992) and later announcements, are a) To promote port based thermal power plants by providing exclusive port facilities to import coal / naphtha /oil / natural gas, b) To improve port facilities to promote export oriented industries and port based industries along the coast, c) to promote tourism / coastal cruises and d) corporatisation of major ports.

The chief threats to the coastal ecology and coastal communities on Pulicat Lake and the Kattupalli island and its inhabitants are coming in the form of the Ennore Satellite Port, North Chennai Thermal Power Station (NCTPS) and the proposed Petrochemical Park along the coastal stretches from Ennore to Kattupalli. The adverse impact (actual and potential) of these needs serious attention and corrective action.

The Ennore Satellite Project, partly funded by the Asian Development Bank, is to develop sheltered harbour facilities at Ennore, about 24 kms from Chennai city, mainly to handle coal meant by the Tamilnadu Electricity Board for its thermal power stations, including the North Chennai Thermal Power Station, as well as liquid natural gas (LNG) and liquid petroleum gas (LPG). The main works involved in the project are construction of 2 new berths to handle vessels upto 65,000 DWT size, capital dredging of approach channel and harbour basin, construction of a 4 km long breakwater into the sea on its northern side and 1 km long breakwater on its southern side, which is close to the NCTPS. Originally sanctioned for Rs 593 crores, the revised estimate of the Port stands at Rs 927.10 crores.

The chief threats to the coastal ecology and coastal communities on Pulicat Lake and the Kattupalli island and its inhabitants are coming in the form of the Ennore Satellite Port. North Chennai **Thermal Power** Station (NCTPS) and the proposed Petrochemical Park along the coastal stretches from Ennore to Kattupalli

The dredging operations and the effluent water from the Thermal station have had adversary effects on the growth of fish and prawns, resulting in a sharp fall in the catch of fish and an unprecedented growth of algae bloom

The Satellite Port is visualized as a user developed facility, dedicated for the captive use of private entrepreneurs, whose responsibilities are to develop the needed infrastructures on BOOT (Build, Own, Operate and Transfer) basis. There is a move to declare the Port as a corporate entity in order to effect improvement in their efficiency and to have speedier modernization programmes.

About 1000 acres of land have been acquired and a further 1500 acres are proposed to be acquired. All the lands acquired through TIDCO, as part of its effort to acquire about 7000 acres for the development of the Petro-Chemical Park. For the formation of Port approach, about 30 acres of salt pan land has been acquired. Another 400 acres of salt pan land is proposed to be acquired.

The coal based **North Chennai Thermal Power Station** with a capacity of 630 mw, has been commissioned by the Tamilnadu Electricity Board (TNEB). The TNEB draws water from the Ennore Creek, which is linked to Pulicat lake, for cooling purposes. Fly ash, which the Plant discharges at the rate of 3000tpd, is collected in dry form and as slurry, is stored in 3 ponds in 1120 acres.

A **Petro-Chemical Industrial Park**, with an initial investment of Rs 700 crores, is to be constructed on a 7000 acres site adjoining the Ennore Port. The Park is to house industrial units manufacturing PVC, Polymers, Polypropylene and aromatic products. Phase I of the project can accommodate as many as 12 large corporate giants including power plants, petrochemical and public sector oil majors.

The ongoing Port construction has resulted in extensive erosion and ingression of the sea into the mainland that separates Pulicat Lake and the sea. Based on the already 50 metres long sea erosion and expected works at the port, it is feared that the sea erosion will result in merging the sea and lake into a large water body destroying this world famous brackish water lake and the livelihood of thousands of people as well as result in large scale displacement of people.

The dredging operations and the effluent water from the Thermal station have had adversary effects on the growth of fish and prawns, resulting in a sharp fall in the catch of fish and an unprecedented growth of algae bloom.

NCTPS discharges hot water into the Buckingham canal, killing the nursery of prawns, crabs and fish. According to

the Zoology Department of MCC, NCTPS has been releasing hot coolant water at 40 degrees centigrade into the canal. The samples collected from 6 stations showed that water temperature was 40 degree near the plant and was still at 34 degree at a point 10 kms away, compared to the normal temperature of 20-22 degrees. According to a CAN study of North Chennai coastline, lakhs of fish and other marine organisms die because of effluent dumping from the petrochemical industries into the water streams which are connected from the Ennore creek to Pulicat lake. The toxic materials are large quantities of sulphuric acid, alkalies, cyanides and phenols which are very harmful to aquatic life.

Fish catch has come down from Rs 300 per day 10 years ago to just Rs 20 now. Following complaints of hot water let into the Buckingham canal by the NCTPS, the Central Water and Power Research Station has been commissioned to study the scene.

With no outlet and industrial pollution building up, "the Ennore creek has turned into a septic tank".

The Petro-Chemical Park has come in for sustained criticism from all quarters and strong protests from the local coastal communities.

A CAN study says that the Park, coming under the sensitive CRZ I Zone, is the least desirable in such a fragile ecosystem. CAN has filed a writ petition in the high court seeking a direction not to set up the park at Kattupalli.

But TIDCO has claimed that MOEF has reclassified the zone from CRZ I to CRZ III and that the proposed area is not ecologically sensitive. NEERI has given the project the go ahead provided certain precautionary steps are taken.

The executive summary prepared by the TNPCB for the public hearing says that the park will attract investments worth Rs. 300 billion in petrochemical, power and chemical plants over the next decade.

At the public hearing (03.05.2000) arranged by the TNPCB to fulfill the Environmental Impact Assessment (EIA) of the project, TIDCO claimed that 600 families will be properly rehabilitated and that the project does not affect the environment adversely. NEERI claimed that a rapid EIA conducted in 1996 for three months showed that suspended particulate matter, air and noise pollution were low.

The findings and recommendations of the Expert Committee are indeed a cause for much concern, regarding the very policy framework of Tamilnadu Government vis-à-vis coastal communities and coastal ecology But Mr. A. Sreenivasan, former Joint director of Fisheries, said that the study was not adequate to judge the ecological value of the area. Mr.J.Palaiyan, President, National Union of Fishermen, said that the Fisheries survey of India referred to Kattupalli and Ennore as two major fishing shoals which will be threatened by the project. Dr. R. Sarin, head of NEERI EIA division that instead of one EIA for the entire infrastructure of such a scale of area planning, a separate EIA should be conducted for each unit. The residents as well as involved NGOs and research centres voiced their serious concerns.

The Ennore-Pulicat Environmental Protection Forum has decided to start a campaign on the issues pertaining to the area.

In March 1999, an expert Committee consisting of Justice H.Suresh, Dr. V.Vasanthi Devi and others undertook a fact finding mission, on invitation from CAN. Their findings and recommendations surely are a cause for much concern, regarding the very policy framework of the Tamilnadu Government vis-à-vis coastal communities and coastal ecology. Among the recommendations, the following deserve serious attention and urgent corrective action:

- All the three projects are violative of many enactments, Court directives and Conventions. These include:
  - > Environment Protection Act 1986 and its rules
  - CRZ Notification 1991 and Supreme Court Order 1996
  - ➢ Wild Life Protection Act 1974
  - > UN Convention on Biodiversity
  - > UN Convention on the Law of the Sea
- The entire stretch running parallel to Pulicat lake upto Ennore creek and the stretch of Buckingham canal which connects the two backwaters is designated as CRZ I area. The envisioned Industrial projects are in violation of CRZ law as this is a no-development, prohibited zone. We call for a moratorium on any further industrial development between Ennore and Pulicat coastal stretches irrespective of category of industry.
- While the coal-based Basin Bridge power plant was decommissioned and replaced recently by a diesel based power station, it is incomprehensible to start a new coal based power plant given the ecological impact of thermal pollution and fly ash disposal. Hence the proposal to expand NCTPS should be shelved.

- The drawing of enormous quantities of water from the Ennore creek, which is a naturally connected water source to the Pulicat lake, by the NCTPS is causing enormous hardship to the fishing people and destroying the once abundant fish resources. This withdrawal of water from the Ennore creek must be stopped. Alternate sources of water intake that does not harm this fragile coastal system must be explored.
- The proposed Petro-Chemical Industrial Park is found to further the damage already caused by the NCTPS and the Port, in the form of loss of biodiversity, loss of several habitats, salination of land and water, pollution of air and water. And the Ministry of Environment and Forests has not given any clearance for the project and no norms required under the Environmental Protection Act have been fulfilled.
- TIDCO invoking an emergency provision like section 17(1) of Land Acquisition Act, in order to acquire and transfer lands to private companies is a misuse of the Land Acquisition Act and a violation of the use of its emergency provision
- The proposed amendment to CRZ dated 05.08.1999 completely dilutes the very purpose of CRZ, to the detriment of the rights of fishing communities. It intends to legitimize all hotels, tourist resorts, industries etc, started after 1991 and proposes to reduce the protected zone to a mere 50 metres. The amendment needs to be withdrawn completely
- Delegating the powers of reclassification of coastal zones to district collectors is a gross violation of Supreme Court directives. The approval of the respective Panchayat and Panchayat union should be made mandatory

### **GULF OF MANNAR**

The Gulf of Mannar region, designated a biosphere reserve in 1989, is known for its species diversity. It has a high concentration of seagrass species on which the endangered dugong (sea cow) feeds. It also has high diversity of coral and mangrove species.

The resources of the Gulf of Mannar have been facing threats due to coral mining, increased silt in the rivers, fly ash slurry from thermal power plant and overfishing. The rivers are also reported to be carrying high load of sewage and fertilizer washings. A new proposal to manage the Gulf of Mannar Biosphere Reserve (GMBR) – managing the 21 islands, the Delegating the powers of reclassification of coastal zones to district collectors is a gross violation of Supreme Court directives. The approval of the respective Panchayat and Panchayat union should be made mandatory adjoining waters and the coral reefs in a sustainable manner, by involving all stakeholders – with a grant of \$7.85 million (app. Rs 32 crores) by the United Nations Development Programme (UNDP) through the Global Environment Facility (GEF) has been prepared by the MSSRF on behalf of the State Govt and sanctioned. GEF funding comes as grant to cover the incremental cost of the projects of global importance. In the case of GMBR, the other budgetary allocation of the State Governments departments (forests, rural development, public works, fisheries, agriculture etc) will be dovetailed into the project funding.

Oil pollution has effected a large-scale destruction of coral reefs in the Thoothukudi harbour.

The above are just among the most significant examples of scarce respect of public policy in Tamilnadu for coastal ecology and the rights and livelihood of coastal communities. There are many more. The Sipcot Complex, housing about 60 industries, in the already ecologically fragile district of Cuddalore... the Sterlite Industries in Toothukudi district that has led to many fatal accidents leading to protests.... The proposed Thermal Power plant at Cheyyur in Kancheepuram district, already classified by the Pollution Control Board as of red category, endangering lives of thousands involving in salt making and fishing....

According to one estimate, of the over 12,000 industrial units in the State, more than 5,000 are situated along the coast, causing great harm to the coast and its inhabitants. Pearl banks and chunk beds, the priced treasures off Toothukudi in the Gulf of Mannar, are fast depleting owing to industrial pollution and the silt and mud carried by the Tamaraparani river (mainly owing to deforestation). Also extensively damaged are the 23 coral islands between Mandapam and Thoothukudi, covering 683 hectares in the 1980s.

Surely there is a serious need for the Tamilnadu Government to radically rethink its coastal policies, so that the rights and livelihoods of the coastal communities remain a high priority. More specifically, the Coastal Management Plan for Tamilnadu has to be thoroughly redrafted.

POLICY ON FISHERIES AND THE COAST

Over the last 30 years, the government's marine fishery policy has been focused on exploitation of resources in the sea, leading to over-exploitation of the fishery resources. The present Govt. policy which is satisfied with some minimal subsidies, while encouraging big business and enterprises along the coast surely makes it worse.

Tamilnadu Government needs to seriously rethink its coastal policies, keeping the rights and livelihoods of coastal communities as a central priority. The Coastal management Plan for Tamilnadu has to be thoroughly redrafted The present fisheries policy, which gives priority to deep-sea fishing, is both proving to be very harmful to fishermen and leads to depletion of our valuable fishing resources. Trawling on a big scale destroys the marine eco-system and marine life causing depletion of fish resource and even extinction of some species.

The trend needs to be reversed so that the concerns of local coastal communities are no more sacrificed at the altar of foreign exchange earnings.

### RECOMMENDATIONS

- Any effort to modify the Coastal Regulations Act of 1991 towards reclassification of zones needs to be resisted.
- Common coastal lands along the coast and up to the habitation of the fishing village must be vested solely with the fishing village and their panchayats.
- The fishing community should be categorised as scheduled tribes and accorded statutory status at the earliest as per the Mandal Commission Report.
- Though women constitute 50% of the adult fishing population their interests and needs do not figure in any significant manner in the policies, programmes and budgets of the department or the Government. There is a need to recognise the contribution of women to fisheries development through their extensive marketing and involvement in processing of fish products. Policies and programmes should reflect it
- There has been a growing neglect of inland fisheries in reservoirs, lakes, tanks, ponds etc. in Tamilnadu. This neglect must be reversed as inland fisheries in reservoirs, tanks and ponds can produce common varieties of fish that will be accessible for the common people as nutritious food at reasonable prices.
- There is the need for an Inland Fisheries (organic) Promotion and Development programme, which would restore the traditional practice of employing fishermen for reservoir fishing under the control of the State Fisheries Department. The current practice of TNFDC leasing out reservoir fishing rights to private contractors should be immediately stopped.

The trend needs to be reversed so that the concerns of local coastal communities are no more sacrificed at the altar of foreign exchange earnings

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