

Animal Husbandry, Dairying and Fisheries Department

Fisheries

Policy Note for the year 2008-09

Demand No.7

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POLICY NOTE 2008-2009

FISHERIES DEPARTMENT

INTRODUCTION

Tamil Nadu is one of the important coastal States in the East coast, having a coastline of 1076 kms. with 13 Coastal Districts and 591 fishing villages. It ranks fourth in fish production in the country. It has a continental shelf of 41,412 sq. kms. and an Exclusive Economic Zone spreading over 0.19 million sq. kms.

Marine sector dominates the entire fishery sector, and, Tamil Nadu coast line is divided into four zones.

- I. The surf-beaten Coromandal Coast extending to 357.2 kms., from Pulicat to Point Calimere.
- II. The Palk Bay extending to 293.9 kms., from Point Calimere to Dhanushkodi.
- III. The Gulf of Mannar, rich in biodiversity and hosting a variety of marine species is a Marine National park, extending to 364.9 kms. from Dhanushkodi to Kanniyakumari.
- IV. The western sector with 60 kms. of coastline is on the Arabian sea, from Kanniyakumari to Neerodi.

The vast fishery resources both marine and inland waters have not yet been fully exploited. The fishery resources in the inshore areas have been over exploited whereas, the offshore resources and deep sea resources are yet to be tapped to the optimum level.

The prime responsibility of the department is to judiciously balance, enhance fish production with sustained conservation of resources as well as to improve the socio-economic standards of the fishermen.

This Government which cares for the welfare of the fishermen who eke out their livelihood by battling the nature everyday, have established a separate " Tamil Nadu Fishermen Welfare Board" on the same line as the Welfare Board for agricultural labourers, with a view to providing the required social security and, to extend all assistance to them.

Administrative Set up

The Commissioner of Fisheries is the Head of the Department and also the Managing Director of Tamil Nadu Fisheries Development Corporation Limited an undertaking of the Tamil Nadu Government. He is the Functional Registrar of all fishermen cooperative societies including Tamil Nadu State Apex Fisheries Cooperative Federation.

In this endeavour, Fisheries Department has won prestigious awards based on their performance in the year 2007-08.

Tamil Nadu Fisheries Development Corporation Limited has bagged the following 3 awards in Aqua Show conducted during February, 2008.

- i. Best pavilion award
- ii. Best display of marine aquarium fishes, and
- iii. Best retail show of ornamental accessories.

The Fisheries Department of Tamil Nadu has been awarded the first prize for having covered the maximum number of 5,55,744 fishermen/fisherwomen who are members of the various co-operative societies under the Group Accident Insurance scheme. The Hon'ble Minister for Agriculture of the Union Ministry has given shield, and, citation to the Commissioner of Fisheries of Tamil Nadu in the function held at New Delhi in appreciation of this feat.

The State is divided into six regions headed by three Joint Directors of Fisheries and three Deputy Directors of Fisheries who monitor and supervise the activities of Assistant Directors of Fisheries, and implement various developmental schemes including fishermen welfare schemes.

The ban on recruitment in the past years led to many vacancies and the Department faced grave hardship in implementing the welfare schemes and developmental activities. During the year 2006-07, the Government, lifted the ban and the following vacancies have been filled up during the year 2007-08.

Sl. No.	Name of the Post	Number of posts filled up
1.	Joint Director of Fisheries	2
2.	Deputy Director of Fisheries	7
3.	Assistant Director of Fisheries	31
4.	Personal Assistant	5
5.	Inspector of Fisheries	25
6.	Sub Inspector of Fisheries	14
7.	Superintendent	37
8.	Assistant	12
9.	Junior Assistant	5
10.	Fishery overseer-Grade-I	26
11.	Fishery overseer -Grade-II	18
12.	Temporary Appointment by the District Collectors concerned (Typist)	8
13.	Redeployment from other Department (Stenographer)	1
14.	Compassionate-ground Appointment (All categories)	15
15.	Candidates allotted by TEXCO (Driver)	4
	Total	210

Objectives of Fisheries Department:-

- ❖ To encourage fisherfolk to exploit the under-utilized fishery resources and to reduce fishing pressure in the inshore areas.
- ❖ To augment aquatic resource production in the inshore areas by conservation measures, stock enhancement, establishing artificial reefs etc.,
- ❖ To promote sustainable eco-friendly aquaculture practices.
- ❖ To strengthen the infrastructure facility for fish landing and marketing as per Hazard Analysis and Critical Control Point (HACCP) and European Union (EU) norms.
- ❖ To uplift the socio-economic status of the fisherfolk through welfare measures and also by generating employment opportunities.

- ❖ To modify the present fisheries legislation suiting the requirements of the fisherfolk and conservation.
- ❖ Impetus to ornamental fish culture, and deep sea fishing including Tuna.

Strategies to be adapted to achieve the objectives

- ❖ By motorisation of traditional crafts and by giving subsidy for the purchase of Out Board Motors for marine fishermen and introduction of integrated farming practices in cages with scampi.
- ❖ Under Tamil Nadu Marine Fishing Regulation Act, 1983, introduction of ban on fishing by mechanised boats for 45 days, regulation of mesh size, banning purse-seine, pair trawl operation, sea ranching of shrimp seeds, regulation of mesh size of nets operated in reservoirs and by declaring closed seasons.
- ❖ Training fishermen of 12 coastal districts on various mariculture activities such as sea weed, cage culture of fin fish etc., under Swarna Jayanthi Gram Swarozgar Yojana.
- ❖ Upgrading the existing Fishing Harbours / Fish Landing Centres, creation of new Fishing Harbours / Fish Landing Centres, upgrading the existing fish seed farms and enhancing the seed transport facilities.
- ❖ Free housing scheme, providing various relief assistance and training programmes for marine and inland fishermen.
- ❖ Implementation of Tamil Nadu Marine Fishing Regulation Act, 1983, regulating the mesh size of nets, stocking of fingerlings in natural waters.
- ❖ Training fishermen in ornamental fish culture and assisting in conversion of their fishing vessels into Tuna vessels.

XI Five Year Plan—A focus on Fisheries Development

During the XI Five Year Plan period from 2007-08 to 2011-12, the following Schemes will be taken up for implementation in the Department

- ❖ Develop fishery resources and potential including alternate livelihood programme to improve the economic well being of the fishermen.
- ❖ Modernize and equip all the Fishing Harbours and Fish Landing Centres in accordance with the guidelines of Export Inspection Council Government of India, to satisfy Hazard Analysis and Critical Control Point (HACCP) norms to avail opportunities under the World Trade Organisation (WTO) regime.
- ❖ Empower fish producers to compete both in domestic and international markets.
- ❖ Facilitate organized market network and modernize domestic fish markets including cold chain facility.
- ❖ Conservation of fishery resources, enhancement of resources, reduce over-capitalized fishing efforts.
- ❖ Modify policies to achieve conservation and diversification efforts.
- ❖ Encourage alternate livelihood support programmes, through skill upgradation and professional training to fisherfolk.

- ❖ Identify vulnerable areas and prepare a comprehensive plan for disaster preparedness and mitigation.
- ❖ Develop aquarium and oceanarium for the promotion of fisheries tourism.

1. TSUNAMI REHABILITATION AND RECONSTRUCTION PROGRAMME

Tsunami 2004 have caused heavy damages to the lives and properties of the people in the 13 Coastal Districts of Tamil Nadu. Tamil Nadu is one of the worst affected States by Tsunami. The fishermen community in the coastal districts were the worst affected population who needs to be rehabilitated by way of assistance from Government and other Agencies.

Hence, the Government gave a major thrust to Tsunami relief, taken a comprehensive view on the relief measures and sanctioned various packages to provide maximum relief assistance to the fishermen who suffered damages to their houses, fishing crafts and gears. The Government issued detailed guidelines for assessment of the damages caused to the fishermen under distribution of the assistance to the tune of Rs.151.34 crore under first package and this has been completed.

1.1. Issue of additional relief assistance to Tsunami affected fishermen

The Hon'ble Chief Minister of Tamil Nadu announced a grant of additional relief assistance to 42,000 Tsunami affected fishermen in 13 Coastal Districts. The Government sanctioned Rs.110.36 crore under Rajiv Gandhi Rehabilitation Package. The Hon'ble Chief Minister inaugurated the distribution of additional relief materials i.e., Heavy Duty Bicycles, Life jackets, Rechargeable lanterns and Insulated ice boxes to the already benefitted fishermen at Chennai on 12.10.2007, and, this will be completed by August, 2008.

1.2. Relief assistance sanctioned from Prime Minister's National Relief Fund

(a) Sports equipments

Cricket kits, Volley ball with nets, Foot ball, Knee cap for Kabadi, Carrom boards and Chess boards with coins have been distributed.

(b) Waiver of loan obtained by Fishermen through TAFCOFED

TAFCOFED under the Integrated Marine Fisheries Development Project obtained loans from National Co-operative Development Corporation and issued loans to fishermen through the Fishermen Co-operative Societies and the pending outstanding loan amount of Rs.19.56 crore which includes the Principal, Interest, Penal Interest and Share Capital. To alleviate the sufferings of the Tsunami affected fishermen, the Government have issued orders for the waiver of loan amount of Rs.19.56 crore by obtaining funds from the Prime Minister's National Relief Fund.

(c) Support of Social Infrastructure to marine fishermen – Distribution of First Aid Boxes

The Government of Tamil Nadu have sanctioned Rs.9.40 crore under Prime Minister's National Relief Fund, for the purchase and distribution of 47,000 First Aid Boxes and they have been procured and distributed to Tsunami affected fishermen.

1.3. Chennai Fishing Harbour

In order to modernize the Chennai Fishing Harbour, an amount of Rs.19.569 crore has been sanctioned to the Port Trust Chennai for rehabilitation of trawler wharf, extension of break water, construction of additional trawler wharf and finger jetties. The works are planned to be completed by Port Trust Chennai during 2008-09.

1.4. Restoration of Fishing Harbours and Fish Landing Centres under the Member of Parliament Local Area Development Scheme (MPLADS)

Members of Parliament came forward and contributed a sum of Rs.4.53 crore for restoration and reconstruction of Tsunami affected fishing harbours and fish landing centres in Kanyakumari and Cuddalore Districts.

The works done based on their contribution are as follows:-

- i) Restoration of Chinnamuttom Fishing Harbour in Kanyakumari District -Work completed.
- ii) Creation of infrastructure facilities at Kovalam in Kanyakumari District -Work completed
- iii) Construction of Boat jetty at Arockiyapuram in Kanyakumari District-Work completed.
- iv) Construction of fish landing centre at Enayamputhenthurai in Kanyakumari District- The work has been completed except, construction of wharf for which feasibility studies by IHH Poondi is in progress.
- v) Construction of Fisheries Training and informatics Centre at Parangipettai in Cuddalore District:-

The facilities are being created at an estimated cost of Rs.92.50 lakh in respect of construction of Fisheries Training Centre, Hostel building and procurement of laboratory equipments.

1.5 Restoration works in Tsunami affected Fishing Harbours / Fish Landing Centres sanctioned under National Calamity Contingency Fund (N.C.C.F.)

- i. Restoration of Fish Landing Centre at a cost of Rs.718.50 lakh in Mudasalodai, Kottaipattinam, Nagapattinam, Mallipattinam and Fishing Harbours in Cuddalore, Thondi, Thoothukudi and Chinnamuttom- Work completed.
- ii. Pazhayar Fishing Harbour- Work has been completed except administrative office building which is also nearing completion.
- iii. Dredging in Chinnankudi river- Work is under progress.

1.6 Construction of 10 Fish Landing Centres under Tsunami Rehabilitation Programme

10 new Fish Landing Centres in Tamil Nadu each at a cost of Rs.5.00 crore have been approved in the following places.

Threspuram	- Thoothukudi District
Periyathalai	- Thoothukudi District
Keelakarai	- Ramanathapuram

	District
Ovari	- Tirunelveli District
Ekkiyarkuppam	- Villupuram District
Annamalaicheri	Tiruvallur District
Ennore Mugathuvara-kuppam	- Tiruvallur District
Periyamangodu	Tiruvallur District
R.Pudupattinam	- Pudukottai District
Kadalore Periakuppam	- Kanchipuram District

Consultancy study has been awarded to M/s.Mahindra consultancy Pvt.Ltd. Draft detailed project report received from the consultants is under scrutiny.

1.7. World Bank aided Emergency Tsunami Reconstruction Project (ETRP)

An amount of Rs.80.60 crore has been allotted under World Bank aided ETRP for the following works:-

a) Reconstruction and modernisation of 4 fishing Harbours

Consultancy services has been fixed for carrying out the studies for reconstruction and modernisation of Fishing Harbours. The study needs to be completed in 9 months. Report on existing conditions and draft conceptual design has been received and is under examination and the execution of work will be taken up after the studies.

b) Permanent opening of 4 bar mouths

Consultancy services for permanent opening of bar mouths has been fixed and Draft detailed project report has been received and the tenders will be invited in consultation with World Bank.

c) Construction of 2 new fish landing centres

(i) Nagoor

Regarding construction of new fish landing centre at Nagoor, studies were carried out by the consultancy agency and Draft detailed project report, Environmental Impact Assessment and Environmental Management Plan report are received. Project will be completed in 18 months.

(ii) Annankoil

The consultancy service has been fixed for carrying out studies for construction of new fish landing centre at Annankoil and draft detailed project report has been received and the tenders will be invited in consultation with World Bank.

d) Seamless communication Network in 13 Coastal Districts

For installation of Seamless Communication Network in 13 coastal districts, ELCOT has been fixed as the agency. The Government of India have been addressed to sanction a sum of Rs.57.60 crore.

e) Assistance to aqua farms / hatcheries

The work on distribution of assistance to 68 aqua farms / hatcheries, damaged by Tsunami covering an extent of 232.8 ha at a cost of Rs.59,95,258/- through District Collectors concerned have been completed.

1.8. Asian Development Bank assisted Tsunami Emergency Assistance Project (TEAP)

a) Repair and Rehabilitation Work:

From Asian Development Bank under TEAP, a sum of Rs.74.30 lakh has been sanctioned for carrying out repair and rehabilitation works at Cuddalore Fishing Harbour and the Fish Landing Centres at Mudasalodai, Sethubavachatram, Kottaipattinam, Jagatha- pattinam and Punnakayal. Work has been completed in all the places. Completion report received and reimbursement towards entire eligible amount of Rs.72.70 lakh has been claimed.

b) Development of comprehensive design for Fishing Harbours at Cuddalore, Chennai Napier Bridge and Adyar Creek

The Development of comprehensive design for Fishing Harbours at Cooum and Adyar are found to be unsuitable for conventional crafts. Therefore, it is planned to conduct study only in the Cuddalore backwaters. Asian Development Bank has approved further studies.

c) Dredging works in the basin of Fishing Harbour / Fish Landing Centres (Pazhayar and Chinnamuttom Fishing Harbours and Mudasalodai, Sethubavachatram, Kottai pattinam, Jagathapattinam and Punnakkayal Fish Landing Centres)

Anna University Chennai has conducted IEE/ EMP studies at a cost of Rs.24.00 lakh after approval from ADB. Environmental clearance under CRZ has been received from National Coastal Zone Management Authority. For dredging in fishing harbours and fish landing centres, draft bid document has been sent to ADB for approval.

2. INFRASTRUCTURE FACILITIES

2.1. Sethusamudram Ship Channel Project Coastal Community Development Programme Construction of Fishing Harbour and Fish Landing Centres.

For the benefit of the local fishermen, it has been decided to provide Rs.60.00 crore under Sethusamudram Ship Channel Project, for developing Fishing Harbours / Fish Landing Centres at Muthupet, Sethubavachatram, Thondi, Rameswaram and Mookkaiyur.

The Sethusamudram Corporation Limited has taken action to select the consultancy for studies and preparation of a Detailed Project Report. Based on the feasibility, the work will be taken up for execution. Draft DPR has been received by Department for Muthupet, Sethubavachatram, Thondi and Mookkaiyur and remarks had been sent to Sethusamudram Corporation Ltd.

2.2. Rameswaram Fishing Harbour

As part of Sethusamudram Ship Channel Project, it has been decided to extend financial assistance for developing a Multi-purpose harbour at Rameswaram at a tentative cost

of Rs.100.00 crore, with provision for handling of fishing vessels, cargo vessels, berthing and repair facilities for the vessels of the Sethusamudram Corporation Limited. The Sethusamudram Corporation Limited Chennai invited tenders for selection of consultants for study and work has been awarded to C.E.S. and study is in progress.

2.3. Construction of Fishing Harbours in Tamil Nadu under Centre/State Shared scheme

(i) Colachel Fishing Harbour

The proposal for construction of Fishing Harbour at Colachel was recommended and forwarded to Government of India. The Union Government has approved this proposal at a cost of Rs.27.10 crore and the work will commence in this financial year.

(ii) Thengapattinam Fishing Harbour

Government have accorded administrative sanction for construction of Fishing Harbour at Thengapattinam in Kanyakumari District at a cost of Rs.30.55 crore under centrally sponsored scheme (50:50 basis). Ministry of Environment and Forest, Government of India New Delhi have accorded environmental clearance for the projects. As suggested by Government of India, revised cost estimate based on the current schedule of rates at Rs.38.10 crore has been sent. After getting approval from Government of India, the project will be implemented.

(iii) Poompuhar Fishing Harbour

For construction of Fishing Harbour at Poompuhar, the National Institute of Ocean Technology (NIOT) has submitted Model studies and EIA / EMP reports. The report is under examination in consultation with Archaeology Department. In the joint meeting with Archaeology Department, it was decided to conduct archaeological marine survey before giving clearance to this work.

2.4. Construction of Fishing Harbours at Muttom and Rajakkamangalamthurai in Kanyakumari District on BOOT (Build, Own, Operate and Transfer) basis.

Government have accorded permission for the construction of Fishing Harbours at Muttom and Rajakkamangalamthurai in Kanyakumari District under BOOT System. The Government have also approved the draft Request For Proposal and draft concession agreement. The tender received for these works were finalised. Letter of award issued to concessionaire. Agreement has been drawn for Muttom.

2.5. Assistance from ASIDE for Developing Infrastructure Facilities in the Fishing Harbours.

Under Assistance to States for Developing Export and other allied activities, a sum of Rs.1242.00 lakh has been sanctioned for carrying out the following works.

- a) Upgradation of Fishing Harbour at Chennai- Rs.638.00 lakh
- b) Upgradation of Fishing Harbour at Thoothukudi-Rs.504.00 lakh
- c) Establishing cold chain facilities in 4 Districts- Rs.100.00 lakh

Chennai Fishing Harbour Management Committee has taken up additional works like compound wall, additional toilet block, provision of shops for sale of fishing implements and electrification works at a cost of Rs.121.60 lakh

As regards Thoothukudi Fishing Harbour Phase-I & II, dredging has been completed. In respect of civil works, all the works have been completed. Tender processing has also been completed for renovation of wharf and jetty. Preliminary work has commenced.

Cold chain facilities are being established in Thoothukudi, Pudukkottai, Ramanathapuram and Kanyakumari Districts at an estimated cost of Rs.25.00 lakh each. Cold storage installation have been completed in the above four districts.

3. NEW SCHEMES- 2008-09.

3.1 Setting up of Distress Management Cell in Head Office

The control room functioning in head office during monsoon period every year is provided only with a phone and the information received from the coastal districts, Coast Guard/Navy could not be passed on to the Government immediately. Hence, it is proposed

to form a Distress Management Cell at a cost of Rs.6.00 lakh with computer and other facilities and the information received can immediately be stored and passed on to Government by e-mail.

3.2. Pilot Project on issue of Smart Cards to fishermen of Rameswaram in Ramanathapuram District

The fishermen of southern coastal districts often cross International Maritime Boundary Line (IMBL) and stray into Sri Lankan waters in search of rich fishing grounds and are apprehended and harassed by Sri Lankan Navy. Sometimes missing of fishermen/crew also occur due to inclement weather conditions. Identity of such missing fishermen /boat crossing IBL cannot be easily established at times. It is proposed to issue a smart card to all the fishermen of Rameswaram in Ramanathapuram District as a pilot project by which, identity of fishermen in such incidents of IBL crossing/missing can be easily traced and appropriate action taken. This scheme will be implemented at a total cost of Rs.10.00 lakh.

3.3 Supply of inverters to the Office of the Assistant Director of Fisheries (Marine) in 13 Coastal Districts

There are 13 Offices of the Assistant Director of Fisheries functioning in the coastal districts. For conveying urgent messages on weather warning issues, tracing of missing fishermen in the sea, implementation of various socio-economic schemes, it is proposed to provide inverters to all the Offices of the Assistant Director of Fisheries (Marine) at a total cost Rs.7.00 lakh.

3.4. Provision of 2 solar lights each in 11 Fish Landing Centres

There are 363 fish landing centres along the coast of Tamil Nadu. The fishermen return to the shore after fishing operation with their fish catches during night time, sell their catches in open auction on the shore itself. Lighting facility is essential to carry out their post harvest fishing activities during night time. Hence, it is proposed to install 2 solar lights each in 11 fish landing centres at a total cost of Rs.7.00 lakh.

3.5. Installation of artificial reefs in the inshore areas of Tamil Nadu Coast

Artificial reefs are recycled under-water habitats for marine life and help in increasing the productivity of eco-system. Fishes would congregate in these areas for food, shelter and breeding activities. Thus, fish production will be increased. Also bottom-trawling operations by mechanized fishing boats in the reef areas will become impossible. Hence, installation of artificial reefs is implemented in Tamil Nadu as a stock enhancement programme for fishery resources. It is proposed to install artificial reef in 2 places, one each in Kancheepuram and Thiruvallur Districts at a total cost of Rs.20.00 lakh.

Concrete structures (modules) for different varieties of fish, viz. Grouper fish, reef fish etc. are fabricated in the shore and deployed in inshore waters at a depth of 20 fathoms. The Coromandal Coast which is surf beaten is ideally suited for installation of artificial reefs.

3.6 Sea Ranching of Shrimp Seeds for Stock Enhancement

To enhance biological productivity and fishery resources in coastal waters and to help in conservation of fishery resources, a scheme on sea ranching of commercial shrimp species is implemented by the Department. It is proposed to stock PL 15-20 shrimp seeds in 2 places in the State at a total cost of Rs.20.00 lakh.

3.7 Pilot Project on Demonstration of Cage Farming in Inland Water Bodies

The inland fishery resources of Tamil Nadu are estimated at 3.7 lakh ha. To increase fish production, cage farming is a promising option available. At present, about 20 to 25 kgs per ha. is achieved as production from reservoirs. To enhance the same and to achieve 150 to 200 kgs/ha by cage farming, it is proposed to take up this activity in a suitable place at a total cost of Rs.4.80 lakh.

3.8. Seed Transport Facility for Government Fish Seed Farm

For stocking in water bodies, the fish seeds are to be transported from fish rearing centres. Fish seeds are prone to high mortality. The fish seeds cannot be subjected to prolonged transport stress, as this would reduce the survival of fingerlings. Hence there is a need to provide proper fish seed transport facility. It is proposed to provide the seed transport facility to one major seed production centre. A vehicle with infrastructure facilities like oxygen cylinder for oxygenation of bags packed with fish seeds, additional space for containers for holding the bags with seeds will be purchased at a total cost of Rs.10.00 lakh.

3.9. Upgradation of the Existing Fish Seed Farm at Krishnagiri

The fish seed farm constructed in 1981-82 requires extensive repair works. By upgrading this farm, an additional fish seed production of about 7 lakh fingerlings is anticipated. This scheme will be implemented at a total cost of Rs.20.00 lakh.

3.10. Subscribing to All International Magazines relevant to Fisheries Central Library of Commissionerate

Fisheries Department Library is a treasure for Fisheries. There are about 3000 valuable books, 109 important journals, 32 Magazines, 29 Department Publications and other important scientific journals, MPEDA, CMFRI, CIFRI, CIBA news letters, Publications of FAO, UNDP, BOBP etc., are also available in this Central Library.

Since Students, Farmers, Scientists, Research Scholars from Tamil Nadu and other States of India are visiting this Library and utilizing the facility, the Library requires more and more international publications in the field of fisheries and it is proposed to subscribe to International Magazines, for which a sum of Rs.2.00 lakh will be provided.

3.11 Establishment of Fishers Institute of Tamil Nadu

To provide technical assistance and training to marine fishers to take up activities in diversified fishing methods, marine cage culture and crab culture including sea weed farming and for adoption of proper fish processing technique by fisherwomen, a Fishers Institute of Tamil Nadu would be established as a World class facility with the participation of major corporates like TATA Group.

Government have announced the establishment of Fishers Institute of Tamil Nadu and provided a sum of Rs.1.00 crore as the initial budgetary assistance.

The following are the major activities that would be taken up by the proposed Fishers Institute of Tamil Nadu.

- ❖ Sea farming.
- ❖ Sea weed culture for the Self Help Groups.

- ❖ Fish processing in value-added consumer products.
- ❖ Diversified fishing with carrier vessel Operation.

3.12 Setting up of Modern Fish Stalls in major cities in Tamil Nadu Rs.30.00 lakh under NADP

In a major step to modernise the retail fish marketing, to provide hygienic conditions in and around the stalls, recently TNFDC Ltd., has established 4 numbers of modern fish stalls at Chennai, under funding from post harvest infrastructure development by Ministry of Agriculture, Government of India and it has also gained popularity among the general public. The TNFDC Ltd., proposes to establish five numbers of modern fish stalls for retail marketing of fish in 2 places at Chennai, 2 places at Madurai and one at Coimbatore.

4. MARINE FISHERIES

4.1. CONSERVATION AND MANAGEMENT OF FISHERY RESOURCES:

For conservation and Management of fishery resources in the territorial waters of Tamil Nadu, the Government have taken the following steps under TNMFR Act, 1983,

- ❖ Imposing ban on fishing by mechanized fishing boats in the East and West coasts of Tamil Nadu for a period of 45 days every year
- ❖ Banning purse seine and pair trawl fishing by all types of crafts
- ❖ Regulating the mesh size of gill net, shrimp trawl net and fish trawl nets.

4.2. Stock enhancement of inshore fishery resources by sea ranching programme.

Awareness is being created among the fishermen on the need to conserve the fishery resources. In order to redress the problems of over-exploitation and stall the depletion of resources, sea ranching of commercial shrimp species was launched. The Government have sanctioned a sum of Rs.128.40 lakh to stock 15-20 day post larvae seeds at 12 places in five coastal districts of Ramanathapuram, Pudukottai, Nagapattinam, Thanjavur and Thoothukudi. 48 million shrimp seeds have been reared and stocked.

4.3. Installation of Artificial Reefs

14 artificial reefs have already been installed in the inshore waters of Tamil Nadu Coast. The work on installation of 2 artificial reefs in Thanjavur and Kanyakumari District at a sanctioned cost of Rs.10.00 lakh / each unit has been entrusted to TAFCOFED and tenders have been called for.

4.4. Motorisation of Traditional Crafts

The Government is providing subsidy of Rs.20,000 towards the purchase of outboard motors to be fitted in the traditional crafts of fishermen. So far, the Department has provided 18,470 OBM / IBE to the fishermen.

4.5 Tuna Resources potential and Exploitation

Tuna fishing is one of the eco-friendly and low energy fishing activities targeting pelagic resources and this fishing is encouraged at all levels. Since Tuna fish has good export potential, it is proposed to create awareness among the fishermen about Tuna fisheries, financial assistance for conversion of vessels and to train 110 fishermen through

MPEDA. First batch of Training of Fishermen for Tuna longline fishing has been completed in Chennai, and, is in progress in Nagapattinam.

5. MARICULTURE

Tamil Nadu with its long coast line has immense potential for development of various mariculture activities. This will help to reduce the fishing pressure in the inshore waters and will also act as a diversified activity. Various species suitable for cage culture species which have very good export market are selected for mariculture.

5.1 Seaweed Culture

Seaweed cultivation is being undertaken in selected areas involving Self Help Groups, an ideal alternate employment opportunity for diversification of fishing and thereby reducing fishing pressure in the inshore region. Under the SGSY Special Project, it is proposed to impart training to 6000 fisherfolk, and also support 3000 fisherfolk to start their economic activity within a span of three years. During the year 2007-08, 2587 fisherfolk have been trained in seaweed cultivation at an estimated cost of Rs.16.69 lakh and financial assistance to the tune of Rs.357.00 lakh will be given as backend subsidy to start their economic activity.

5.2. Cage Culture of fin fishes in the sea

Under SGSY Special Project, it is proposed to impart training to 16,700 fisherfolk in different mariculture activities like Lobster / Crab fattening, Seaweed culture, Mussel/Oyster farming, Ornamental fish culture and Cage culture of marine fin fishes within a span of 3 years.

These species have a very good export market, but the main constraint is the limited availability of seeds for promoting cage culture in sea water. At present, the Grouper seeds are available only in natural sources. The main requirement for taking up cage culture is calm bays and calm waters, where wave action is less with little variation in physico-chemical parameters. The deployment of cages require larger areas in the inshore water, which will pose hindrance to traditional fishermen in the movement of their crafts and going into the sea for fishing.

To overcome the above constraints, it has been proposed to take up a pilot project for Grouper culture in cages in selected areas, i.e calm bays with the participation of the fisherfolk under the SGSY special project. If proved successful, the cage culture of groupers and other important species in mariculture will be extended to other areas also. For the year 2008-09, about 4000 fisherfolk will be trained in different mariculture activities.

6. FISHERMEN WELFARE SCHEMES

6.1. Fishermen Free Housing Scheme

Under the Fishermen Free Housing Scheme, Government sanctions 2000 houses yearly to Marine and Inland fishermen who are below the poverty line, subject to the following conditions:-

- the fisherman should be a member of the Fishermen Co-operative Society and should be below the poverty line
- the fisherman should live in huts or Katcha houses
- the fisherman should own 3 cents of land.

Apart from this, the Government of India sanctions the construction of houses, community halls and tube wells under the Centrally sponsored scheme of "Development of Model Fishermen Village Scheme" shared between the State and Central Government on 50: 50 basis.

<u>2005-06</u>		
i) Amount sanctioned under State Scheme Rs.740.00 lakh.	Houses ordered to be constructed 2000	Houses allotted (25 + 1975)
ii) Amount sanctioned under Centrally Sponsored Shared Scheme Rs.74.76 lakh.	2000 Houses 7 Community Halls 96 Tube Wells have been ordered to be constructed.	Houses allotted-1342. The scheme will be implemented on receipt of balance amount from Government of India.
<u>2006-07</u>		
Amount sanctioned under State Scheme Rs.740.00 lakh	Houses ordered to be constructed 2000	Houses allotted (914 + 1086)2000
<u>2007-08</u>		
Proposals for construction of 2000 houses under State scheme has been received and it is under examination. Further, the proposal for construction of 3000 houses, 10 Community Halls and 100 Tube Wells under Centrally Sponsored Shared Scheme has been forwarded to Government of India. The construction work will be taken up, on release of funds from Government of India.		

(a) National Savings-cum-Relief Scheme for Marine Fishermen

The Government is continuously implementing the Savings-cum-Relief Scheme for the fishermen of Tamil Nadu.

Under this scheme, the fisherman contributes Rs.75/- per month as his share for 8 months in a year. The contribution is equally matched by the Central and State Government i.e. Rs.300 each. A sum of Rs.1200/- including the fisherman contribution is disbursed to the beneficiaries during the four lean months. For the year 2007-08, a sum of Rs.2112.20 lakh has been sanctioned and 1,76,017 beneficiaries have benefitted. This scheme will be continued during 2008-09.

(b) Savings-cum-Relief Scheme for Marine Fisherwomen

This scheme is being implemented as a state scheme from the year 2006-07. Under the scheme, a sum of Rs.75/- per month shall be contributed by the beneficiary fisherwoman for a period of 8 months. Matching share of Rs.600/- is provided by the State Government. Thus, the sum of Rs.1200/- is distributed to the beneficiary during the 4 lean months. For the year 2007-08, Government have sanctioned a sum of Rs.1260.00 lakh. 1,05,534 fisherwomen have benefitted under the scheme. Rs.1259.00 lakh has been disbursed covering 12 Coastal districts. For the remaining 1 district, distribution will commence by June 2008. This scheme will be continued during 2008-09.

6.3. Group Accident Insurance Scheme for Fishers

Under this scheme, the State and Central Government will pay the total Insurance premium of Rs.14/- (Rs.7/-each) and no premium is collected from the fishermen. In case of death / permanent disablement, the fisherman will be given Rs.50,000/- and Rs.25,000/- for partial disablement.

During 2007-2008, 5,55,744 active marine and inland fishermen and fisherwomen were insured in FISHCOFED, New Delhi for the period 10.12.2007 to 9.12.2008. 127 members have been benefitted and Rs.60.82 lakh has been disbursed. This scheme will be continued during 2008-09.

6.4. Cash awards to X, XII Standard students of fishermen community

To encourage students of fishermen community to pursue education, Government of Tamil Nadu have announced cash awards to the boys and girls who have obtained top ranks in X and XII Standard Examinations. The Government have sanctioned Rs.4.12 lakh towards the disbursement of cash awards. For the academic year 2005-06, cash awards and certificates have been distributed to the top rank holders of the students. Further, a sum of Rs.4.12 lakh has been sanctioned for the disbursement of cash awards to the students of fishermen community for the academic year 2006-07 and are disbursed.

6.5 Reimbursement of Central Excise Duty on High Speed Diesel

To alleviate the sufferings of the mechanised fishing boat operators, the Government reimburses the excise duty by way of subsidy towards the purchase of HSD to bring down the running cost of mechanised fishing boats. Government of India have sanctioned Rs.3.00 crore as subsidy for 2007-08 as 100% assistance. So far, 1537 beneficiaries have been benefitted under this scheme. During 2007-2008 a sum of Rs.2,96,58,075/- has been given to the beneficiaries.

6.6 Sales Tax Exemption on sale of High Speed Diesel to Fishermen

A scheme for the fishermen of Tamil Nadu involved in fishing activities with mechanised boats and motorised country crafts was announced with 100% exemption of payment of Sales Tax for the purchase of High Speed Diesel. Accordingly, 15,000 litres of sales Tax Free Diesel per Mechanised Boat per year and 3000 litres of Sales Tax Free Diesel per country craft per year is supplied. So far, 74020.50 KL of diesel for mechanized boats and 24398 KL for country crafts has been supplied upto March, 2008.

7. FISHERMEN RELIEF MEASURES

7.1 Daily Relief to Marine Fishermen apprehended in other Countries

With a view to supporting the families of the genuine fishermen who are apprehended in the neighbouring countries during fishing operations, a daily relief amount of Rs.50/- is given to the family till he returns home. The Government have sanctioned a sum of Rs.5.00 lakh each to the 8 District Collectors of Nagapattinam, Thanjavur, Tiruvarur, Pudukkottai, Ramanathapuram, Thoothukudi, Tirunelveli and Kanyakumari for providing immediate relief.

7.2 Relief to the families of missing fishermen

As per the orders issued in G.O. (Ms) No. 62, AHD & F Department, Dated 27.4.2007 a sum of Rs.50/- per day or Rs.1500/- per month shall be paid to the families of the fishermen missing while fishing in the sea, till he returns, subject to the following conditions:-

- i) The affected fisherman should be an actual fisherman and should be a member of the Fishermen Co-operative Society.
- (ii) An application with FIR copy countersigned by local Sub-Inspector / Inspector of Police should be submitted to Assistant Director of Fisheries concerned.
- (iii) An Affidavit, from the local village Panchayat regarding.
 - (a) Non-availability of the missing fisherman in that village for 30 days from the date of voyage.
 - (b) That the fisherman had not been involved in any illegal activity.
 - (c) An affidavit will be obtained from the families of these fishermen that the amount paid to them as daily relief shall be returned to the Government in case the fishermen are later found engaged in any illegal activity or become eligible for ex-gratia amount.

7.3 Relief to the families of deceased fishermen subject to attack by Sri Lankan Navy

The fishermen of Nagapattinam, Thanjavur, Tiruvarur, Pudukkottai, Ramanathapuram, Tirunelveli, Thoothukudi and Kanyakumari Districts inadvertently cross the International Maritime Boundary Line, (IMBL) due to engine failure and natural vagaries of the sea and drift into Sri Lankan waters. Such fishermen are apprehended and some times shot at by Sri Lankan Navy. All such incidents are brought to the notice of the Government of India in order to take up the matter with the Government of Sri Lanka for their immediate intervention.

The Hon'ble Chief Minister of Tamil Nadu has announced the payment of ex-gratia of Rs.1.00 lakh to the families of the fishermen who die due to shooting incidents by Sri Lankan Navy under Chief Minister's Public Relief Fund. The Collectors of Coastal Districts have been authorized to sanction and disburse the ex-gratia amount of Rs.1.00 lakh from the CMPRF immediately.

7.4. SEA SAFETY SCHEMES FOR FISHERMEN - Re-registration of fishing crafts

Registration of fishing boats is mandatory as per Tamil Nadu Marine Fishing Regulation Act, 1983. Only registered boats will be given fishing licence to conduct fishing in the sea. Assistant Directors of Fisheries of marine coastal districts are the authorised officers for the cancellation of old registration of all crafts, and to assign new registration numbers.

Many problems like dual ownership for the same boat, the boat having multiple registration numbers were detected while registering new boats in the Post-Tsunami relief operation. Hence, it was decided to undertake the re-registration of all types of crafts to assess the exact fleet strength, monitor the quantum of sales tax exempted diesel supplied to motorised crafts and to help in tracing of missing fishermen / boat as details of registration have to be furnished to Coast Guard at times of distress.

New R.C. books with details of Code No. for each district / type of craft / registration No. are supplied to all Assistant Directors of Fisheries, and 93% of re-registration work has been completed.

8. INLAND FISHERIES

Tamil Nadu is having a vast potential for the development of inland fisheries. The total water resources available in this State is estimated as 3.7 lakh ha. Though different types of waterbodies such as reservoirs, major irrigation and long seasonal tanks, minor irrigation and short seasonal tanks and ponds, rivers, backwaters, hatcheries and swamps are available, major culture based fishery activities are limited to the first three. Even among these categories, about 30-40 percentage of water resources alone are effectively utilised for fish culture. The main reason is that the water retention period of most of the waterbodies is very short as Tamil Nadu mainly depend on the seasonal rains.

The Tamil Nadu Government's objective is to utilise the available waterbodies effectively aiming at maximum inland fish production. To achieve this goal, the Government have planned to introduce advance fingerlings of fast growing fishes in the short seasonal waterbodies, introduce cage culture in reservoirs to increase unit productivity, introduce integrated method of fish culture with scampi to generate maximum income etc., The motive of the Government is that, no water body will be left over without fish culture in due course of time, and, the Fisheries Department is taking suitable measure to achieve this.

8.1 Reservoirs

There are 53 reservoirs under the control of the Department and the fishery resources of these reservoirs are being exploited by the following methods.

1. Licensing System
2. Share fishing involving nearby Inland Fishermen Co-operative Society members
3. Leasing.

8.2 Fish Seed Production

The average inland fish production per annum is 1.29 lakh tonnes. To attain this, fish seed requirement of the State is 232 million fingerlings. The 8 Fish seed producing centres of the Department and of TNFDC is having the potential for producing 80 million fingerlings through their production and rearing centres. The private farmers are producing 80 million fingerlings. Altogether, the State's seed production is 160 million. The shortfall of 72 million seeds are catered by the neighbouring States.

To attain self sufficiency in fish seed production to bring more water bodies under fish culture through various schemes such as Anaithu Grama Anna Marumalarchi Thittam, Rastriya Sam Vikas Yojana, Rastriya Krishi Vikas Yojana, National Fisheries Development Board, Tamil Nadu Irrigated Agriculture Modernisation and Water Bodies Restoration and Management (IAMWARM), Agricultural Technology Management Agency (ATMA), etc., Tamil Nadu Government have planned to strengthen the Governments Fish seed production centres and to encourage private farmers to involve in this activity by implementing several schemes.

8.3. Strategies to achieve self sufficiency in fish seed production

The inland water bodies comprises of reservoirs, large seasonal tanks, rural fishery demonstration tanks, short seasonal tanks and Fish Farmers Development Agencies tanks with water spread area of 3.7 lakh hectares. As against 232 million fish seed requirement annually, the Department of Fisheries and Tamil Nadu Fisheries Development Corporation Limited produce 80 million fish seeds and 80 million seeds are produced in private sectors. There is a gap of 72 million fish seeds for stocking in all the water-bodies. To fill up the gap, 15 ha.of fish seed production and rearing area needs to be developed, for which a sum of Rs.450.00 lakh is required as investment from the Department and private sector. Government have sanctioned Rs.323.50 lakh under NADP for repairs and renovation of seed farms under the control of the Department.

8.4. Fish Seed Rearing Centres

There are 27 fish seed rearing centres in an extent of 16 ha. At present, only 7.5 ha. of rearing area is in operation. To enhance the seed production, it is proposed to repair the nurseries in a phased manner. During the year 2007-08, 3,000 M² of nursery area has been under taken for repair and 184.17 lakh fingerlings have been reared.

8.5. Intensive Inland Fish Culture and Marketing Scheme

The scheme is implemented in Villupuram, Madurai, Theni and Cuddalore Districts. About 16,000 ha of water-spread areas of seasonal and major irrigation tanks are covered under fisheries development. The tanks are leased out in open tender for fish culture. About, 280 tanks with an area of 9827.98 ha. were leased out during the year 2006-07, and 905 Metric tonnes of fishes were harvested. During 2007-08, 260 tanks have been leased out and 875 Metric tonnes of fishes were harvested.

8.6. Cage culture of fishes in water bodies

The perennial reservoirs / water bodies in Tamil Nadu are suitable for cage culture and for enhancing fish production. The main advantages of cage culture are that it can be easily maintained with high stocking density, and high yield can be achieved. There are 61 reservoirs with water spread area of 52,000 ha which accounts for 14% of the inland fishery resources. The reservoirs contribute about 1% of the total inland fish production, and per ha fish productivity is also very low i.e. between 12 to 42 Kgs/ ha.

The per ha fish production can be increased to manifolds if, cage culture is adopted. As a pilot project, the cage culture of commercially important freshwater fish varieties was undertaken at Aliyar Dam and the results were encouraging. It is expected that the fish production can be increased to 20 Kgs/M². Cage culture is ideally suited for Self Help Groups. Hence, the culture of freshwater fishes will be replicated wherever possible by involving the local fisher communities and Self Help Groups during the ensuing years.

8.7. Popularisation of Integrated Fish Farming in tanks and ponds

The main objective of the scheme is to integrate culture of freshwater prawns with carps in ponds and tanks, to enable fish farmers to raise commercially important species such as fresh water prawn (scampi) with conventional carps, as well as to earn additional revenue. Under this programme, a farmer can avail subsidy assistance for purchase of freshwater prawn seeds. Upto 2007-08, a sum of Rs.14.97 lakh was disbursed as subsidy to 280 farmers covering an area of 969.86 ha.

8.8. Development of Post harvest Infrastructure

For strengthening of inland fish marketing, Government of Tamil Nadu have sanctioned an amount of Rs.50.00 lakh for the establishment of infrastructure marketing facilities under Centrally Sponsored Scheme. The main components are to provide insulated mini trucks, modern hygienic retail outlets with freezer facilities. 4 insulated mini trucks have been purchased and are put to use. Work orders were issued for installation of modern fish outlets at Neyveli (TAFCOFED), Coimbatore, Adyar, Nandanam and Velachery.(TNFDC). Government of India have sanctioned Rs.26.25 lakh for 2007-2008, and the scheme will be continued in 2008-09.

8.9. Development of ornamental fish culture

Ornamental fish culture activity is gaining momentum, and, it has tremendous export potential. The ornamental fish breeding has a good scope for rural employment. The technology is very simple and the culture involves low cost input and suited for developing as a backyard hatchery. There are more than 600 households in Kolathur, (Chennai) with backyard type of hatcheries for ornamental fish breeding. The facilities developed at Chembarambakkam will be utilized to impart training to Self Help Groups and Inland Fishermen Cooperative Society members. In order to address the issues faced by the ornamental fish breeders, suitable measures will be initiated for developing water quality testing laboratory, live feed culture method, pellet feed, subsidy assistance etc. In addition to the above efforts, under SGSY Special Projects, 300 persons were imparted skill upgradation training on ornamental fish breeding and culture.

As a step towards establishment of an Ornamental Techno-Park, Land at Manimangalam in Kancheepuram District was inspected by MPEDA/TNFDC authorities, along with Japanese Team, exporters from Japan and Singapore who have shown interest in the project. The Chief Engineer, P.W.D., has been addressed for drawal of water from the lake. Water samples have been collected for the second time and reported to MPEDA.

8.10. Leasing of Inland and Coastal land and water bodies for Aquaculture

Fisheries play a vital role in rural economy, makes a remarkable contribution to export earnings and also generate employment opportunities. Tamil Nadu is blessed with vast resources for fisheries development, both in marine and inland. Owing to the growing dependence on the resources, environmental concerns, technological advancement in various fisheries sector and quality regulation in the international arena, there is a need to evolve a comprehensive fisheries policy specific to the needs and challenges ahead. Hence, the Government will evolve a comprehensive fisheries policy that will encompass the sustainable utilization of aquatic resources, infrastructure development, strengthening the marketing net work, promotion of sustainable aquaculture development, socio-economic development of fisher folk / fish farmers.

The Draft policy is under preparation in consultation with stake holders, Non-Governmental Organisations, Central and State Research Institutes and Regulatory bodies dealing with conservation and development of aquatic resources.

8.11. Anaithu Grama Anna Marumalarchi Thittam

Under this scheme, a tank in each village will be developed at a cost of Rs.3.00 lakh to Rs.5.00 lakh. The scheme envisages to maintain purity of water, increasing revenue to local bodies, creation of regular source of income to women self help groups by encouraging fish culture, adopting fish culture practices by local authorities for augmenting additional revenue. So far, 1073 tanks located in 1073 villages of 25 Districts have been selected and 9,69,720 fish seeds have been stocked in these tanks.

8.12. Swarna Jayanthi Gram Swarozgar Yojana(SGSY)

The SGSY projects has been funded by Department of Rural Development at a cost of Rs.28.16 crore. The project will be implemented in the 12 Coastal Districts of Tamil Nadu in two phases within 3 years. The major components of the projects include skill upgradation of different mariculture practices and infrastructure development to support the project. This project aims to benefit about 42,000 fisherfolk by upgrading their skills and improving their economic status. Apart from this, there will be a significant increase in Aquaculture production and export earnings.

Skill upgradation training will be in Lobster fattening, Crab fattening, Seaweed culture, Ornamental fish culture, Engine repair and Net mending, fish processing and value addition to 8654 beneficiaries comprising of both men and women. Among the trained persons, 31 SHGs have been involved in seaweed culture as an economic activity for self employment support. Skill upgradation training in fin fish cage culture, mussel and oyster training will be undertaken in the current year in addition to the ongoing training programmes. A multi species marine fin fish hatchery will be established through a society "Centre for Aquaculture Research and Development" (CARD). Under infrastructure development, 12 solar dryers will be set up in each of the coastal districts as modern economic activity. Those trained in fish processing and value addition will be supplied with marketing kit worth Rs.1.75 crore for hygienic handling and fish marketing.

8.13. Irrigated Agriculture Modernisation and Water Bodies Restoration and Management (IAMWARM)

IAMWARM, envisions at improving the productivity of water and agriculture for enhancing the farm income by convergence of the line Department activities using water in an integrated approach. The IAMWARM project is a World Bank funded project,

- to improve the efficiency of water use
- to improve sustainable farm income
- to improve water resources management.

With these objectives, it is proposed to develop the line department activities in 63 sub-basins, and a base cost of Rs.17.3 crore has been approved by World Bank towards fisheries component. Nine sub-basins have been selected during 2007-08.

The following activities are undertaken in this project.

1. Aquaculture in Farm ponds
2. Fish Seed rearing in cages
3. (a) Improvement to Govt. Fish seed farm
(b) Construction of Fish Seed Bank
4. Ornamental fish culture
5. Supply of Fishing implements
6. Kiosks
7. Information, Education, Communication and Capacity Building Head Quarters' cell etc.,

47 Farm ponds were stocked with fingerlings and fish culture is in progress. For repairs and renovation of Government Fish Seed Farm at Veedur and Pilavakkal, the work orders were issued except for one fish seed bank.

For the year 2008-09, Project proposal for 16 sub basins have been prepared for Rs.253.05 lakh and sent to the Multi Disciplinary Project Unit (MDPU) for approval.

8.14 Fish culture in Check Dams under Forest Department involving Village Forest Council Rs.2.50 lakh under NADP

The Fisheries Department in coordination with the Forest Department will select 100 ha of suitable water spread area and the project will be implemented in Nilgiris, Coimbatore, Tirunelveli, Dindigul and Namakkal Districts. It is proposed to impart training to 300 Village Forest Council members in fish culture activities. Training will be given to the members of Village Forest Council in a phased manner.

8.15 River Ranching as a measure of conservation of endangered / endemic species to enhance fish production – Rs.35.00 lakh under NADP

It is proposed to develop the required infrastructure for production and rearing of endangered species such as *Cirrhinus cirrhosa*, *Labeo fimbriatus*, *L. Calbasu*. The brood stock of these endangered species will be developed for seed production. The seeds thus produced will be reared to stockable size in Mettur and ranched in the Cauvery at various locations in and around Mettur.

8.16 Repairs and Renovation of existing fish seed farms – Rs.323.50 lakh under NADP

It is proposed to repair and renovate 3 ha of nursery and rearing areas in the existing fish seed farms in Bhavanisagar, Manimuthar, Krishnagiri and Mettur Dam. By repairing the unusable area of nursery ponds, rearing ponds and breeder ponds, additional seed production could be achieved.

8.17 Creation of additional space for fish seed production and rearing in Neithalur in Thanjavur District – Rs.192.00 lakh under NADP

It is proposed to strengthen existing Departmental fish seed farms and creating additional nursery rearing area in a phased manner, and, to bridge the seed requirement gap it is necessary to create additional rearing area. Additional space of 1 ha. (0.7 ha. water spread area) fish seed rearing area will be created additionally at Neithalur Departmental fish farm.

8.18. Cage culture of fishes in inland water bodies – Rs.52.50 lakh under NADP

The cage culture practice with the simple technology and low capital high return technology can be made available to all sectors of the society. One of the identified areas for increasing inland fish production is by utilising the surface area of reservoirs, irrigation channels and running water system etc. Cage culture of fish is nothing but rearing of fish from fingerlings to table fish in an enclosure which permits water exchange and waste removal. It is proposed to develop cage farming in 15 locations in Aliyar, Kelavarapalli, Gunderipallam, Odathurai and Palani Tanks.

9. WESTERN GHATS DEVELOPMENT PROGRAMME

Western Ghats Development Programme is being implemented with the assistance of Government of India, to uplift the socio-economic status of the people living in the Western Ghats. Government of India have sanctioned Rs.10.00 lakh for the construction of Mahseer Hatchery at Sholayar for the year 2006-07. All works have been completed except electrification. The electrification work will commence shortly. For the year 2007-08, Government have sanctioned a sum of Rs.22.50 lakh for the implementation of the scheme.

10. DEVELOPMENT OF COLD WATER FISHERIES

Tamil Nadu is endowed with rich Cold Water Fishery Resources. It is proposed to strengthen the Trout Hatchery, and farm in Nilgiris at an estimated cost of Rs.51.50 lakh by availing State and Central funds. In 2006-07, the Central Government released Rs.20.00 lakh and state Government released Rs.5.00 lakh.

The upland water streams in Nilgiris offer immense potential for developing sport fishery. The streams are stocked with trout fishes by the Department, and licences are issued for the anglers. As part of development of sport fishery, steps will be initiated for stock enhancement of game fishes in the streams so as to attract more tourists for angling. It is targeted to issue 350 angling licences during the year, 2008-09.

11. FISH FARMERS DEVELOPMENT AGENCIES

Tamil Nadu is having 12 FFDA's covering most of the Districts to promote the inland fish culture activities. The main objective of the FFDA is to popularise scientific fish culture activities by giving training, technical guidance and subsidy so as to encourage the farmer to venture in this profession.

FFDA aims at popularising scientific fish culture activities in the water bodies utilizing all niches in the water bodies which ultimately result in enhanced fish production, creation of employment to rural educated unemployed youths by taking up pisciculture. The farmers are trained in fish culture activities, assisted in obtaining tanks on lease and are also given technical guidance till harvest. At present, about 5,000 ha. of area is under inland fish farming. To promote the FFDA activities, it is proposed to give intensive training to rural youths in fish culture and also broad based FFDA's activity by taking additional water sources from the Panchayats. During 2006-07, the Government have sanctioned Rs.66.67 lakh for the development of Inland Fisheries under Centrally Shared Scheme and 162 farmers have been benefitted.

For 2007-08, Government have sanctioned a sum of Rs.66.25 lakh (Central share Rs.50.00 lakh +State share Rs.16.25 lakh) to implement the scheme. The scheme will be continued in 2008-09.

12. BRACKISHWATER AQUACULTURE

The changing scenario in the shrimp industry has made it necessary to take up a 'Census of Coastal Aqua Farms'. From the year 2006-07, the Department initiated steps to take census of shrimp aqua farms. To promote shrimp aquaculture, the Government is providing necessary subsidy assistance under Centrally Shared Scheme at Rs.40,000/- per ha. to small farmers having land holding of less than 2 ha.

There are 5 Brackishwater Fish Farmers Development Agencies in the State at Thoothukudi, Nagapattinam, Tiruvallur, Ramanathapuram and Cuddalore Districts. Chief Executive Officers in the rank of Assistant Director of Fisheries function under the Chairmanship of District Collectors, and are incharge of BFDA's.

Out of 56,000 ha brackish water area and 14,880 ha. of coastal lands, shrimp farming is done in an area of 6335 ha. The mandatory registration of shrimp aquafarms provided in the Coastal Aquaculture Authority Act, 2005, has made all the stake holders to regulate and register all the aquafarms with Coastal Aquaculture Authority.

Registration of Shrimp farms with Coastal Aquaculture Authority is one of the pre conditions stipulated in extending subsidy assistance to small farmers. So far, Rs.20.44 lakh has been released as subsidy to 54 shrimp farmers. The Coastal Aquaculture Authority has approved registration of 628 farms. Further, State Level Committee has recommended 127 shrimp farm applications to Coastal Aquaculture Authority for consideration and issue of registration certificate.

13. RESEARCH

The Department has set up two Research Stations, one at Chennai and another at Thoothukudi. 19 research projects are carried out with the approval of State Fisheries Research Council. Fisheries Department is coordinating with the Central Institute of Freshwater Aquaculture, Central Institute of Brackish Water Aquaculture, Central Marine Fisheries Research Institute and the Fisheries College and Research Institute, Thoothukudi. The thrust areas are:-

- i. Extended breeding / Multiple breeding of major carps
- ii. Improving fish production in reservoirs.
- iii. Environmental Impact Assessment
- iv. Demonstration of Marine Fin Fish Farming
- v. Feed evaluation for commercially important freshwater fishes /ornamental fishes and freshwater prawns
- vi. Diagnosis of fin fish/shell fish diseases
- vii. Improvement of Trout strain in Nilgiris.

Tamil Nadu State Fisheries Research Council

The 28th Tamil Nadu State Fisheries Research Council meeting was held on 29.2.2008 under the Chairmanship of Hon'ble Minister for Fisheries. The Research programmes for 2004-2007 were reviewed, and the following future research programmes for 2008-2010 were suggested.

- 1) Standardising the multiple breeding technology by environmental and feeding management.
- 2) Development of Masheer fishery in upland waters
- 3) Environmental Impact Assessment of shrimp farm discharges
- 4) Study on the prevalence of shrimp diseases
- 5) Study on the Tuna Fishery resources of Nagapattinam and Kanyakumari Districts
- 6) Status / Study on the aggregation of fish in the available artificial reef, and
- 7) Study on the Lobster fishery of Thoothukudi and Kanyakumari districts.

14. EXTENSION AND TRAINING

Department of Fisheries is carrying out various extension activities such as conducting training on various culture activities, demonstration of mud crab fattening, lobster fattening, seaweed culture, etc., Under Centrally Sponsored shared Scheme (80:20) it is proposed to establish one awareness centre and three training centres in the State.

14.1 Establishment of Training Centres

Government of India have sanctioned Rs.65.00 lakh during 2007-08 for the construction of one awareness centre at Pulicat (Tiruvallur), and 3 training centres at Rameswaram (Ramanathapuram), Colachel (Kanyakumari) and Thoothukudi. Government of India have released Rs.26.00 lakh as it's share and Government of Tamil Nadu also released it's share of Rs.13.00 lakh. The work is entrusted to PWD. Concerned Executive Engineers have been addressed for execution. This scheme will be continued during 2008-09.

14.2 Training for Fisher Youth

For the operation and maintenance of the mechanised fishing boats and to operate modern fishing gear, the fisher youth are given training for 10 months in four places in the State at Nagapattinam, Mandapam, Thoothukudi and Colachel. 50 to 60 fisher youth are trained in each centre. Besides this, a Junior Mechanic course is also conducted in these

training centres. Monthly stipend of Rs.400/- is paid to each selected trainee with effect from 2006-07. So far 42 fishermen have been trained in Junior Mechanic course.

14.3. Strengthening of Database

Under strengthening of Data Base, 34 computers and accessories have been purchased and distributed to the District level offices for Rs.21.50 lakh.

14.4. Touch Screen Facility

Government of Tamil Nadu have sanctioned Rs.2.00 lakh for installing an advanced Touch Screen facility at the Library of Directorate of Fisheries on pilot basis. Touch screen has been received from ELCOT on 9.5.2007. The Departmental activities and welfare schemes in static form have been installed in the touch screen. Special software arrangements with animation and photo images are to be developed, for which firm has been finalised and the work is in progress.

14.5 Upgrading the skill of educated fisher youths

The Government of Tamil Nadu have proposed to provide financial assistance to educated fisher youths to upgrade their skills in maritime education. Initially, it is proposed to give financial assistance for the students who have passed 10th or +2 for undertaking the courses. 100 suitable educated students are to be identified every year and to be given financial assistance of Rs.50,000/- each. Government of Tamil Nadu also sanctioned Rs.50.00 lakh for implementing the scheme.

14.6 Improvement of Fisheries Department Central Library

Government have sanctioned a sum of Rs.8.00 lakh for improvement of fisheries central library. Printing and binding of Library books, purchase of computers, accessories, purchase of books and periodicals are the facilities created under the scheme.

14.7 Study tour of farmers – Rs.18.00 lakh under NADP

In order to create awareness on scientific aqua farming by adopting latest technologies for achieving highest production, it is highly essential to impart exposure visit-cum-training to aqua farmers of our State by taking them to various Central / State Institutes operating in other States and also to some of the private organisations doing aqua farming as a commercial enterprise to have interaction with farmers level. It is proposed to give exposure training to the progressive aqua farmers of Tamil Nadu to other States for learning the innovative techniques adopted there for increasing fish production and to have interaction with the successful farmers and the scientists during their visit.

14.8 Upgradation of Extension Centres in Tamil Nadu – Rs.50.00 lakh- under NADP

Under this project, one Audio Visual Van each with extension equipments, models on various activities, cut models of fishing crafts, engines, outboard motors, charts, blow-ups, etc. explaining the Departmental programmes, multimedia equipments like Community Computer, Laptop, LCD Projector, Projection Screen, DVD Player, DVDs, Digital Camera, Diesel Gen-set, Amplifier, Mike, Vinyl Flex Board, Drawing Board, Colour Pens, Switch Board, etc., have been proposed for the five Extension Centres at Chennai, Parangipettai, Nagapattinam, Madurai and Colachel.

15. FISHERIES CO-OPERATIVES

The Fisheries Co-operative Societies play a dynamic role in the upliftment of fishermen and fisherwomen in the State. Fisheries co-operatives are playing a vital role in this department in extending many welfare schemes to the members of the primary fishermen co-operative societies. About 5.64 lakh fishermen/fisherwomen have been enrolled as members of the fishermen co-operative societies. 54 fair price shops are run by the fishermen co-operative

societies. The details of the Societies / Members are as given below:-

Name of the Society	No. of Societies	No. of Members enrolled
Marine fishermen Co-operative Society	521	3,21,106
Marine fisherwomen Co-operative Society	382	1,46,239
Inland fishermen Co-operative Society	303	77,615
Inland fisherwomen Co-operative Society	84	10,784
Other types of Societies	21	6628
District fishermen Co-operative Federation	11	727
Tamil Nadu State Apex Fisheries Co-operative Federation	1	502
TOTAL	1323	5,63,601

16. SPECIAL PROGRAMMES

NATIONAL AGRICULTURE DEVELOPMENT PROGRAMME

This is a new additional central assistance scheme launched by Ministry of Agriculture. Fisheries interalia constitute one of the focus area under the scheme, and Rs.25,000 crore has been provided for the entire XI five year plan. This scheme provides flexibility and autonomy to the State Government to prepare projects as part of the District Agriculture plan so as to increase public investment in agriculture allied sectors and enhance production and productivity.

In G.O. (Ms) No.129, Agriculture (API) Department, dated 19.03.2008 Government have accorded administrative sanction for Rs.703.50 lakh and the following schemes are to be implemented by the Fisheries Department.

- i. Fish culture in Check Dams in Nilgiris, Coimbatore, Tirunelveli, Dindigul and Namakkal Districts under Forest Department involving Village Forest Council – Rs.2.50 lakh
- ii. River Ranching as a measure of conservation of endangered / endemic species as well as to enhance fish production. The production of seeds of endemic species will be carried out in Mettur Dam and ranched in the Cauvery at various locations in and around Mettur– Rs.35.00 lakh

- iii. Repair and Renovation of existing fish seed farms in Bhavanisagar, Manimuthar, Krishnagiri and Mettur Dam – Rs.323.50 lakh.
- iv. Creation of additional space for fish seed production and rearing in Neithalur in Thanjavur District – Rs.192.00 lakh.
- v. Study tour of farmers – Rs.18.00 lakh.
- vi. Upgradation of Extension Centres in Tamil Nadu at Chennai, Parangipettai, Nagapattinam, Madurai and Colachel. – Rs.50.00 lakh.
- vii. Cage culture of fishes in inland water bodies in Aliyar, Kelavarapalli, Gunderipallam, Odathurai and Palani Tanks.– Rs.52.50 lakh.
- viii. Setting up of Modern Fish Stalls in major cities in Tamil Nadu in 2 places at Chennai and in 2 places at Madurai and one at Coimbatore – Rs.30.00 lakh.

17. TAMIL NADU FISHERIES DEVELOPMENT CORPORATION LTD.

Tamil Nadu Fisheries Development Corporation Limited was established in 1974 with authorized Share Capital of Rs.500.00 lakh and the paid up Share Capital as on date is, Rs.445.52 lakh.

Tamil Nadu Fisheries Development Corporation Limited has earned profit for the past 3 years from 2005-06 to 2007-08 as follows:-

(Rupees in lakhs)

1) 2005-06	98.32 (Audited)
2) 2006-07	108.29 (Audited)
3) 2007-08	229.50 (unaudited)

The Corporation undertakes the following activities:

17.1 Reservoirs

The Tamil Nadu Fisheries Development Corporation Limited undertakes systematic stocking of fish seeds in the following reservoirs. Harvesting of fish is done by engaging local fishermen who are entitled for the value of 1/3rd of the catches, as their share.

- a) Sathanur Dam
- b) Bhavanisagar
- c) Aliyar
- d) Amaravathy
- e) Thirumoorthy
- f) Uppar
- g) Palar-Porandalar
- h) Perumpallam

During the year 2007-2008, 515.95 tonnes of fish were landed from the reservoirs and the revenue realization is Rs.146.48 lakh. Palar Porandalar, Uppar, Perumpallam Reservoirs have been leased out to private agencies.

17.2 Fish Seed Production

The Corporation is managing two fish seed production and rearing centers one at Sathanurdam and another at Aliyar, and fish seed rearing centers at Amaravathy, Thirumoorthy, Palar-Porandalar and Uppar. Fish seeds produced here are stocked in the reservoirs in addition to supplying of fish seeds to the Fisheries Department, Fish Farmers Development Agencies and private farmers. During the year 2007-08, 244 lakh fish seeds were produced and supplied to the value of Rs.9.55 lakh.

17.3. Fish Processing

The Corporation is in possession of Ice Plants/Processing Plants in the State. The processing cum cold storage facilities at Mandapam are leased out to one Private party M/s. Primier Marine Products for lease amount of Rs.7.00 lakh/annum for three years.

17.4. Diesel outlets

The Corporation is operating 27 diesel outlets in the Fishing Harbours and Jetties starting from Ennor in Coramandal Coast to Chinnathurai Westcoast for the benefit of mechanized fishing boat operators and fishermen. During the year 2007-2008, Out of total quantity of 80768 K.L of quota received, 63107.71 K.L. of HSD has been sold towards subsidised diesel and 8536.27 K.L of HSD has been sold with a total turn over of Rs.19492.50 lakh.

17.5 Fish Marketing

The Corporation is marketing fresh and fried fish in the cities like Chennai, Madurai, Coimbatore, Trichy, Pollachi, Thiruvannamalai through retail outlets in order to benefit fishermen from harness harvest and to get better price so as to sell the fishes to public at an affordable price . During the year 2007-2008, 828.01 tonnes of fish were sold for Rs.581.27 lakh.

17.6 Fish net making factory

A Fish Net Making Factory with a production capacity of 75 tonnes per annum is functioning at Royapuram. During the year 2007-08, 25.17 tonnes of Nylon nets were sold to fishermen for Rs.69.53 lakh.

17.7 Shrimp Hatchery at Neelankarai

There is a Shrimp Hatchery at Neelankarai. Part of the facilities were provided to National Institute of Ocean Technology for the project on "Marine Living Resources Enhancement Programme". The hatchery has been leased out to "Rajiv Gandhi Centre for Aquaculture" sponsored by Marine Products Export Development Authority from 24.1.2004 for Rs.3.50 lakh.

17.8. Model Shrimp farm at Karangadu

A Model Shrimp Farm has been set up at Karangadu and the farm has been leased out to private party for Rs.5.00 lakh per annum. The TNFDC has taken action for culture fin fishes such as chonas, grouper etc.,

17.9. Production and marketing of Ornamental fishes

The TNFDC has set up Ornamental Fish Production Centres at Aliyar and Thirumoorthy Nagar. An Ornamental Fish Sales Centre-cum-Aquarium is functioning at Aliyar and Thirumoorthy Nagar. One ornamental fish sales centre is functioning at Chennai. During the year 2007-2008, a sum of Rs.12.22 lakh was realized, as total revenue from the sale of ornamental fish and accessories.

17.10 Supply of OBM / IBE under subsidy to motorised traditional fishing crafts

TNFDC is supplying Outboard Motor/Inboard Engines on subsidy to the fishermen for motorisation of their traditional fishing crafts. During the year 2007-08, 346 Engines were supplied to fishermen.

17.11 New schemes proposed to be taken up by TNFDC

- ❖ Establishment of modern fresh fish stalls in the major cities of the State.
- ❖ Strengthening of infrastructure of marketing under Post Harvest Technology funded by Government of India, Ministry of Agriculture in 4 places @ Rs.4.00 lakh each - Rs16.00 lakh
- ❖ Provision of insulated trucks @ Rs.5.00 lakh each for 3 nos. under funding from the above scheme-Rs.15.00 lakh
- ❖ Modernisation of Teynampet stall into fish stall, aquarium and Value Added Product sales counter under funding from Post Harvest Technology, Ministry of Agriculture, Government of India (Rs.10.00 lakh grant-in-aid)-Rs.27.40 lakh.

18. TAMILNADU STATE APEX FISHERIES CO-OPERATIVE FEDERATION LTD

Tamil Nadu State Apex Fisheries Co-operative Federation Ltd was registered and started functioning from 6.11.1991 with head quarters at Chennai. At present, 589 Primary Fishermen Co-operative Societies and 9 District Fishermen Co-operative Federations have become members in TAFCOFED and have paid Rs.89.06 lakh as share capital. To uplift the socio-economic status of traditional fishermen, TAFCOFED has been implementing Integrated Marine Fisheries Development Project with financial assistance from NCDC. Under this project, TAFCOFED distributed fishing inputs consisting of fishing crafts, engines and gears to the members of the Fishermen Co-operative Societies. A sum of Rs.19.79 crore was disbursed to 147 Fishermen Co-operatives benefiting 5669 beneficiaries who had acquired 2736 fishing inputs.

TAFCOFED have recently started diversifying it's activities to achieve sustainable and independent existence by establishing diesel bunks, sale of out board motors and service centres to facilitate marine fishermen.

18.1. Service Centres

TAFCOFED has started three service centres at a cost of Rs.3.20 lakh, one at Mallipattinam in Thanjavur District, one each at Tharuvaikulam and Kombuthurai in Thoothukudi District for selling engine spares, fishing requisites and engine oil.

18.2. Diesel Bunks

For supply of Diesel to fishermen, Diesel bunks are functioning in Sethubavachatram in Thanjavur, Pulicat in Thiruvallur, Vembar in Thoothukudi, Annankoil in Cuddalore, Neelangarai in Kancheepuram, Tharuvaikulam in Thoothukudi, Chinnamuttam in Kanyakumari and Nagoor in Nagapattinam Districts. So far, 8414 KL HSD has been sold to the fishermen.

TAFCOFED has initiated action for installing Diesel Bunks at Marakanam in Villupuram, Jegathapattinam in Pudukottai and Kilakarai in Ramanathapuram Districts.

18.3. Sale of Out Board Motors

TAFCOFED is selling Outboard Motors to the eligible fishermen under subsidy scheme. 1040 Outboard Motors have been sold during the year 2007-08.

18.4. Fish marketing

TAFCOFED is marketing fresh fish at Neyveli through retail outlet.

19. TAMIL NADU FISHERMEN WELFARE BOARD

For the welfare of the labourers involved in fishing and allied activities, Tamil Nadu Fishermen Welfare Board was formed as announced by His Excellency, the Governor of Tamil Nadu on 20.01.2007, during the last Budget Session. The Act and Rules have also been framed. A sum of Rs.5.00 crore was sanctioned towards the grants-in-aid in G.O. (Ms) No. 91, Animal Husbandry, Dairying and Fisheries Department dated 12.06.2007.

The President and the Members, both officials and non-officials for the Board are nominated by the Government. Two Board meetings were held on 30.05.2007 and 27.2.2008 to resolve various demands of the Board.

A total number of 6 lakh application forms and 3 lakh Identity Cards have been printed. 53,629 fishermen have been enrolled as members and 19,774 Identity Cards have been issued. So far, 92 claims have been received requesting for relief under Fishermen Welfare Board and they are being processed and relief will be given early.

K.P.P. SAMY
MINISTER FOR FISHERIES