



**ANIMAL HUSBANDRY, DAIRYING AND  
FISHERIES DEPARTMENT**

**FISHERIES**

**POLICY NOTE**

**2015-2016**

**DEMAND NO.7**

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Minister for Fisheries**

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**GOVERNMENT OF TAMILNADU  
2015**

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# **FISHERIES DEPARTMENT**

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*"To develop fishing occupation which plays an important role in generating employment opportunities, providing protein rich food to the public, developing livelihood of fishermen, generating income, the Government under my leadership is actively implementing schemes such as development of New Fishing Harbours, Fish Landing Centres, Fish Processing Parks in Coastal Towns, improving Inland fisheries, motivating marketing of fish and modernizing markets besides implementing fishermen welfare schemes".*

- ***Speech by Hon'ble Chief Minister on the floor of Assembly on 04.08.2014***

### **1. INTRODUCTION**

'Fisheries' as a sector is one of the thrust areas in the overall Economic development of the State playing a predominant role in its economic activity by its contribution to direct and indirect employment for more than 11 lakh fishers, contributing food security to a considerable portion of population and earning substantial revenue, especially from foreign exchange. Tamil Nadu State, with its second longest coastline in the country covering 1,076 km in 13 coastal Districts consist of 4 coastal Zones viz., Coromandel Coast, Palk Bay, Gulf of Mannar and West Coast. The continental

shelf area of the State is 41,412 sq. km (Inshore area -16,058 sq. km., Offshore area-7,197 sq.km and deep sea -18,157 sq. km). Tamil Nadu ranks 5<sup>th</sup> in total fish production of the country and the total fish production of the State during 2014-15 is 6.97 lakh tons. (from marine resources-4.57 lakh tons and freshwater and brackish water resources -2.40 lakh tons). Tamil Nadu is one among the leading exporter of sea food with the export of marine products of 93,477 MT and earned a foreign exchange of Rs.5,308.17 crore during 2014-15. The fisheries sector has contributed 0.7 percent of the total Gross State Domestic Product (GSDP) of the State.

The Fisheries sector over the years has transformed from subsistence-based artisanal activities to modern livelihood activities with the application of science and modern technologies in the field of capture fishing and culture fisheries. It is developing as a major industry with diversifications viz., exploring deep sea resources, eco friendly aquaculture practices for culture of finfish and shell fish, ornamental fish culture, eco-tourism, fish processing parks, mid sea fish processing units, etc.

Hence, providing a strong base for the holistic development of fisheries in an integrated way as a

policy, the Government of Tamil Nadu under the leadership of the Hon'ble Chief Minister has been undertaking various innovative and novel programmes for increasing fish production, conservation of resources and ensuring sustainable exploitation of fisheries wealth, promotion of sustainable Aquaculture practices, development of infrastructure facilities such as fishing harbours / fish landing centres for safe berthing of fishing crafts and providing shore based facilities for hygienic fish landing, for strengthening domestic marketing of fish, strengthening human resource development in fisheries, providing protein rich hygienic fish as food to the people and the upliftment and welfare of the fishers.

This Government have introduced many fishermen welfare/ development schemes with a long term vision to ensure safety and social security of fishers in the State. Enhancement of Saving-cum-relief amount from Rs.1,800/- to Rs.2,700/-, ban period relief assistance of Rs. 2,000/- and special allowance of Rs.4,000/- during lean fishing season have given substantial relief to the marine fishermen families. With an aim to provide good and transparent Governance and timely relief to the needy fishers, the Government have disbursed all relief assistance to the

tune of Rs. 164.34 crore to 6.93 lakh fishers directly into their bank accounts through National Electronic Fund Transfer (NEFT) within a span of one month time which is the shortest time ever taken for disbursing the relief.

In the inland fisheries sector, aquaculture is poised to play a pivotal role in increasing fish production, ensuring food security and enhancing growth of the State's economy. To maximise fish production from an unit area and to generate maximum income to the fish farmers, the Government has initiated innovative approaches such as stocking of fast growing fish species in the short seasonal water bodies, integrating aquaculture in the existing irrigation systems / rain water harvesting systems, brood stock development to produce quality fish fingerlings, promotion of fish culture in farm ponds and introduction of cage culture in reservoirs etc.

## **2. FISHERIES POLICIES AND ITS PERSPECTIVES**

The major fisheries policies of the Government of Tamil Nadu are as follows:

- Protecting the traditional fishing rights of the fishermen.
- Ensuring the safety of the fishermen while fishing at sea.
- Providing social security to the fishers through various relief schemes.
- Improving the standard of living of the fishers by implementing several welfare schemes.
- Developing / strengthening the infrastructural facilities for hygienic handling and processing of fish and thereby promoting domestic and overseas market.
- Conserving the fishery resources by enforcing statutory regulations such as mesh regulation, preventing use of destructive gears and stock enhancement and establishing artificial fish habitats.
- Managing the fishery resources by offering diversified fishing options to the fishermen to exploit offshore/ deep sea resources especially Tuna by providing financial assistance for deep

sea fishing and establishing Mid-sea Fish Processing Unit.

- Promoting sustainable eco-friendly aquaculture practices / capture and foreign exchange earnings through export.
- Meeting the need for qualified manpower by Institutional strengthening of Fisheries training / Institutes.
- Generating rural employment opportunity.
- Strengthening the Fisheries Co-operatives.
- Affirming effective, efficient and transparent administration.

### **3. MAJOR ACHIEVEMENTS VIS-A-VIS OBJECTIVES (2014-15)**

The major achievements vis-a-vis the objectives of the Department of Fisheries, during 2014-15, are as follows:

1. In continuation of the Hon'ble Chief Minister's announcement made in the Legislative Assembly during the Budget Session 2014-15 under rule 110, the relief assistance under National Savings Cum Relief Scheme for marine fishermen and Saving Cum Relief Scheme for marine fisherwomen has been enhanced from Rs.1,800/- to Rs.2,700/-. For the year 2014-15, the Government sanctioned an amount of



Rs.75.60 crore as its Share (both Central and State). So far, a total relief assistance of Rs.66.81 crore has been disbursed to 1,94,436 marine fishermen and 1,76,786 marine fisherwomen of 13 coastal Districts upto 31.07.2015.

2. During 2014-15, the Government extended special allowance of Rs.4,000/- per marine fisherman family during the lean fishing season to 1,65,243 marine fishermen families and relief assistance of Rs.2,000/- during fishing ban period (2015-16) to 1,57,244 marine fishermen families (upto 31.07.2015). The financial assistance was disbursed to the individual beneficiary's bank account directly through National Electronic Fund Transfer (NEFT). The list of beneficiaries has already been hosted on the website [www.fisheries.tn.gov.in](http://www.fisheries.tn.gov.in).
3. Thiru Thomas Cletus of Rajakamangalamthurai Village in Kanyakumari District who was engaged in fishing as fisherman in a Bahrain based private fishing firm on contract basis was shot at by the Sea pirates on 21.5.2014 and died on the spot. As per the orders of Hon'ble Chief Minister, an ex-gratia amount of

Rs.5 lakh was given from the Chief Minister's Public Relief Fund to the wife of the deceased fisherman in person by the Hon'ble Minister for Fisheries on 11.06.2014.

4. Thiru T.Karthikeyan of Thirupalaikudi Village in Ramanathapuram District who was engaged in fishing as fisherman in a Bahrain based private fishing firm on contract basis was shot at by the Qatar Coast Guard on 21.9.2014 and died on the spot. As per the orders of Hon'ble Chief Minister, an ex-gratia amount of Rs.5 lakh was given from the Chief Minister's Public Relief Fund to the wife of the deceased fisherman in person by the Hon'ble Minister for Fisheries on 4.10.2014.
5. Thiru Mathivalan of Polikarai Village in Kanyakumari District who was engaged in fishing as fisherman in a Saudi Arabian based private fishing firm on contract basis was shot at by the unidentified and died on the spot. As per the orders of Hon'ble Chief Minister, an ex-gratia amount of Rs.5 lakh was given from the Chief Minister's Public Relief Fund to the wife of the deceased fisherman in person by the Hon'ble Chief Minister on 25.06.2015.

6. Thiru Antony Arul Anish of Inayamputhanthurai Village in Kanyakumari District who was engaged in fishing as fisherman in a Qatar based private fishing firm on contract basis was shot at by the Sea pirates on 06.08.2015 and died on the spot. As per the orders of Hon'ble Chief Minister, an ex-gratia amount of Rs.5 lakh was sanctioned from the Chief Minister's Public Relief Fund on 10.08.2015.
7. Due to the untiring efforts of the Honourable Chief Minister, Tamil Nadu fishermen who were apprehended by the Navy / Coast guard of the foreign countries such as Bangladesh, Iran and Saudi Arabia have been released and brought back to Tamil Nadu.
8. In an Unprecedented move, the High Court of Colombo, Sri Lanka delivered a judgment convicting and sentencing 5 innocent Tamil Nadu fishermen from Rameswaram with death penalty on fabricated charges of transferring narcotics. The Hon'ble Chief Minister of Tamil Nadu had been taking various legal and diplomatic steps continuously for the release of these 5 fishermen ever since their arrest in 2011. The Government sanctioned a sum of Rs.5 lakh towards payment of legal fee to

expedite the release of those fishermen, in addition to the daily relief assistance of Rs.13,60,000/- paid till their return i.e., On 20-11-2014 and interim relief of Rs.2 lakh each from Chief Minister's Public Relief Fund. The District Collector also sanctioned Rs.5,000/- each to their family as immediate relief assistance. The Government of Tamil Nadu also sanctioned an additional financial assistance of Rs.3,00,000/- each to the 5 fishermen to start their new lease of life in Tamil Nadu. Including this amount a total sum of Rs.38,85,000/- has been released to protect the life of the 5 fishermen. A sum of Rs.26,25,891/- including the legal expenses of Rs.20,00,000/- for appeal, released to provide legal assistance and in total a sum of Rs.65,10,891/- has been released by Government of Tamil Nadu as financial assistance in this regard. Due to the efforts taken by the Hon'ble Chief Minister the 5 fishermen were released by the Sri Lankan Government. As ordered by the Hon'ble Chief Minister, the 5 fishermen were received by Hon'ble Ministers and officials and safely brought home on 20.11.2014.

9. With the unrelenting and assiduous efforts of the Hon'ble Chief Minister, during 2014, 787 fishermen have been released from the Sri Lankan Jails along with 158 fishing boats. Out of the 80 boats released recently, due to the efforts of the Government 34 boats have been salvaged and brought back to Tamil Nadu on 19.03.2015 in the first phase and 30 boats on 30.04.2015 in the second phase. Efforts are under way to salvage and bring the 16 boats back to Tamil Nadu. During 2015, 23 mechanized fishing boats along with 151 fishermen have been apprehended by Sri Lankan navy. Due to the efforts taken by the Government all the 151 fishermen were released by Sri Lankan authority and repatriated to Tamil Nadu. Efforts are also being taken to release 23 fishing boats.
10. As per the orders of the Hon'ble Chief Minister of Tamil Nadu, the Tamil Nadu Sri Lanka fishermen third level talks were held on 24.3.2015 in Chennai. In the meeting, a delegation of 13 fishermen representatives from Tamil Nadu, 4 fishermen representatives from Puducherry and 10 fishermen representatives from Sri Lanka were participated. The Hon'ble

Minister for Fisheries and officials from Government of Tamil Nadu, Government of Puducherry, Government of India and the Government of Sri Lanka participated as observers. During the talks, the Indian (Tamil Nadu and Puducherry) fishermen put forth their demands and the Sri Lankan fishermen placed their stance. The Sri Lankan fishermen stated that the demands of the Indian fishermen would be presented and discussed with the fishermen of North and Eastern Provinces of Sri Lanka and the decision would be communicated. All the decisions taken during the bilateral Fishermen level talks would be implemented only after obtaining the approval of the Governments of Tamil Nadu, India and Sri Lanka.

In response Deputy High Commissioner of Srilanka, Chennai in his letter has informed that the Representatives of North East province, Srilanka, Fishermen association representatives during the meeting on 14.05.2015 have resolved not to allow fishing in Palk Bay region of Srilankan territory and also furnished the copy of the minutes of the meeting.

11. The Hon'ble Chief Minister laid the foundation stone for the construction of Fishing Harbour at Poompuhar in Nagapattinam District on 11.09.2013 at an estimated cost of Rs.148 crore. The construction works are in progress and will be completed by June 2016.
12. The establishment of Sports Fishing-Cum-Eco Park at Chetpet lake, Chennai at a cost of Rs.42 crore is progressing rapidly and will be completed by December 2015.
13. Strengthening the facilities at Chennai Fishing Harbour at an estimated cost of Rs.75 crore is in progress and will be completed shortly.
14. For establishment of World Class Oceanarium at Mamallapuram, the concept and feasibility report and Request For Qualification (RFQ) approved by Tamil Nadu Infrastructure Development Board. Global tender inviting RFQ has been floated and the qualified bids are in the next stage of processing.
15. Land allotment has been made by the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) complex at Meelavitan and Gummidipoondi for the establishment of fish processing parks in Thoothukudi and Thiruvallur districts while tender has been floated for

leasing out land on long term lease basis by the Department in the districts of Cuddalore, Nagapattinam and Kanniyakumari.

16. To disseminate fish culture activities in rural areas and also to get additional income from fish culture by the farmers, multipurpose farm ponds are being constructed for ground water recharge under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), integrated with fish culture. Government has sanctioned an amount of Rs.1.14 crore to undertake fish culture during 2014-15, and 934 newly constructed multipurpose farm ponds covering an area of 133.35 acres were stocked with fish seeds and would result in additional fish production of 75 tonnes.

17. It is estimated that 70 crore fingerlings is required for the State annually to achieve a potential fish production of 4.50 lakh tonnes. During 2013-14 the fish seed production was 24 crore leaving a gap of 46 crore. The fisheries department has taken several measures to increase the fish seed production of the State. An additional space of 40 ha has been created for fish seed rearing both in Government and



private sector which lead to an all time highest fish seed production of 45 crore during 2014-15, thereby reducing the fish seed gap from 46 to 25 crore.

18. During October 2014, 10 department Technical Officials were deputed to Vietnam and 9 officials were deputed to China for overseas training programme in various new technologies in Fisheries development and Aquaculture. The trainees have gained knowledge in modern fish culture activities such as cage culture, Intensive fish culture in ponds, GIFT Tilapia culture, intensive Pangasius culture, integrated fish culture and hygienic live fish marketing.

19. In respect of providing Wireless Communication facilities to every fishing craft of the State as part of Sea Safety, 19,380 applications have been received from the fishermen for the supply of wireless sets and are being processed through Wireless Planning and Coordination Wing, Government of India.

20. During 2014-15, the Tamil Nadu Fisheries Development Corporation Limited earned a profit of Rs.8.75 crore and a dividend of Rs.1.50 crore will be paid to the Government

for its paid up share capital. Further, an amount of Rs.1 crore has been paid towards its contribution to Tamil Nadu Fishermen Welfare Board (TNFWB).

21. During 2014-15, the Tamil Nadu Fisheries University started the B.F.Sc. degree programme at the Institute of Fisheries Technology, Ponneri with an intake of 40 students every year.
22. The Indian Council of Agricultural Research (ICAR), Government of India, has funded Rs.3.056 crore towards the establishment of Niche Area of Excellence Programme in Fish Safety and Quality Assurance at the Dept. of Fish Quality Assurance and Management, Fisheries College and Research Institute, Thoothukudi.
23. The First Convocation of the Tamil Nadu Fisheries University was held on 19.02.2015 at Chennai. During 2014-15, 65 Undergraduates, 33 Post-graduate and one Doctorate scholar have been conferred with degrees in Fisheries Science.
24. During 2014-15, the Tamil Nadu Fishermen Welfare Board (TNFWB) has settled 7,248 claims for a total value of Rs.3.28 crore,

besides 2,293 claims have been settled to the tune of Rs.1.31 crore upto July 2015 from TNFWB own funds.

25.The Government issued order for all the 24 announcements made during 2014-15 and the works are in progress.

#### **4. FISHERIES IN TAMILNADU-AN OVERVIEW**

Fishery resources of Tamil Nadu are categorised as Marine, Inland and Brackish water.

##### **4.1 Marine Fisheries**

Tamil Nadu has 1.9 lakh sq. km of Exclusive Economic Zone (EEZ) and a continental shelf of 41,412 sq.km. The marine fisher population in Tamil Nadu is 9.43 lakh, living in 608 fishing villages in the 13 coastal districts. The inshore waters of 1,016 km length of the coast on the eastern side and 60 km length of the coast on the western side are over-exploited, whereas the offshore and deep sea resources are yet to be exploited to its optimum levels. The marine fish production of the State presently is estimated as 4.57 lakh tones against the estimated potential of 7 lakh tones.

A glimpse of the Marine Fisheries sector is given in Table-1.

**Table 1: Marine Fisheries Statistics- 2014-15**

Coastal length	1,076 km
Number of Coastal Districts	13
Number of Fishing Villages	608
Marine Fisherfolk Population (Projected)	9.43 lakh *
<b>Fishing Crafts Registered (online):</b> as on 17.08.2015	
1.Mechanised Fishing boats	5,735
2.Traditional Crafts (motorised and non-motorised)	33,053 (27899 + 5,154)
<b>Infrastructural Facilities</b>	
Major Fishing Harbours	3 (Chennai, Thoothukudi and Chinnamuttom).
Major Fishing Harbours -under construction	4 (Thengapattinam, Poompuhar, Colachel and Muttom )
Medium Fishing Harbours	4 (Phazhayar, Mallipatnam, Nagapattinam and Cuddalore)
Fish landing centres / Jetties	36
Fish Landing Points	254
Marine Fish Production(14-15)	4.57 lakh tonnes*
Marine Products Export (2014-15)	93,477 MT** value Rs.5038.17 crore

Source: \*Fisheries Statistics of Tamil Nadu, Fisheries Department

\*\*Marine Product Export Development Authority (MPEDA)

## **4.2 Inland Fisheries**

Tamil Nadu is endowed with 3.83 lakh ha. of effective water spread area in which 69% of the water spread comprises of long seasonal / short seasonal irrigation water resources. Tamil Nadu being a water starved State, has water in most of these water bodies for a short period of 4-5 months only. The inland fisher population is about 2.27 lakh. Inland fisheries has gained popularity and emerged as an important source of livelihood for fisherfolk / fish farmers in Tamil Nadu. The inland fishery resources of our State comprises of reservoirs, major irrigation and long seasonal tanks, short seasonal tanks and ponds which are amenable to both capture and culture fisheries. About 5,000 ha of ponds and tanks are being utilised for fresh water aquaculture under the programme of District Fish Farmers Development Agency (DFFDA). Under the Intensive inland fish culture and marketing scheme, about 24,600 ha of ponds and tanks are utilised for inland fish culture. The short water retention period in ponds and tanks due to erratic and scanty rain fall necessitates promoting and stocking of fast growing, short seasonal fish species such as Amur Carp, Genetically Improved and Farmed Tilapia (GIFT), Jayanthi Rohu, Pangasius sp., etc. Table

2 provides an overview of inland fisheries sector of the State.

**Table 2: An Overview of Inland Fisheries Sector**

Inland Fishery Resources extent	3.83 lakh ha.
Reservoirs (78 Nos*)	62,015.06 Ha.
Large irrigation and short seasonal tanks	2,65,642 ha.
Brackish water spread area	56,000 ha.
Population of Inland Fishers (projected)	2.27 lakh
Inland Fish Production 2014-15	2.40 lakh tonnes.

\* 61 reservoirs taken over from PWD for fish culture by Fisheries department out of the total 78 reservoirs

The Inland fisheries sector of the State has the potential to contribute 4.50 lakh tonnes of fish production in times of normal rainfall, for which 70 crore fingerlings are required.

The Government through various schemes such as NADP, NMPS, IAMWARM, WGDP, NABARD, etc., has improved the Government fish farm facilities as well as encouraged the private farmers to create fish seed rearing farms. An additional rearing area of 40 ha has been created both in Government and private sector which lead to an all time highest fish seed production of 45 crore during 2014-15, thereby reducing the fish seed gap from 46 to 25 crore.

### **4.3 Brackishwater Fisheries**

In Tamil Nadu, the total extent of brackish water spread is estimated as 56,000 ha which is used for capture fisheries. Apart from that, about 7,100 ha area is under coastal aquaculture production mainly comprising of shrimp. In Tamil Nadu, shrimp farming has grown considerably and has emerged as a major commercial enterprise owing to the introduction of Specific Pathogen Free (SPF) Shrimp, *Litopenaeus vannamei*. So far, 1,694 shrimp farms have been registered under the Coastal Aquaculture Authority (CAA) Act, 2005.

## **5. ADMINISTRATIVE SET UP**

The Commissioner of Fisheries is the Head of the Department, the Managing Director of Tamil Nadu Fisheries Development Corporation Limited, (TNFDC Ltd.,) a Public sector undertaking of the Tamil Nadu Government, the Functional Registrar of all Fishermen Cooperative Societies including Tamil Nadu State Apex Fisheries Cooperative Federation (TAFCOFED) and also the Member Secretary of Tamil Nadu Fishermen Welfare Board (TNFWB).

The budgetary allocation for the fisheries sector has increased manifold due to expansion of activities. This has necessitated the re- organisation of the

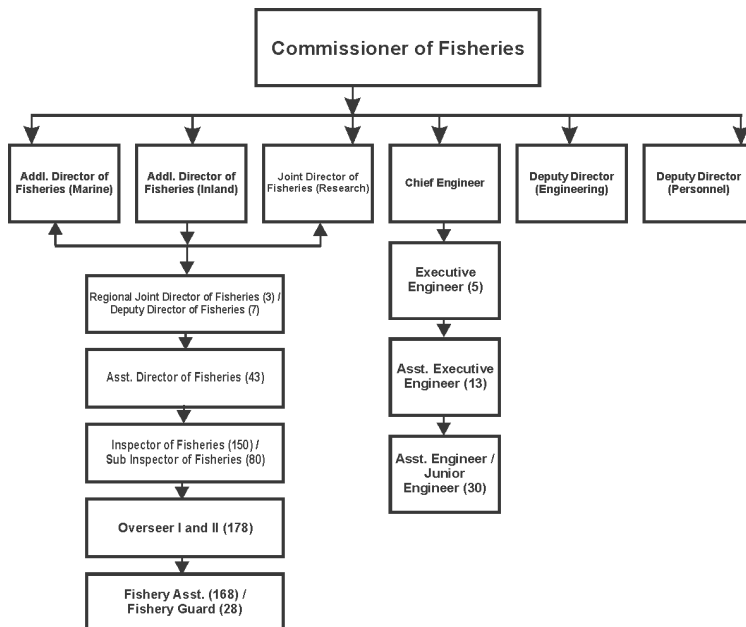
fisheries department during 2012-13, so as to ensure effective and efficient service delivery system. Accordingly, two posts in the cadre of Joint Director of Fisheries in the head office have been upgraded to the level of Additional Director of Fisheries. Further, the State is divided into 10 regions, out of which 3 regions are headed by Joint Directors of Fisheries (Chennai, Nagapattinam and Thoothukudi) and 7 regions are headed by Deputy Directors of Fisheries (Cuddalore, Tiruchirapalli, Madurai, Ramanathapuram, Nagercoil, Dharmapuri and Bhavanisagar) who monitor and supervise the activities of 49 Assistant Directors of Fisheries and implement various developmental and fishermen welfare schemes. Further, during 2013-14, the Engineering wing headed by the Chief Engineer has also been re-organised with four divisions at Chennai, Nagapattinam, Thoothukudi and Nagercoil to monitor the engineering works that are being carried out by the 14 sub-divisions.



The organizational setup of Fisheries Department is depicted below in figure I.

**Figure 1:**

**Organizational Setup of Department of Fisheries**



The total sanctioned staff strength of Fisheries Department is 1,686 after re-organisation of the Department. The Department of fisheries during 2014-15, have filled up 45 posts (Table 3) at various levels. Apart from that, 85 vacancies in different cadres will be filled up through the Tamil Nadu Public Service Commission.

**Table 3. Details of posts filled up during  
2014-15**

<b>Sl.No</b>	<b>Name of the Post</b>	<b>Nos.</b>
1	Addl. Director of Fisheries	01
2	Joint Director of Fisheries	01
3	Deputy Director of Fisheries	02
4	Sub-Inspector of Fisheries	24
5	Junior Assistant	03
6	Typist	09
7	Watchman	01
8	Driver	01
9	Boat Driver	02
10	Sea Man	01
<b>Total</b>		<b>45</b>

### **5.1 Hon'ble Chief Minister's Special Cell Petitions**

For the year 2014, 565 petitions were received from Hon'ble Chief Minister Special Cell and all the 565 petitions were disposed. For the year 2015, 222 petitions were received (Till 31.07.2015) and 222 petitions were disposed. The details of action taken have been sent to the concerned petitioner.

## **6. PROTECTION OF TRADITIONAL FISHING RIGHTS OF TAMIL NADU FISHERMEN.**

### **6.1. Retrieval of Katchatheevu: Issues and Status**

The Government, since May 2011, has taken pro-active steps for the retrieval of "Katchatheevu" Island which was ceded unilaterally by Government of India to Sri Lanka in 1974, to protect the traditional

fishing rights of Tamil Nadu fishermen. Tamil Nadu Legislative Assembly on 09.06.2011 unanimously passed a resolution to implead the Revenue department in the Writ Petition W.P. (Civil) No.561/2008, in the individual capacity before the Supreme Court of India in 2008 for retrieval of Katchatheevu. Accordingly Government of Tamil Nadu impleaded itself in this case.

Further, the Government passed another resolution in the Tamil Nadu Legislative Assembly unanimously on 3.5.2013, urging the Government of India to retrieve Katchatheevu, questioning the legal validity of the 1974 and 1976 Indo-Sri Lankan Agreements, in the light of the judgment issued by the Hon'ble Supreme Court of India in "Berubari" case. The Government passed one more resolution in the Tamil Nadu Legislative Assembly unanimously on 05-12-2014, urging the Government of India to retrieve Katchatheevu to restore the traditional fishing rights of the fishermen of Tamil Nadu.

The above steps are aimed to bring the repeated arrest of the fishermen of Palk Bay districts who fish in their traditional waters of Palk Bay region to earn their livelihood by the Sri Lankan Navy to an immediate end. In order to establish the traditional fishing rights of the fishermen in the background of increasing and

repeated incidents of arrest and harassment by the Sri Lankan Navy, the measures taken by the Hon'ble Chief Minister assumes greater significance. This Government reiterates its consistent stand that a permanent solution to this vexatious problem faced by our fishermen will be possible only by restoring India's sovereignty over Katchatheevu thereby securing their rights to fish in their traditional waters.

## **6.2. Efforts taken by Government to prevent Harassment/Release of Tamil Nadu Fishermen and their fishing boats**

The Government of Tamil Nadu accords top priority for the safety and security of our fishermen who eke out their livelihood by fishing in their traditional fishing waters. Our Hon'ble Chief Minister is determined to ensure that the traditional fishing rights of our fishermen which have been continuously enjoyed by them since time immemorial are well protected. The right of life, livelihood and the right to carry on fishing in the traditional waters of Palk Bay are continuously infringed upon by Sri Lankan Navy's recurrent, unabated apprehension, attack and harassment of our innocent fishermen. With a deep sense of concern on the repeated incidents of attack, harassment and apprehension of Tamil Nadu fishermen by the Sri Lankan Navy and prolonged incarceration of

our innocent fishermen in Sri Lankan jails, the Hon'ble Chief Minister has written as many as 66 letters bringing the above incidents to the notice of the Hon'ble Prime Minister of India.

The Hon'ble Chief Minister has constantly demanded the Government of India to decisively use all available diplomatic channels to secure the immediate release of apprehended fishermen of Tamil Nadu and also to prevent the recurrence of such incidents. With the unrelenting and assiduous efforts of the Hon'ble Chief Minister, 2024 fishermen and their 356 fishing boats since May 2011, viz., 222 fishermen, 40 fishing boats in 2011 (from May 2011) 219 fishermen, 39 fishing boats in 2012, 645 fishermen, 119 fishing boats in 2013, 787 fishermen, 158 fishing boats in 2014 and 151 fishermen in 2015 have been released from the Sri Lankan Jails and repatriated to Tamil Nadu. The Government passed resolution in the Tamil Nadu Legislative Assembly unanimously on 05.12.2014 urging the Government to take immediate steps to release the 79 boats detained by Sri Lankan authority. Due to the untiring efforts the remaining 80 boats which were in Sri Lankan custody since last June have also been released. Out of 80 boats 34 boats on 19.03.2015 in the first phase and 30 boats on 30.04.2015 have been salvaged to Tamil Nadu in the

second phase. Efforts are under way to salvage and bring the 16 boats back to Tamil Nadu. During 2015, 23 mechanized fishing boats along with 151 fishermen were apprehended by Sri Lankan navy. Due to the efforts taken by Government all the 151 fishermen were released by Sri Lankan authority and repatriated to Tamil Nadu. Efforts are also being taken to release the 24 fishing boats including one boat apprehended on foisted case during 2011.

In an unprecedented move, the High court of Colombo delivered a Judgement convicting and sentencing 5 innocent Rameswaram fishermen who have been arrested on false charges with death penalty by the Sri Lankan Navy and languishing in Sri Lankan jails since 29.11.2011 were released. Since, their arrest in 2011, Hon'ble Chief Minister had taken various legal and diplomatic steps continuously to secure their release. The Government sanctioned a sum of Rs 5 lakh towards payment of legal fee to expedite the release of those fishermen, in addition to the daily relief assistance of Rs.13,60,000/- paid till their return i.e., on 20-11-2014 and interim relief of Rs.2,00,000/- each from Chief Minister's Public Relief Fund. The District Collector also sanctioned Rs.5,000/- each as immediate relief assistance.

The State Government had also funded the entire legal costs of the defence of these five fishermen and also supported their families throughout this period with financial grants. As soon as information on the award of death penalty to these 5 fishermen was received on 30.10.2014, the Government of Tamil Nadu requested the Government of India to immediately take up the matter with the highest authorities in Sri Lanka to ensure that the lives of the 5 innocent Indian fishermen are saved and they are released to return home at the earliest. The Government of India was also requested to direct the Indian High Commission in Sri Lanka to set in motion the legal procedure for appeal and secure the best legal counsel and support for the effective defence of the 5 fishermen.

The Government of Tamil Nadu also sanctioned Rs. 2,00,000 as the legal costs for the defence of the 5 fishermen. Based on the request of the Government of Tamil Nadu, Hon'ble Prime Minister of India personally intervened in the matter and the 5 fishermen were released on 19-11-2014 and repatriated to Tamil Nadu on 20.11.2014. The Government of Tamil Nadu also sanctioned an additional financial assistance of Rs.3,00,000/- each to the 5 fishermen to start their new lease of life in Tamil Nadu. Including this amount

a total sum of Rs.38,85,000/- has been released to protect the life of the 5 fishermen, and a sum of Rs.26,25,891 released to provide legal assistance and thus a sum of Rs.65,10,891/- has been released by Government Tamil Nadu as financial assistance in this regard. Due to the efforts taken by the Hon'ble Chief Minister, the 5 fishermen were released on 19.11.2014 and repatriated to Tamil Nadu on 20.11.2014. As ordered by the Hon'ble Chief Minister, the fishermen were received by Hon'ble Ministers and officials on 20.11.2014 and sent to them safely to their native place.

### **6.3 Indo-Sri Lankan Fishermen Level Talks**

In view of the sentiments and desire of the Fishermen Associations of Tamil Nadu to have direct talks with their counterparts in Sri Lanka and in the interest of keeping a channel of communication open between the fishermen communities of both countries, the Hon'ble Chief Minister of Tamil Nadu had proposed to the Government of India that arrangements may be made to have talks between fishermen belonging to Tamil Nadu and their counterparts in Sri Lanka at Chennai.



In the meeting held on 27.01.2014 at Chennai, a delegation of 13 fishermen representatives from our side and 10 fishermen representatives from the Sri Lankan side participated. The Hon'ble Minister for Fisheries, Government of Tamil Nadu and officials from Government of India, Government of Tamil Nadu and the Government of Sri Lanka participated as observers during the talks. There was an agreement in this meeting. The subsequent meeting was held at Colombo in Sri Lanka on 12.05.2014. The Colombo talks could not make any headway due to the premeditated stance of the Sri Lankan officials.

As per the orders of the Hon'ble Chief Minister of Tamil Nadu, the Tamil Nadu Sri Lanka fishermen level talks were held at 11 am on 24.3.2015 in Chennai. In the meeting, a delegation of 13 fishermen representatives from Tamil Nadu, 4 fishermen representatives from Puducherry and 10 fishermen representatives from Sri Lanka were participated. The Hon'ble Minister for Fisheries and officials from Government of Tamil Nadu, Government of Puducherry, Government of India and the Government of Sri Lanka participated as observers during the talks.

During the talks, the Indian (Tamil Nadu and Puducherry) fishermen put forth their demands and

the Sri Lankan fishermen placed their stance. The Sri Lankan fishermen stated that the demands of the Indian fishermen would be presented and discussed with the fishermen of North and Eastern Provinces of Sri Lanka and the decision would be communicated. All the decisions taken during the bilateral Fishermen level talks would be implemented only after obtaining the approval of the Governments of Tamil Nadu, India and Sri Lanka. In response Deputy High Commissioner of Srilanka, Chennai in his letter has informed that the Representatives of Northern and Eastern province, Srilanka, Fishermen association representatives during the meeting on 14.05.2015 has resolved not to allow fishing in Palk Bay region of Srilankan territory and also furnished the copy of the minutes of the meeting.

The Government of Tamil Nadu is committed to continue the bilateral fishermen level talks.

## **7. MARINE FISHERIES**

### **A. WELFARE SCHEMES**

The Government always accords priority to improve the standard of living of fishers in State by implementing several welfare schemes. In order to affirm that the benefits of welfare schemes reach the beneficiaries in the shortest span of time and in a transparent manner, for the first time the Government

disbursed the financial assistance being extended under various welfare schemes to the individual beneficiary's Savings bank account directly through National Electronic Fund Transfer (NEFT). The details of various welfare Schemes are given below:

### **7.1 National Savings-cum-Relief Scheme (NFSRS) for Marine Fishermen**

Under this Scheme the grant provided to the beneficiaries is shared equally between the Centre and the State and the relief amount is being disbursed to the marine fishermen every year, during lean fishing months.

The Hon'ble Chief Minister's made announcement under Rule 110 on the floor of Legislative Assembly during the Budget 2014-15 to enhance the relief amount from Rs.1800/- to Rs.2,700/-.

Based on the revised pattern of assistance approved by Government of India, a fisherman contributes Rs.900/- at the rate of Rs.100/- per month as his share in nine months. The contribution is matched with the total amount of Rs.1,800/- shared equally by the Central and State Governments (i.e. Rs.900/- each). Thus, a sum of Rs.2,700/- including the fisherman's contribution is disbursed to the beneficiaries during the lean months.

For the year 2014-15, Government sanctioned an amount of Rs.39.60 crore as its Share (both Central and State), Rs.34.99 crore has been disbursed to 1,94,436 marine fishermen of 13 coastal districts. The relief amount was disbursed directly to the beneficiary's account through National Electronic Fund Transfer (NEFT).

Government has issued orders for continuation of this scheme during 2015-16 also.

## **7.2 Savings-cum-Relief Scheme for Marine Fisherwomen**

This Scheme is being implemented as a State Sector Plan Scheme similar as per the guidelines of a scheme for marine fishermen. Since this scheme is being implemented based on the guidelines issued for implementing the scheme for fishermen, the Hon'ble Chief Minister of Tamil Nadu made announcement under Rule 110 on the floor of Legislative Assembly during the Budget 2014-15 to enhance the relief amount totaling from Rs.1800/- to Rs.2700/-.

Under the revised pattern of assistance, a fisherwoman contributes Rs.900/- at the rate of Rs.100/- per month as her share in nine months. The contribution is matched with the total amount of Rs.1,800/- provided by State Government. Thus, a

sum of Rs.2,700/- including the fisherwoman's contribution is disbursed to the beneficiaries during the lean months.

For the year 2014-15, the Government sanctioned an amount of Rs.36 crore as its Share, Rs.31.82 crore has been disbursed to 1,76,786 marine fishermen of 13 coastal districts. The relief amount was disbursed directly to the beneficiary's account through National Electronic Fund Transfer (NEFT).

Government has issued orders for continuation of this scheme during 2015-16 also.

### **7.3 Financial assistance of Rs.2,000/- to Marine Fishermen Families during Fishing ban period**

In order to conserve the marine fishery resources, seasonal fishing ban is imposed for 45 days since 2001 (i.e. from April 15<sup>th</sup> to May 29<sup>th</sup> in the East Coast region and June 15<sup>th</sup> to July 29<sup>th</sup> in the West Coast region). The fishermen who are engaged as crew / labourers in the fishing boats have no other source of income during the ban period leading to much hardship in maintaining their families and their livelihood. To alleviate the sufferings of the poor fishermen crew / labourers who are actually involved in marine fishing activities, this Government after assuming office during 2011, enhanced the relief assistance given to

marine fishermen families from Rs.1,000/- to Rs.2,000/-.

For the year 2014-15, Rs.29.97 crore has been disbursed to 1,49,855 families as relief assistance. For the year 2015-16, the Government sanctioned Rs.33.05 crore for extending fishing ban relief assistance to 1.65 lakh fishermen families. So, far relief assistance amounting to Rs.31.45 crore has been disbursed to 1,57,244 families. The relief amount was disbursed directly to the beneficiary's account through National Electronic Fund Transfer (NEFT).

#### **7.4 Special Allowance of Rs.4,000/- to Marine Fishermen Families during Lean Fishing Season**

Subsequent to the announcement made by the Hon'ble Chief Minister of Tamil Nadu in the State Legislative Assembly during August 2011, the Government introduced a new Scheme for disbursement of a Special Allowance of Rs.4,000/- to each of the marine fishermen families in coastal Districts to mitigate their sufferings in the lean fishing months and implementing since 2011.

For the year 2014-15, Rs.71.45 crore has been disbursed to 1,78,500 marine fishermen families of 13 coastal districts. The relief amount was disbursed

directly to the beneficiary's account through National Electronic Fund Transfer (NEFT).

This Scheme will be continued during 2015-16.

### **7.5 Group Accident Insurance Scheme for Fisherfolk**

Under this Centrally Sponsored Shared Scheme till 09.12.2014, the State and Central Government shared the total Insurance premium of Rs.30/- per beneficiary equally. Insurance premium was not collected from the fishermen. In the event of death, the legal heir of fisherman was given Rs.1,00,000/- and in the event of permanent and partial disability the fisherman was given Rs.1,00,000/- and Rs.50,000/- respectively.

For the year 2014-15, i.e. from 10-12-2014 onwards, the relief has been enhanced and premium has been fixed at Rs.20.27 per beneficiary for the entire period of 12<sup>th</sup> Five Year Plan. The total insurance premium of Rs.20.27 per beneficiary will be equally (@ Rs.10.135 each) paid by State and Central Governments. Insurance premium is not collected from the fishermen. In the event of death, missing and permanent disability the relief assistance has been enhanced from Rs.1,00,000/- to Rs.2,00,000/- and in the event of partial disability, the relief assistance has been enhanced from Rs.50,000/- to Rs.1,00,000/- with

a cover of Rs.10,000/- towards hospitalization expenses.

A sum of Rs.72.60 lakh (as State's share) has been paid to FISHCOPFED (National Federation of Fishermen's Co-operatives Ltd), New Delhi, towards insurance premium covering 7,16,308 active marine and inland fishers and fishers enrolled in Tamil Nadu Fishermen Welfare Board (TNFWB) as fishers in allied activity for the period from 10.12.2014 to 9.12.2015. For the year 2014-15, the insurance company has settled 119 claims for a total value of Rs.1.13 crore. For the year 2015-16 the insurance company has settled 54 claims for a total value of Rs.53.35 lakh upto 17.08.2015.

This Scheme will be continued during 2015-16.

## **7.6 Motorisation of Traditional Crafts**

The Government is providing subsidy assistance towards the purchase of Out Board Motors (OBM) / In Board Engines (IBE), to be fitted in the traditional crafts of fishermen. The fishermen will be provided with 50% subsidy of the unit cost of the engine or Rs.30,000/- whichever is less which will be shared equally between centre and State under the scheme. For the year 2014-15, the Government of India has released Rs.95 lakh being 50% of its share. The State



Government has released the total amount of Rs.1.90 crore including central share. Under this scheme, 635 fishermen were benefitted by getting OBM/IBE under subsidy rates.

This Scheme will be continued during 2015-16.

## **7.7 Issuance of Biometric Identity Cards to marine fishers**

### **a) Marine Fishermen**

The Government of India introduced a Central Sector Scheme for "Issuance of Biometric Identity Cards to marine fishermen" to ensure coastal security in the aftermath of 26/11 Mumbai terrorist attack. A sum of Rs.1.16 crore was allocated for this purpose to Tamil Nadu. It is proposed to issue Biometric ID cards to about 2.06 lakh active marine fishermen. The work was entrusted with "M/s.BEL Ltd" Bengaluru. Under this scheme 1,35,771 cards have been distributed to the marine fishermen. On completion capturing of Biometric features, Biometric ID cards will be issued to the remaining fishermen.

### **b) Marine Fisherwomen**

During budget demand on the floor of Assembly, the Hon'ble Minister for Fisheries has announced that Biometric identity cards will be issued to fisherwomen also as in the case of marine

fishermen. The Government has accorded sanction to issue biometric identity cards to fisherwomen. Under this scheme, capturing of Biometric features has been commenced and so far 37,541 data of fisherwomen has been captured in Ramanathapuram district. 69,880 data of fisherwomen having Aadhar details sent to BEL Bangalore for linking the existing data for this scheme. Further Capturing of Biometric features is in progress and on completion, Biometric Identity cards will be issued to the marine fisherwomen shortly.

### **7.8 Online Registration of Fishing Vessels**

For ensuring coastal security, the Government of India have introduced a Central Sector Scheme on "Online registration of fishing vessels" and sanctioned a sum of Rs.1.33 crore to Tamil Nadu towards provision of infrastructure such as computers and software through NIC, New Delhi.

A total of 5,735 mechanised fishing boats, 27,899 motorised and 5,154 non- motorised traditional crafts have been registered till 17.08.2015.

### **7.9 Reimbursement of Central Excise Duty on High Speed Diesel**

This Scheme was implemented with 100% funding support from the Central Government, to reimburse the Central Excise Duty by way of providing

subsidy towards purchase of high speed diesel (HSD) oil by the mechanised fishing boat operators who own boats of overall length less than 20 mts and registered before 10<sup>th</sup> five year plan so as to reduce the operational cost till the end of 10<sup>th</sup> Five Year Plan period. However, in the 11<sup>th</sup> Five Year Plan (2007 - 2012) the Government of India imposed a condition that the owners of the mechanised fishing boats should be below poverty line (BPL) category to avail the benefit under this scheme, which is a non-implementable condition as the mechanised boat owners will not come under the BPL category. The same condition is in force till date.

The Hon'ble Chief Minister has already brought this issue to the notice of the Hon'ble Prime Minister through a memorandum presented on 13.06.2011. The request has been reiterated once again by the Hon'ble Chief Minister in the memorandum submitted to the new Prime Minister on 03.06.2014, 07.12.2014 and 07.08.2015 insisting on relaxation of these impracticable and unworkable conditions imposed for reimbursement of Central Excise Duty for all the coastal States and that these should immediately be reviewed in order to enable this Scheme to become operational. A decision on this issue is yet to be conveyed by the Government of India.

### **7.10 Sales Tax Exemption on Sale of High Speed Diesel to Fishermen**

The Government of Tamil Nadu provides 100% sales tax exempted High Speed Diesel for mechanised fishing boats and motorised country crafts registered in the Fisheries Department. The mechanised boats can avail Sales Tax exempted diesel, subject to a maximum of 15,000 litres per boat/per year (during active fishing months) and motorised country crafts can avail a maximum of 3,600 litres per craft per year.

This Scheme is being continued for the year during 2015-16 also.

### **7.11 Subsidised and Sales Tax Exempted Industrial Kerosene to the Traditional Crafts**

The Government provided Sales tax exempted industrial kerosene at the subsidised rate of Rs.25/- per litre (200 litres per craft per month) till 2011-12 to the fishermen of Thoothukudi, Tirunelveli and Kanniyakumari Districts who own motorised traditional crafts fitted with kerosene driven motors.

The Hon'ble Chief Minister of Tamil Nadu enhanced the limit of Sales Tax exempted and subsidised industrial kerosene from 200 litres to 250 litres per craft per month during 2012-13, so as to reduce the increasing operational expenses of traditional fishermen. For the year 2014-15, the Government sanctioned an amount of Rs.80.41 crore for implementing the scheme which benefits around 5,000 traditional crafts. Industrial kerosene is being issued to country crafts driven by Kerosene of Thoothukudi and Tirunelveli districts through TAFCOFED and for Kanniyakumari through TNFDC.

This Scheme is being continued for the year 2015-16 also.

### **7.12 Cash Awards to 10<sup>th</sup> and 12<sup>th</sup> Class Students of Fishing Community**

To encourage the students of fishing community to pursue higher education, the Government of Tamil Nadu is providing cash award and merit certificates to the boys and girls of fishermen community who have secured top ranks in 10<sup>th</sup> and 12<sup>th</sup> standard examinations at District and State level as furnished in Table 4.

**Table: 4. Details of Cash Awards**

Sl. No	Category	Cash Awards (in Rs.)		2013-14 Academic Year			
				12 <sup>th</sup> Std		10 <sup>th</sup> Std	
		12 <sup>th</sup> std	10 <sup>th</sup> std	Boys	Girls	Boys	Girls
1	State level - 1 <sup>st</sup> mark	10,000	6,000	1	1	2	1
2	District level - 1 <sup>st</sup> mark	6,000	2,000	23	23	24	25
3	District level - 2 <sup>nd</sup> mark	Nil	1,000	0	0	21	23
4	District level - 3 <sup>rd</sup> mark	Nil	600	0	0	20	24
<b>Total</b>				<b>24</b>	<b>24</b>	<b>67</b>	<b>73</b>

During 2014-15, a sum of Rs.5.24 lakh was disbursed to 188 students of fishermen community for the academic year 2013-14.

Government have issued orders for providing cash award to the boys and girls of fishermen for this year 2015-16 also.

### **7.13 Providing 75% Subsidy Assistance for Purchase of Self Contained Underwater Breathing Apparatus (SCUBA) to Chank divers in Thoothukudi District**

Chank fishery is practised by the traditional fishermen of Thoothukudi District by skin diving for centuries as their livelihood. The divers normally use air compressors for continuous breathing for longer

durations in the depths of the sea for collecting chanks, sometimes leading to their death due to asphyxiation and Nitrogen necrosis. The air compressor gets power from the inboard engine of the traditional fishing craft 'Vallam' and the air from compressor are stored in an air tank from which it is released through hoses to the divers, while they are inside the water. The divers will remain at the bottom for about two hours by inhaling air from the hoses and exhale through mouth inside the water. Because of prolonged submergence, the divers consume more Nitrogen when compared to the proportion of Oxygen which may cause "Nitrogen necrosis" a disease sometimes even leading to death. Considering the plight of the poor fishermen the Hon'ble Chief Minister has announced to provide 75% subsidy subject to maximum of Rs.75,000/- per unit for the purchase of Self Contained Underwater Breathing Apparatus (SCUBA) during the District Collectors' and Police Officers' Conference held on 19.12.2012.

For the year 2013-14, the Government sanctioned a sum of Rs.20 lakh towards implementing the scheme. Under this scheme, subsidy assistance to a tune of Rs.7.50 lakh (Rs.75,000/-per unit) was disbursed to 10 fishermen of Thoothukudi district engaged in chank fishery. The other common

accessory i.e. Air compressor was also purchased for filling the compressed air in the cylinders. Necessary training has been imparted to the beneficiaries on the use of SCUBA through Central Marine Fisheries Research Institute (CMFRI).

#### **7.14 Reconstruction of Thiruchinankuppam Fishermen Tenements and Construction of fishermen houses under the Honourable Chief Minister's Solar Powered Green Housing Scheme to fishermen**

The Government has accorded administrative sanction for reconstruction of 492 tenements at Thiruchinankuppam in Thiruvallur District at an estimated cost of Rs.24.60 crore through Tamil Nadu Slum Clearance Board. The biometry of 492 occupants at Thiruchinankuppam has been completed by the District Collector, Thiruvallur. The 492 tenements has been dismantled and work order for reconstruction has been issued by the Tamil Nadu Slum Clearance Board.

In order to provide houses to fishermen families, provision was made in the G.O Ms No 158, Animal Husbandry, Dairying and Fisheries (Fs3) Dept dt 08.08.2014 for 641 houses exclusively for fishermen under Honourable Chief Minister's Solar Powered Green Housing Scheme. Based on which, 631 fishermen beneficiaries were selected and construction of



Chief Minister's Solar Powered Green House by the District Rural Development Agency (DRDA) is in progress.

## **B. RELIEF SCHEMES**

### **7.15 Daily Relief to Marine Fishermen apprehended in other Countries**

The Government supports the family of fishermen who are apprehended by the neighbouring countries while fishing by providing daily allowance of Rs.50/-till he returns. The present Government after taking charge enhanced the daily allowance from Rs.50/- to Rs.250/- to the family of the apprehended fisherman till he returns home. The scheme is being implemented through the District Collectors for providing immediate relief.

For the year 2014-15, a sum of Rs.22.70 lakh was disbursed to the 302 families of apprehended fishermen from Pudukottai, Thanjavur, Ramanathapuram and Kanniyakumari districts. For the year 2015-16 a sum of Rs.11.74 lakh was disbursed to the 132 families of apprehended fishermen from Nagapattinam district.

This Scheme will be continued during the year 2015-16.

### **7.16 Daily Relief to the Families of Missing Fishermen**

This Government after assuming charge, enhanced the daily allowance from Rs.50/- (i.e. Rs.1,500/- per month) to Rs.250/-(i.e. Rs.7,500/- per month) to the families of fishermen who went missing while fishing at sea till his return. During 2014-15, a sum of Rs.10.47 lakh was disbursed to 19 families of missing Fishermen in Nagapattinam, Ramanathapuram, Thoothukudi and Kanniyakumari Districts. A sum of Rs.6.94 lakh was disbursed to 16 families of missing fishermen in Chennai, Nagapattinam and Kanyakumari district during the year 2015-16.

This Scheme will be continued during 2015-16.

### **7.17 Relief to the families of deceased / injured fishermen due to shooting by Sri Lankan Navy and others**

The fishermen of coastal Districts, who fish in their traditional waters of the Palk Bay drift due to engine failure and natural vagaries of the sea and so on, are apprehended / harassed and sometimes even shot at by the Sri Lankan Navy.

The Government is providing an ex-gratia payment of Rs.3 lakh from the Chief Minister's Public Relief Fund to help the family of fishermen who die as

a result of shooting at sea. In the case of the deceased fisherman being the sole breadwinner of the family, an Ex-gratia amount of Rs.5 lakh is provided. If the fishermen sustain major and minor injuries, an Ex-gratia amount of Rs.50,000/- and Rs.20,000/- is provided respectively. Due to the continuous efforts taken by the Government, there were no incidents of shooting on Tamil Nadu fishermen by Sri Lankan Navy during the year 2014-15.

As a special case, the Hon'ble Chief Minister has ordered for the sanction of an ex-gratia amount of Rs.5 lakh to the family of Thiru Thomas Cletus of Rajakamangalamthurai Village in Kanyakumari District who was shot at by the Sea pirates on 21.5.2014 and died on the spot while engaged in fishing as fishermen in a Bahrain based private fishing firm on contract basis from the Chief Minister's Public Relief Fund to the wife of the deceased fishermen in person by the Hon'ble Minister for Fisheries on 11.06.2014.

As a special case, the Hon'ble Chief Minister has ordered for the sanction of an ex-gratia amount of Rs.5 lakh to the family of Thiru.T.Karthikeyan of Thiruppalaikudi Village in Ramanathapuram district who was shot dead by the Qatar Coast Guard while engaging in fishing for a Bahrain based private firm on contract basis from the Chief Minister's Public Relief

Fund on 23.09.2014. The relief amount was given to Tmt. Eluvakkal, the wife of the deceased fisherman in person by the Hon'ble Minister for Fisheries on 04.10.2014.

As special case, the Hon'ble Chief Minister has ordered for the sanction of an ex-gratia amount of Rs.5 lakh to the family of Thiru.S.Mathivalan of Pozhikarai village of Agatheeswaram taluk, Kanniyakumari district who was shot dead by the unknown person while engaging in fishing for a Saudi Arabian based private firm on contract basis from the Chief Minister's Public Relief Fund on 02.06.2015. The relief amount was given to Tmt.Mary Bellaji, the wife of the deceased fisherman in person by the Hon'ble Chief Minister of Tamil Nadu on 25.06.2015.

As a special case, the Hon'ble Chief Minister has ordered for the sanction of an ex-gratia amount of Rs.5 lakh to the family of Thiru Antony Arul Anish of Inayamputhanthurai Village in Kanyakumari District who was shot at by the Sea pirates on 06.08.2015 and died on the spot while engaged in fishing as fishermen in a Qatar based private fishing firm on contract basis from the Chief Minister's Public Relief Fund on 10.08.2015.

### **7.18 Corpus Fund for extending financial assistance for pursuing higher education to the Children of Missing / Deceased Fishermen due to Shooting during fishing**

The financial relief assistance provided to the families of the missing fishermen / deceased fishermen who died of shooting by Sri Lankan Navy is insufficient for meeting their day-to-day expenses and in most of the cases, the families experience much hardship for providing/continuing their son(s)/daughter(s) education as they are financially not sound. The children of the deceased / missing fishermen therefore, are forced to discontinue their education and seek employment to maintain their families.

Considering the above plight, the Hon'ble Chief Minister of Tamil Nadu ordered the creation of a Corpus fund of Rs.25 lakh in Tamil Nadu Fishermen Welfare Board to meet out the full expenses of the higher studies of the children of the families of missing / deceased fishermen who die due to shooting incidents. Under this Scheme, tuition fee (Government prescribed fee) and the hostel fee are being borne by the Government from the Corpus fund.

The Scheme will be continued during 2015-16.

## **C. RESOURCE/PRODUCTION ENHANCEMENT**

### **7.19 Conservation and Management of Fishery Resources**

In recent years, the fishery wealth in the inshore waters is under pressure due to increased fishing effort. The Government of Tamil Nadu is enforcing Tamil Nadu Marine Fishing Regulation Act 1983, a regulatory measure, as a part of regulation conservation and management of marine resources. This Act was enacted during the year 1983 and needs to be amended to suit present requirement of fisheries development. Hence, this Government is committed to make necessary amendments in the TNMFR Act 1983.

Imposing seasonal fishing ban, stock enhancement, habitat development like sea ranching programme, installation of artificial reefs and diversified fishing methods are some of the conservation/ stock enhancement measures, being adopted by the Fisheries Department.

### **7.20 Patrolling Boat**

The Hon'ble Chief Minister of Tamil Nadu during the District Collectors' conference held on 18.12.2012 has made announcement that 3 boats will be handed over to Thoothukudi district for implementation of

TNMFR act 1983, Patrolling, search and rescue operations in Thoothukudi and Tirunelveli district.

In continuation, 3 FRP boat has been constructed and handed over to Assistant Director of Fisheries, Thoothukudi and the boats was put into use.

### **7.21 Setting up of Artificial Reefs**

Artificial reefs act as habitats to marine aquatic organisms, help in enhancing the fish production through increased breeding activity and survival of young ones and a barrier for bottom trawling operations. The Government has taken steps for development of fish habitats, by setting up of artificial reefs in the inshore waters as a conservation / stock enhancement measure. So far, 18 artificial reefs have been setup along the Tamil Nadu coast. The work has been carried out after obtaining technical advice from the Central Marine Fisheries Research Institute (CMFRI), Kochi. The Government has sanctioned a sum of Rs.2.93 crore towards the installation of additional 19 units. Deployment of Artificial Reefs in 18 places completed and remaining 1 place (Amalinagar in Thoothukudi District) work is in progress. (Table-5).

**Table: 5 Places of Deployment of Artificial reefs Completed**

<b>Sl. No.</b>	<b>Village</b>	<b>District</b>
1	Arangankuppam	Tiruvallur
2	Nettukuppam	
3	Kathivakkam Chinnakuppam	
4	Kanathur	Kancheepuram
5	Chemmencherri	
6	Mudaliyar Kuppam	
7	Panaiyur Periyakuppam	Kancheepuram
8	Nemmeli Kuppam	
9	Mahabalipuram	
10	Pudukuppam	Cuddalore
11	Pillumedu	
12	Seruthur	Nagapattinam
13	Vellapallam	
14	Chinnaangudi	
15	Perumalpettai	
16	Nagoor	
17	Kattumavadi	Pudukottai
18	Muthukuda	

**7.22 Providing 50% subsidy for fishermen to procure New Tuna Longliner cum Gill Netter**

Considering the higher capital cost involved in construction of Tuna long-liner with modern facilities, the Hon'ble Chief Minister enhanced the subsidy assistance from 25% to 50% during the District Collector's and Police Officer's Conference held in 2012. Subsequently, the Hon'ble Finance Minister announced allocation of Rs.30 crore in the Budget speech of 2013-14, for implementing this scheme with



enhanced subsidy assistance, estimating the unit cost as Rs.60 lakh and subject to the maximum subsidy of Rs.30 lakh/unit for construction of new Tuna long-liner cum-Gill netter.

To mitigate the conflict in the Palk Bay area, where the area for fishing operation is very limited, 60% of the total subsidy is earmarked for Palk Bay Districts i.e., Ramanathapuram, Pudukottai, Thanjavur, Tiruvarur and Nagapattinam. Detailed Guidelines have been issued by the Government for implementing the scheme. An amount of Rs.11.48 crore has been sanctioned by the Government for implementing the scheme during 2013-14 and 2014-15.

As per the approved Guidelines of the Government, 275 applications were received based on the priority for group of which 171 applications of group and individual containing 580 fishermen were found eligible. This includes 4 applications of 16 fishermen released from Iran jail and 2 applications of fishermen rescued from the "Phailin" cyclone. Hon'ble Chief Minister of Tamil Nadu inaugurated the scheme on 15.07.2015 by issuing work order to 5 selected beneficiaries followed by which, work orders to all 171 eligible beneficiaries have been issued. In the memorandum presented by the

Hon'ble Chief Minister to the Hon'ble Prime Minister on 03.06.2014, a sum of Rs.975 crore has been sought for three years at the rate of Rs.325 crore per annum for this purpose. The scheme is proposed to be extended by availing Central assistance.

### **7.23 Deep Sea Fishing – Stationing of Mother Ship Concept**

The Government has announced during 2011-12, that an innovative project on establishment of "Mid Sea Fish Processing Units-cum-carrier Mother Vessel" on a pilot basis, under Public-Private-Partnership (PPP) mode, to help Tamil Nadu fishermen to take up deep sea fishing and to reduce the fishing pressure in inshore waters. The Mother Vessel will act as a source of critical inputs for the 'baby vessels' involved in commercial fishing in the deep sea and will have facilities for onboard fish storage through Refrigerated Sea Water (RSW) system. This will also act as a 'Value Added Export Oriented Facility' and ensure quality standards for export and fetch good price to fishermen for their catch. The consultant appointed to provide Transaction Advisory Services and to carry out the Feasibility study has completed various studies and finalized a workable implementable model for operating a carrier mother vessel in Tamil Nadu. Tender for selection of carrier mother vessel

operator will be floated shortly. The scheme will be implemented on a pilot basis after finalizing the private operator.

## **D. DEVELOPMENT OF INFRASTRUCTURAL FACILITIES**

### **7.24 Construction of Fishing Harbours under Centrally Sponsored Scheme**

#### **i) Fishing Harbour at Colachel (sharing cost on 50:50 basis between Centre and State)**

The Government accorded revised administrative approval for construction of Fishing Harbour at Colachel in Kanniyakumari District at a cost of Rs.87.75 crore. So far, a total sum of Rs.68.445 crore has been released on this project, in which the Central Government has released a sum of Rs.24.570 crore and the State Government has released its total share of Rs.43.875 crore.

In accordance to the revised design, the Construction of Western Main Breakwater and Eastern Leeward Breakwater has been completed upto 540m and 230m respectively. The shore based facilities viz., Net mending shed, Canteen block, Rest shed, Security shed and Overhead tank and Quay blocks laying for wharf formation, Dredging and open excavation works are in progress. A Sewage Treatment Plant (STP) will be provided at this fishing harbour.

The project will be completed by December 2015 and put to use for the benefit of fishermen.

**ii) Fishing Harbour at Thengapattinam  
(sharing cost on 50:50 basis between  
Centre and State)**

The Government accorded revised administrative approval for construction of Fishing Harbour at Thengapattinam in Kanniyakumari District at a cost of Rs.97.40 crore. A total sum of Rs.81.70 crore has been released so far (Central Government share of Rs.33 crore and the State Government share of Rs.48.70 crore).

In accordance to the revised design, the construction of Western Main Breakwater and Eastern Leeward Breakwater has been completed for a length of 630m and 120m respectively. A Sewage Treatment Plant (STP) will be provided at this fishing harbour. Landside facilities will be taken up after land acquisition process completed.

In line with the recommendation of the 13<sup>th</sup> Finance Commission for coastal shore protection, an amount of Rs.82.73 crore has been allocated as a mitigation measure towards protecting the shore of eastern coastal villages of Thengapattinam fishing harbour. The entire works will be completed by November, 2015 and put into use.

**iii) Fishing Harbour at Poompuhar (sharing on 75:25 & 50:50 basis between Centre and State)**

The Government accorded administrative approval for the construction of Fishing Harbour at Poompuhar in Nagapattinam District at a cost of Rs.78.50 crore comprising assistance of 75:25 basis subsequently the revised administrative approval was accorded for Rs.148 crore comprising assistance of 75:25 for Rs.78.50 crore and 50:50 for Rs.69.50 crore. So far, a total sum of Rs.50.62 crore has been released on this project including Central Government share of Rs.18 crore and the State Government share of Rs.32.62 crore.

In accordance to the revised design, the Construction of Western Main Breakwater and Eastern Leeward Breakwater has been completed for 755m (Total-1100m) and 255m (Total 480m) respectively. The placing of Tetrapod units are in progress in both break waters. The remaining works are also in progress. A sewage Treatment Plant (STP) will be provided at this fishing harbour.

The project will be completed by June 2016.

**iv) Expansion of Fishing Harbour at Chinnamuttom (sharing on 75:25 basis between Centre and State)**

The Government accorded administrative approval for expansion of the Fishing Harbour at Chinnamuttom in Kanniyakumari District at a cost of Rs.73.52 crore (75:25 pattern). So far, a total sum of Rs.38.47 crore has been released for this project, including Central Government share of Rs.20.09 crore and the State Government share of Rs.18.38 crore.

The Construction of Western Main Breakwater has been completed to a length of 405m and extension of Eastern Leeward Breakwater has been completed to a length of 100m. Dredging Works, Quay wall, Jetty and drainage works have been completed and put into use.

**v) Reconstruction of Fishing Harbour at Mookaiyur, Ramanathapuram District**

The Government intends to reconstruct the infrastructure to decongest the mechanized fishing boats in Rameswaram and to support the livelihood of fishermen at Mookaiyur and nearby villages and also to develop a fishing harbour with breakwater, wharf, fish auction hall, protection wall, drying platform, net mending centre etc., at Mookaiyur in Ramanathapuram District. The Detailed Project Report,

Model study and Environment Impact Assessment (EIA) furnished by the Consultant M/s. Water and Power Consultancy Services, (WAPCOS) has been approved and sent to Government of India for approval under Centrally Sponsored Scheme. Administrative approval for this project is under the consideration of the Government of India.

The clearance from State Coastal Zone Management Authority (SCZMA) was obtained on 18.08.2014 and sent to National Coastal Zone Management Authority (NCZMA) for its clearance.

### **7.25 Construction of Fishing Harbours under Public – Private Partnership (PPP) mode**

#### **i) Fishing Harbour at Muttom in Kanniyakumari District**

The Government has accorded permission for the construction of Fishing Harbour at Muttom in Kanniyakumari District under “BOOT” (Build Own, Operate and Transfer) System by the concessionaire M/s/ Jeppiaar Fishing Harbour Muttom Private Limited. The work has been completed.

**ii) Fishing Harbour at Rajakkamangalamthurai in Kanniyakumari District**

The Government has accorded permission for the construction of a Fishing Harbour at Rajakkamangalamthurai in Kanniyakumari District under "Build Own, Operate and Transfer" ("BOOT") System. The total cost of the Project is estimated as Rs.42.24 crore. The work has been awarded to M/s Rajakkamangalamthurai Fishing Harbour Pvt Ltd. The work has been taken up after getting clearance from Coastal Regulation Zone Management Authority (CRZMA) at National level. During construction, the National Green Tribunal issued interim injunction to stay the activities and the Government has appealed for vacating the stay. The final order is expected.

**iii) Construction of Fishing Harbour at Manakudy in Kanniyakumari under Public Private Partnership (PPP) mode**

The Government issued orders to build a Fishing Harbour at Manakudy in Kanniyakumari District on Public Private Participation. M/s. WAPCOS Ltd., has been appointed as Consultancy Service for preparation of Techno Economic Feasibility Report (TEFR) for identifying PPP operator. The Tamil Nadu Infrastructure Development Board approved the



Project of Construction of Fishing Harbour at Manakudy at an estimated cost of Rs.72.44 crore. 'Request for Qualification' (RFQ) notice has been published on 04.03.2014 and 05.07.2014 for which no response for the 1<sup>st</sup> call and bids were rejected due to non-qualified in the technical and financial threshold values for 2<sup>nd</sup> call. In response to the 3<sup>rd</sup> call floated on 24.12.2014 fixing last date on 09.01.2015, the bid received was opened, scrutinized and evaluated by committee and also TNIDB. The RFP and DCA has been approved by the TNIDB, which will be given to the concessionaire for further action.

#### **7.26 The World Bank Assisted Coastal Disaster Risk Reduction Project (CDRRP)**

Fisheries sector and the fishing community are the most vulnerable to natural calamities, climate change and degradation of marine environment. In order to promote sustainable marine fisheries and for secured livelihood of the fishing community, the World bank has sanctioned "Coastal Disaster Risk Reduction Project (CDRRP) at an estimated cost of Rs.321.30 crore as tabulated in Table-6.

**Table 6: Details of Funds allocation under CDRRP Scheme**

<b>I.</b>	<b>Fisheries Infrastructure:</b>	
a)	Ongoing ETRP works	Rs.132.30 crore
b)	New Works (2 projects)	Rs.78.00 crore
c)	Studies for New Projects	Rs.10.00 crore
	<b>Sub Total</b>	<b>Rs.220.30 crore</b>
<b>II.</b>	<b>FIMSUL</b>	Rs.49.00 crore
<b>III.</b>	<b>Providing Wireless Communication facilities</b>	Rs.52.00 crore
	<b>Total</b>	<b>Rs.321.30 crore</b>

**7.26.1 Fishery Infrastructure (Rs.220.30 crore)**

This sub-component is a part of the earlier Emergency Tsunami Reconstruction Project (ETRP) supporting financial assistance for the ongoing civil works. The sanctioned civil works are as follows:

- a) Reconstruction and Modernisation of Two Fishing Harbours in Nagapattinam District**
  - i) Nagapattinam Fishing Harbour**

Revised administrative approval has been accorded for a sum of Rs.45.21 crore for the reconstruction and modernisation of fishing harbour at Nagapattinam. Construction of diaphragm wall and

retaining wall on the Northern side and Southern side of Kaduvaiyar River has been completed and dredging the basin and lead channel are in progress. Construction of structures for land side facilities on the southern side of Kaduvaiyar River are also in progress. The construction of Sewage Treatment Plant (STP) is in progress. All works will be completed by November 2015.

## **ii) Pazhayar Fishing Harbour**

Revised administrative approval has been accorded for Rs.32.22 crore for the reconstruction and modernisation of fishing harbour at Pazhayar. Construction of groyne, diaphragm wall and approach road has been completed. Construction of structures for land side facilities and dredging the basin, approach channel and lead channel has also been completed. The construction of Sewage Treatment Plant (STP) is in progress and the same will be completed by October 2015.

## **b) Permanent Opening of Two bar-mouths**

In order to ensure safety for the navigation of fishing crafts, the Government has accorded administrative sanction for stabilization of the following two bar mouths.

**i) Uppanar river barmouth in Thirumullaivasal village of Nagapattinam District**

The Government sanctioned a sum of Rs.8.03 crore for stabilisation of bar mouth of Uppanar River at Thirumullaivasal, Nagapattinam District. All works have been completed.

**ii) Vellar river Barmouth in Cuddalore District**

The Government sanctioned Rs.14.45 crore towards stabilisation of the barmouth of Vellar River in Cuddalore District. All the works including construction of side channel guide bund, Northern guide bund, dredging etc., were completed and inaugurated by the Hon'ble Chief Minister on 27.06.2014 and put into use.

**c) Construction of Two New Fish Landing Centres**

With an objective of providing safe berthing facilities to the fishing crafts and to facilitate hygienic handling of fish catch, the Government has accorded administrative approval for the construction of two new fish landing centres at the following places:

**i) Nagore in Nagapattinam District**

The Government has sanctioned a sum of Rs.12.99 crore for the construction of a fish landing Centre at Nagore in Nagapattinam District. Works have been completed and Inaugurated by Hon'ble Chief Minister on 15.07.2015. Construction of

STP is in progress and will be completed by September 2015.

**ii) Parangipettai-Annankoil Village in Cuddalore District**

Revised administrative approval has been accorded for a sum of Rs.18.91 crore for the construction of a fish landing centre at Parangipettai – Annankoil in Cuddalore District. Dredging, construction of diaphragm wall and other land side facilities have been completed and inaugurated by the Hon'ble Chief Minister on 27.06.2014. A management committee under the chairmanship of District Collector, Cuddalore has been constituted for the maintenance of the fish landing centre is functioning.

**d) Construction of Tube ice plant at Chinnamuttom**

To improve the fish handling facilities at Chinnamuttom Fishing Harbour, tube ice plant with chill room facility and other additional facilities to the existing auction hall has been established at a cost of Rs.50 lakh. The erection of machineries has been completed by Marine Product Export Development Authority (MPEDA).

**e) Modernisation of Mallipattinam Fishing Harbour in Thanjavur District**

The Government intends to reconstruct and modernise the fishing harbour at Mallipattinam at an

estimated cost of Rs. 60 crore under CDRRP (Coastal Disaster Risk Reduction Project). The main components are L-Jetty, diaphragm wall, net mending shed, auction hall and dredging. The Detailed Project Report (DPR), Environment Impact Assessment (EIA) report and Social Impact Assessment (SIA) reports have been sent to the World Bank for approval. The process of obtaining the necessary clearances for this project is being carried out by the Consultant.

**f) Stabilisation of Barmouth at Punnakayal in Thoothukudi District**

The Government intends to stabilize the barmouth at Punnakayal in Thoothukudi District at an estimated cost of Rs. 18 crore in order to ensure safe navigation of fishing crafts. The main components are dredging, berthing structure, approach roads and linking structure. Water and Power Consultancy Services (WAPCOS) Ltd, has been appointed as Consultant to prepare the Detailed Project Report (DPR) and preparation of Environment Impact Assessment (EIA) report. The CRZ clearance has been obtained. On receipt of No Objection Certificate (NOC) from the World Bank, work will be commenced.

**g) Conducting studies for New Fishing Harbour Projects**

The World Bank has sanctioned Rs.10 crore under Coastal Disaster Risk Reduction Project (CDRRP)

to undertake studies for establishment of 7 new fishing harbours including mandatory studies for the Techno economic feasibility and preparation of Detailed Project Report (DPR). Procurement plan sent to World Bank for approval. On receipt of No Objection Certificate (NOC) from the World Bank, works will be taken up.

### **7.26.2 Fisheries Management for Sustainable Livelihood– II (FIMSUL-II)**

The following sub components are to be implemented under CDRRP funded by World Bank.

#### **i) Marine Fisheries Co-Management (Rs.23.73 crore)**

In order to ensure equitable distribution of the fisheries and better management of marine fisheries, it is proposed to establish Co-management councils in the fishing harbours, fish landing centers. During the year 2014-15, Co-management councils in three pilot areas i.e., Palk bay in Ramanathapuram district, as eco-systems based unit, Chennai fishing harbour as harbour based unit and in Kanniyakumari district as species based unit were formed. A State Level Co-Management platform consisting of experts from Central Fisheries Institute and Tamil Nadu Fisheries University has been formed for providing guidance to the fisheries management units. The Co-management

councils are proposed to be formed in the other fishing harbours and fish land centers. The Co-management councils will periodically discuss about the various options to improve the marine fisheries management. Under this sub component, the Fishing harbour management Committee members and the Co-management members are given training on Hygenic harbour management, improvement on income generation for harbour management, integrating Co-management in Harbour management. So, far 140 nos. of fishermen along with harbor committee members have been trained in Roachmanagar and Devipattinam of Ramanathapuram district, Sethubavachatram of Thanjavur district, R.Pudupattinam and Muthukuda of Pudukottai district totally.

Besides, these steps are initiated for construction of "Fisheries Information and Service Centers in Chennai, Ramanathapuram and Kanniyakumari at an estimated cost of Rs.60 lakh.

It is also proposed to distribute a pair of Life buoys to each registered motorized traditional crafts in Ramanathapuram, Pudukottai and Thanjavur districts at an estimated cost of Rs.2.50 crore. Tenders under National Competitive bidding has been initiated.



## **ii) Improved Capacities and Knowledge Management (Rs.5 crore)**

Under this component, the professional knowledge and skills of the department staff will be strengthened by imparting training and capacity building. The training would include implementation of code of conduct for responsible fisheries, fish catch data collection procedures, enforcement of rules and regulations for marine fisheries management, resource enhancement methods, co-management and participatory methodologies etc. For the year 2014-15, the Government has accorded financial sanction of Rs.1.42 crore towards upgradation of Central library in the premises of the Office of Commissioner of Fisheries, digitization of old and precious publications, conduct of training programme on Code of Conduct for Responsible Fisheries to fishermen group and to fisheries officials. The sanctioned activities are under progress.

## **(iii) Fisheries livelihood support(Rs.6.14 crore)**

This component will focus on developing livelihood enhancement and diversification both in fisheries and non-fisheries activities for the benefit of stakeholders. The stakeholders will be trained on

specific livelihood programmes which will include skill development, market support and financial assistance. During the year 2014-15, the Government has accorded financial sanction for Rs.1.14 crore for mariculture activities, cage farming, capacity building of Stake holders / Departmental Staff, etc. Under this sub component, it is proposed to establish Fish Kiosks in 12 places as livelihood support for the benefit of Fisherwomen widows in coastal districts at an estimated cost of Rs.55 lakh. Further, open sea cage farming, fish marketing with Fish cart are proposed to be implemented under this sub component.

**(iv) Management Support (Rs.4 crore)**

Under this component, the Government has accorded administrative sanction for Rs.4 crore for establishing an exclusive Project Monitoring and Implementation Unit (PMIU) for co-ordinating the implementation of project activities. In this regard, the Government has sanctioned a total of 29 posts for effective implementation of the scheme. The sanctioned post include, one post of Addl. Director of Fisheries, Deputy Director of Fisheries, 3 post of Assistant Director of Fisheries, 8 post of Inspector of Fisheries, Computer operators, Office Superintendents etc., Besides this one Inspector of police and 2 Sub

Inspector of Police have been posted on deputation for effective implementation of seamless communication systems. The staff for the project implementation cell has been posted and functioning from the Head Quarters.

**(v) Providing Wireless Communication facilities to ensure Sea safety (Rs.62.14 crore)**

To ensure the safety and security of the fishermen, disseminate information about weather warnings and availability of fishery resources, the World Bank has sanctioned a sub-component to provide Wireless communication network facilities to all fishing crafts operating in all the coastal Districts of Tamil Nadu at an estimated cost of Rs.62.14 crore.

The Government has proposed to establish shore infrastructure and control rooms in all the 13 coastal districts. A central control room would be operated in Chennai to monitor the overall fishing activities of the state. As part of coastal infrastructure, it is proposed to utilize 8 BSNL Towers located in the shore area on rental basis in addition to construction of 7 new towers. For providing technical details for construction of new tower, the 'Structural Engineering

Research Centre' was addressed. The application for the networking license for the new station and control room filed with WPC Delhi and online uploading completed. So, far 18,400 nos of individual wireless operating license have been filed with WPC. For procurement of 5 watt and 25 watt VHF end user equipments, bids under International competitive bidding procedure has been floated.

### **7.27 Construction of Fish Landing Centres under Tsunami Rehabilitation Programme (TRP)**

The Government has sanctioned a total amount of Rs.49.97 crore for the construction of ten new fish landing centres (FLC) at various coastal villages. Among them, construction of all Fish Landing Centres was completed and put into use except Annamalaichery and Periyamangodu in Tiruvallur District. For Annamalaicherry and Periyamangodu clearance has been obtained from National Board for Wild Life. Government of India has been addressed for exemption to make payment of Net present value for the land.

## **7.28 NABARD Schemes**

### **a) 2013-14(RIDF XIX)**

During 2013-14, the Government has issued administrative approval for Rs.106.20 crore for the improvement of Chennai Fishing Harbour, stabilisation of Vettar barmouth and development works at Vellar barmouth.

#### **i) Improvement and additional works at Chennai Fishing Harbour**

The Chennai Fishing Harbour is overcrowded. Administrative approval has been accorded by the Government for improvement of the harbour and taking up additional works at Chennai Fishing harbour at a cost of Rs.75 crore. A sum of Rs.75 crore has been released in 4 instalments and the works are in progress. The work will be completed by November 2015.

#### **ii) Permanent stability of Vettar barmouth at Nagore in Nagapattinam District**

The Government accorded administrative approval for Rs.11 crore and released in two installments for the permanent stability of Vettar barmouth at Nagore. The Groyne work for a total length of 300m was completed.

### **iii) Development works for Vellar barmouth at Parangipettai in Cuddalore District:**

The Government also accorded administrative approval for Rs.20.20 crore based on the recommendation of the experts, for the development works at Vellar bar mouth with assistance from National Bank for Agriculture and Rural Development (NABARD) and released a sum of Rs. 13.45 crore in 3 installments. The works are in progress and will be completed shortly.

### **b) 2014-15 (RIDF XX)**

The Government has accorded administrative sanction for Rs.79.40 crore for the construction of 9 fish landing / beach landing centres and development of 4 fish seed farms.

### **i) Construction of 6 Fish Landing Centres in Ramanathapuram District**

During the Conference of District Collectors and Police Officers on 13-12-2013, the Hon'ble Chief Minister of Tamil Nadu announced that Fish Landing Centres would be constructed at 6 locations viz., Dhanushkodi, T.Mariyur, Pamban, Muguntharayachatram, Thangachimadam and Vedhalai in Ramanathapuram District.

Accordingly, the Government accorded administrative approval for construction of fish landing centres at a total estimated cost of Rs.44.70 crore. Agency fixed. The Hon'ble Chief Minister laid foundation stone on 15.07.2015.

**ii) Construction of 2 Fish Landing Centres in Kanniyakumari District**

The Government accorded administrative sanction for the construction of Fish Landing Centres at Thoothur and Iraiyanthurai in Kanniyakumari district with financial assistance from NABARD at an estimated cost of Rs.12.15 crore. Agency fixed. The Hon'ble Chief Minister laid foundation stone on 15.07.2015.

**iii) Construction of Fish Landing Centre at Kovalam in Kancheepuram District**

Administrative sanction has been accorded by the Government for the construction of Fish Landing Centre at Kovalam in Kancheepuram district with financial assistance from NABARD at an estimated cost of Rs.5 crore. Due to severe erosion in the coast line of Kovalam village, short groyne are proposed as anti sea erosion measures based on the surveys and studies by IIT, Madras. The cost of the project works out to Rs.18.30 crore which includes Fish Landing Centre and anti sea erosion works.

#### **iv) Development of 4 fish seed farms**

The fish farms at Bhavanisagar in Erode district, Parangipettai in Cuddalore district, Vaigai Dam in Theni district and Kodaikanal in Dindigul district will be developed at a total cost of Rs.17.55 crore. Agency fixed. The Hon'ble Chief Minister laid foundation stone in 15.07.2015.

#### **7.29 National Fisheries Development Board (NFDB) Scheme**

The Government accorded administrative approval to upgrade/ expand / modernise the following fishing harbours / fish landing centres at an estimated cost of Rs.30.20 crore during 2012-13 and 2013-14.

##### **i) Cuddalore Fishing Harbour**

Modernisation of Cuddalore fishing harbour was undertaken at a cost of Rs.10.35 crore. The modernisation work consists of diaphragm wall, wharf, surface hardening and drainage. Works completed and the harbour is put into use.

##### **ii) Mudasalodai Fish Landing Centre in Cuddalore District**

Administrative approval has been accorded for a value of Rs.7.78 crore for the extension of wharf and construction of net mending shed at Mudasalodai Fish



Landing Centre in Cuddalore District. All the works were completed and put into use.

### **iii) Thoothukudi Fishing Harbour**

Administrative approval was accorded for the modernisation of Thoothukudi fishing harbour at a cost of Rs.12.05 crore. This work consists of modernisation of wharf, parking area, auction hall, drainage works, etc. All the works have been completed.

## **7.30 Other Schemes**

### **i) Corpus fund for conducting model studies**

As announced by the Hon'ble Minister for Fisheries on the floor of Assembly during the Demand for grants for Fisheries Department-2012-13, a separate corpus fund of Rs.2 crore has been created for preparation of Techno-Economic Feasibility Report and conduct of Model Studies for construction of New Fishing Harbours / Fish Landing Centres. Detailed Project Report is prepared. Model study work is under progress at Tharangambadi.

### **ii) Permanent stability of barmouth with Groynes at Pulicat Lake in Thiruvallur District**

The Government have accorded administrative approval and financial sanction for Rs.40 lakh for the preparation of Techno – Economic Feasibility Report

and conduct of model studies for the permanent stability of bar mouth with Groynes at Pulicat lake in Tiruvallur district.

The Indian Institute of Technology (IIT) Madras has under take the study and furnished the report. On getting statutory approval, work will be taken up.

**iii) Construction of Integrated Office building at Nagapattinam and Ramanathapuram**

The Hon'ble Chief Minister has announced under Rule 110 in the Legislative Assembly on 04-08-2014, that "In order to enhance the infrastructural facilities of the Fisheries Department, integrated office buildings will be constructed at Nagapattinam and Ramanathapuram at a cost of Rs.3.60 crore". Accordingly, the Government have accorded administrative approval for the construction of integrated office building at Nagapattinam and Ramanathapuram, at a cost of Rs. 1.80 crore each. As per the architect design, to construct the integrated office buildings at Nagapattinam and Ramanathapuram Districts tenders have been called for. Agency fixed. The Hon'ble Chief Minister laid foundation stone in 15.07.2015.

**iv) Studies for construction of Fishing Harbours at Ennore and Vellapallam and renovation of Cuddalore old town Fishing Harbour.**

The State Government have also sanctioned Rs.4 crore for preparation of Techno Economic Feasibility Report (TEFR) and to conduct model studies for construction of (i) Tuna Fishing Harbour at Ennore in Tiruvallur District (ii) Fishing Harbour at Vellapallam in Nagapattinam District and (iii) Renovation of existing Fishing Harbour at Old Town in Cuddalore District. Consultancy services appointed and study is in progress.

**7.31 Koodankulam Nuclear Power Project Neighbourhood Development Programme**

Koodankulam Nuclear Power Project Neighbourhood Development Programme earmarked Rs. 500 crore for the overall development of neighbourhood villages of Koodnakulam Nuclear Power Plant, the Government have allocated Rs. 92 crore for the marine infrastructure development for the benefit of the fishermen.

Under this project, construction of fish landing facilities at Uvari Village at a cost of Rs.66.70 crore is in progress. Agency fixed for the Construction of Groynes at Koothankuzhi and Perumanal at a total estimated cost of Rs. 20 crore (Rs.10 crore each) and

for construction of net mending shed at Koottapanai at an estimated cost of Rs. 30 lakh near Koodankulam.

### **7.32 Establishment of Fish Processing Parks in Tamil Nadu**

The Hon'ble Minister for Finance in the budget speech 2011-12 announced the establishment of Fish Processing Parks in 13 selected Fishing towns in a phased manner under Public-Private-Partnership mode, in order to develop adequate infrastructure facilities support required to sustain development in Fisheries Sector. To provide Transaction Advisory Services and to carry out the Feasibility study, a consultant was appointed who has completed various studies and completed the feasibility studies for Cuddalore and Nagapattinam districts. As a part of convergence, land allotment has been provided by State Industries Promotion Corporation of Tamil Nadu (SIPCOT) in Thiruvallur and Thoothukudi districts to prospective developers for establishment of Fish processing park.

Suitable sites have been selected in the districts of Cuddalore, Nagapattinam, Ramanathapuram and Kanniyakumari. Tenders for providing land on lease basis to the prospective developers for the establishment of fish processing parks in the above districts floated on 25.07.2015.

### **7.33 Setting up of a world class Oceanarium at Mamallapuram**

The Hon'ble Minister for Finance in the Budget speech for the year 2013 -14, announced to establish a World Class Oceanarium at Mamallapuram in Kancheepuram District, at a cost of Rs.250 crore under Public Private Partnership mode. This Oceanarium will be the first of its kind in the country and will be on par with international standards, which will replicate a miniature model of an ocean, exhibiting live marine aquatic fauna and flora in the natural environment. The Oceanarium will be an infotainment park for the National and International tourists as well as a platform for research and awareness.

A suitable site located near the popular tourism spots and beach to an extent of 13.94 acres, at Mamallapuram, belonging to Tamil Nadu Tourism Development Corporation Limited has been identified. A consultant has been appointed to conduct Techno Commercial Feasibility Study and to provide Transaction Advisory Services. After several studies detailed concept, components, related entertainment facilities and feasibility have been finalized. Global tender was floated and bids were received. The qualified bids are in the next stage of processing.

### **7.34 Renovation and Establishment of Sports Fishing-cum-Eco Park at Chetpet lake, Chennai**

The Hon'ble Chief Minister of Tamil Nadu announced to establish "Sports Fishing-Cum-Eco Park" at Chennai-Chetpet Lake at a cost of Rs.42 crore. A sum of Rs.32.50 crore has been released from the Environment Protection and Renewable Energy Development Fund (EPREDF) of the Department of Environment and Forests for implementing the project. After the preparation of detailed project report, the foundation stone for this project was laid by the Hon'ble Chief Minister on 27.06.2014.

The project is being implemented in two packages, in which civil components like boat jetty, angling spots, Multi Level Car Parking (MLCP), Park, recreation centre, sea food court, walking and jogging tracks etc are being implemented by the Fisheries Department. For landscape design and Project Management, a consultant has been appointed and concept designs have been finalized. Works such as desilting of lake, strengthening of bund, formation of new bunds and compound wall construction around the lake have been completed. Construction of other buildings is in progress. The Chennai Rivers Restoration Trust (CRRT) will take up other

Environmental and Ecological components after completion of civil structures.

**7.35 Administrative Office building for Tamil Nadu Fisheries Development Corporation Ltd., (TNFDC) and Tamil Nadu State Apex Fisheries Co-operative Federation Ltd., (TAFCOFED)**

The Government have accorded administrative approval for the Construction of office building for Tamil Nadu Fisheries Development Corporation Ltd., and Tamil Nadu State Apex Fisheries Co-operative Federation Ltd., at an estimated cost of Rs.6 crore at Neelankarai in Chennai. Action will be taken to commence the work after disposal of court case which is pending in the Hon'ble High Court of Madras.

**8. INLAND FISHERIES**

Tamil Nadu possesses 3.83 lakh ha of effective inland water resources comprising of reservoirs, major irrigation tanks, minor irrigation tanks and short seasonal tanks and ponds, rivers, backwaters and derelict water bodies. These water bodies mainly depend on the seasonal rains and the water retention period of most of the water bodies in Tamil Nadu is very short. Poor and erratic rain fall, less retention of water in the water bodies, mismatch of breeding

season of fishes with limited water availability for quality fish seed production, unavailability of low cost and quality feed are the factors responsible for limiting inland fish production. The traditional carp culture including composite fish culture requires water for a culture period of 8 to 12 months. This carp culture does not suit short seasonal water bodies which have water retention for 4 to 5 months only. In order to overcome the limitations, the Fisheries Department is taking suitable measures by introducing fast growing fish species, such as Amur Carp, Genetically Improved and Farmed Tilapia (GIFT), 'Jayanthi Rohu' and Pangasius in short seasonal water bodies. So far 590 number of farm ponds have been stocked with GIFT Tilapia / Pangasius / Amur Carp and fish culture is under progress. To improve the inland fish production in Tamil Nadu, the Fisheries Department is taking the following measures:

- Introduction of in-situ cage / Pen rearing of fish seeds
- Adopting intensive cage farming in reservoirs
- Creation of fish seed banks to ensure the availability of fish seeds throughout the year
- Intensive fish culture in irrigation systems
- Promoting fish culture in farm ponds



- Propagation of hatchery technology for the fast growing fish species
- Encouraging farmers by providing subsidy for setting up of fish/prawn hatchery, fish culture in grow out ponds, feed mill and hygienic marketing infrastructure.

### **8.1 Reservoir Fisheries**

Reservoirs are potential resource for inland fisheries development, where the fishery comprises of both wild and stocked varieties. There are 61 reservoirs under the control of the Fisheries Department comprising of major, medium and small reservoirs. Among these, 53 reservoirs are directly managed by the Fisheries Department and 8 reservoirs are managed by the Tamil Nadu Fisheries Development Corporation Limited (TNFDC). The fishery resources are being exploited by licensing system, share fishing and leasing. The reservoirs are stocked with fingerlings produced from the departmental fish seed farms.

In order to optimise the fish production, the Tamil Nadu Government have taken a decision to lease out fishery rights in 53 reservoirs that are directly managed by the Fisheries Department. Leasing out of

these reservoirs are being carried out in a phased manner. The lessee has to employ fishermen on share basis for harvesting of fish so as to safeguard the interests of the inland fishermen and increase the inland fish production. So far, 35 reservoirs (7 reservoirs during 2012-13, 10 reservoirs during 2013-14 and 18 reservoirs in 2014-15) were leased out and a total cumulative amount of Rs.12.10 crore was realised since 2012-13. Action is being taken to lease out the remaining reservoirs.

## **8.2 Fish seed Production / Fish seed Rearing Centres**

There are 4 Fish Seed Production Centres functioning under the control of Fisheries Department and another 4 fish seed production centre have been established at Poondi in Tiruvallur District, Thirukampuliyur at Karur District, Thattankulam in Thanjavur District and Chittar in Kanniyakuari District which are expected to function to its full potential in the current year. The fish seed production centre under the TNFDC is functioning at Sathanur in Tiruvannanmalai District. A record production of 35.28 crore early fry was produced in the year 2014-15, which surpassed previous record of 28 crore during 2013-14.

There are 33 fish seed rearing centres functioning under the control of the Fisheries Department and 5 fish seed rearing centres under the control of Tamil Nadu Fisheries Development Corporation (TNFDC). During 2014-15, 295.69 lakh late fry and 332.50 lakh fingerlings have been produced from the fish seed rearing centres under the control of Fisheries Department and supplied for stocking in Government and Private water bodies.

The annual Fish fingerling requirement of the state is estimated as 70 crore. The fingerling production during 2014-15 was 45 crore and the gap between seed demand and supply was 25 crore .The fisheries department has undertaken the repair and renovation of Government fish seed farms as well as construction of new fish seed farms by Government and Private entrepreneurs under various schemes such as NADP, NMPS, IAMWARM, WGDP, NABARD etc, an additional space of 40 ha has been created from which 21 crore fingerlings could be produced every year and present fish seed potential has been increased to 45 crore. This effort has narrowed down the demand for fish fingerlings from 46 crore to 25 crore.

### **8.3 District Fish Farmers Development Agencies (DFFDA)**

In Tamil Nadu, the newly formed District Fish Farmers Development Agencies (DFFDA) by merging FFDA and BFDA have started functioning in 31 districts except in Chennai, in order to popularise fish culture activities and generate employment opportunities in rural areas. The main activities are providing technical guidance and encouraging farmers to take up fish culture by extending subsidy assistance, besides imparting technical training and extension support to fish farmers. These District Fish Farmers Development Agencies are functioning under the Chairmanship of the respective District Collectors.

To promote sustainable, eco-friendly coastal aquaculture practices, all District Fish Farmers Development Agencies (DFFDA) functioning in Coastal Districts of Tamil Nadu are involved in promoting and regulating brackish water fisheries development in co-ordination with CAA. So far 1,694 shrimp farms are registered under Coastal Aquaculture Authority (CAA).

### **8.4 Western Ghats Development Programme**

The water bodies of Western Ghats in Tamil Nadu have rich fish diversity. The Western Ghats which extends from Erode District to Kanniyakumari District

is a habitat for several unique endemic fish species. Under this scheme, various fisheries development activities are being implemented every year.

### **8.5 Development of Cold Water Fisheries**

The upland /Cold waters that are available in The Nilgris District and in some parts of Western Ghats offer potential for developing sport fishery. A trout hatchery at Avalanche in The Nilgris is functioning since 1906. The trout fingerlings produced from the hatchery are being stocked every year in the trout streams as a measure of stock enhancement.

## **9. RESEARCH**

The Fisheries Department has two laboratories which are functioning at Chennai and Thoothukudi, catering to the needs of fish/shrimp farmers in analysing the soil and water quality apart from assisting in disease diagnosis of fish/shrimp. These laboratories in collaboration with Tamil Nadu Fisheries University (TNFU), Nagapattinam and Central Institutes viz., Central Institute of Freshwater Aquaculture (CIFA) Bhubaneshwar, Central Institute of Brackishwater Aquaculture (CIBA) Chennai, Central Marine Fisheries Research Institute (CMFRI) Kochi are

disseminating new technologies and propagating research findings to the stakeholders.

The Fish disease Diagnostic unit at Chetpet, Chennai has been strengthened with advanced equipment at a cost of Rs. 1.25 crore with financial support from NADP. This laboratory is catering to the needs of aqua farmers and ornamental fish culturists in the state with a well equipped mobile laboratory for analyzing soil and water quality at field level.

## **10. EXTENSION AND TRAINING**

In order to have effective transfer of technology and propagation of welfare schemes of the Government, to the fishers, fish farmers and other stakeholders, extension and training plays a vital role. Five propaganda vehicles exclusively designed with inbuilt extension aids are included for conducting awareness campaigns in various fishing villages and inland fishing areas. The Department participates in exhibitions, trade fair, Uzhavar peruvizhas and disseminate technical knowledge to fishermen/farmers.

Various need-based training programmes for stakeholders are conducted with the funding support of National Agriculture Development Programme (NADP),

National Fisheries Development Board (NFDB) and Government of India.

### **10.1 Fisheries Statistics**

Survey of "Marine and Inland fish production and its utilities" in Tamil Nadu is being undertaken by Fisheries Department with funding assistance from Government of India through Department of Economics and Statistics. This survey would help to draw a long term plan for development of Fisheries sector and reflect the contribution of this sector to the state economy by arriving at the GSDP of Tamil Nadu. Survey is undertaken during 2014-15 in all the districts of Tamil Nadu at total project cost of Rs. 37.79 lakh.

### **10.2 Maritime Education for Fisher Youth**

To upgrade the skills and to create employment opportunities to the fisher youth, the Government extends financial assistance to the children of active fishermen families at the rate of Rs.50,000/- per person for undergoing 6 specific courses on Maritime Education notified by the Government. An amount of Rs.50 lakh was sanctioned for the year 2013-14, out of which financial assistance was rendered to 139 fisher youth. For the year 2014-15 an amount of Rs.50 lakh

has been sanctioned by the Government and amount of Rs.20 lakh has been released to 56 fisher youth.

The Scheme will be continued in 2015-16.

### **10.3 Creating employment opportunities to rural women by establishing ornamental fish hubs**

To promote rural employment and entrepreneurship among rural women in the ornamental fisheries sector, the Hon'ble Minister for Fisheries has announced during the Budget Session 2014-15 that ornamental fish hubs will be established in 10 districts of Tamil Nadu. Under this scheme, it is envisioned to create ornamental fish hubs with 25 units of backyard ornamental rearing units in each district, five ornamental fish marketing units with a modified vehicle for transportation of live ornamental fishes at a total cost of Rs 2.13 crore, besides providing ornamental fish culture training to the beneficiaries at free of cost. Every beneficiary will be provided with Rs 50,000/- as subsidy being 50% of the cost involved in establishing back yard ornamental fish unit. Funds to the tune of Rs 1.06 crore has been received from the National Fisheries Development Board (NFDB), Hyderabad as first instalment for implementing the scheme. First instalment of subsidy amount has been released to the selected eligible



applications of the ten districts, necessary training has been imparted and the establishment of ornamental fish units by the beneficiaries is in progress.

## **11. SPECIAL PROJECTS**

### **11.1 Tamil Nadu Irrigated Agriculture Modernisation and Water Bodies Restoration and Management (TN IAMWARM) project**

The World Bank funded TN-IAMWARM Project envisions improving the service delivery and enhancing unit productivity of water in selected sub basins. In order to improve the fish productivity of the water bodies, quality fish seeds are produced and stocked. Several activities such as aquaculture in farm ponds, fish seed rearing in cages, construction of earthen fish seed rearing farms, improving the existing Government fish seed rearing farms, cage farming, promoting ornamental fish culture and setting up of fish kiosks for fish marketing are being undertaken. Under this project, so far, 15 masonry fish seed banks, 109 earthen fish seed banks, 4 fish seed breeding and production centers, 49 ornamental fish culture units and 35 modern fish kiosks have been established. So far 831 farm ponds have been stocked with fish fingerlings and brought under fish culture.

During September 2014, the World Bank team reviewed the progress of TN-IAMWARM activities and the World Bank fisheries specialist appreciated the strategies adopted by the department which resulted in the increase of fish productivity from 100 Kg/ha/annum to 200 Kg/ha/annum in irrigation tanks. Similarly, the farm pond productivity has increased to 4.50 MT/ha.

For the year 2014-15, Rs.2.05 crore was sanctioned for implementation of additional fisheries activities which have been completed in 40 sub-basins covering 14 Districts and fisheries activities mainly, low cost fixed cage farming in 100 irrigation tanks besides stocking of fish fingerlings in 6,300 ha. of inland water bodies and fish culture were undertaken. Fixed cage farming has resulted in a production 600 kg per 100 m<sup>3</sup> size of cages. Under IAMWARM floating cage was established in Kolvai lake and resulted in GIFT production of 6 tonnes in the first crop.

### **Overseas Training Programme:**

During October 2014, 10 Officials were deputed to Vietnam and 9 officials were deputed to China for overseas training programme in various new technologies in Fisheries development and Aquaculture. The trainees have gained knowledge in modern fish culture activities such as cage culture,

Intensive fish culture in ponds, GIF Tilapia culture, Intensive Pangasius culture, Integrated fish culture and hygienic fish marketing.

The IAMWARM scheme has been successfully completed on 30.06.2015.

## **11.2 National Agriculture Development Programme**

During 2014-15, the following programmes are being implemented under NADP at a total cost of Rs.5.10 crore.

### **1. Development of quality brood stock with infrastructure facility for fish seed production at Manimuthar and Bhavanisagar**

Quality fish Seeds will be made available for fish culture thereby enhancing the fish production of the State. Good quality fish brood stock is the primary requisite for production of good quality fish seed. Proper maintenance and monitoring of the brood stock by careful selection of breeders and feeding nutritious diet would lead to disease resistant good quality fingerling production. In order to overcome the chances of inbreeding stress and have a quality brood stock, it is proposed to bring good quality fish breeders from different regions like Andhra Pradesh, Odisha, West Bengal, Uttar Pradesh and Bihar have stocked in

the fish farm. An amount of Rs. 63.73 lakh was sanctioned for Manimuthar Government fish seed farm and Rs. 62.62 lakh for Bhavanisagar Government fish seed farm and the works are in progress. The work will be completed during October 2015.

## **2. Upgradation of Fishing Efficiency of inland Fishermen of Tamil Nadu**

The fishing nets used by the fishermen and fish farmers last for an average period of 3 years. In order to help the fishermen and fish farmers of the state to procure new fishing nets and to upgrade the fishing efficiency of inland fishermen of Tamil Nadu a total amount of Rs. 78.275 lakh was released. The members of fishermen co-operative society fishing in reservoirs, ponds and tanks are provided with fishing nets at 50% subsidy. Similarly, for the fish farmers engaged in fish seed rearing and fish culture activities, drag nets are provided at 50% subsidy. Subsidy has been released to 1063 beneficiaries selected for the year 2014-15 and the scheme has been completed.

## **3. Establishment of Magur (*Clarias batrachus*) hatchery at Kancheepuram district**

'Magur' is one of the best choices for the fish farmers and it is more suitable for culture in derelict water bodies and swamps. The 'Magur' seed

availability is very less and have to get from natural collection from the water bodies in Tamil Nadu. An amount of Rs.58.43 lakh was released to establish a 'Magur' hatchery at Kancheepuram District so as to meet the demand of 'Magur' seeds and the work is in progress. It is expected to be completed by December 2015.

#### **4. Cage culture demonstration in rural tanks**

Cage culture of fish helps to increase the unit productivity of fish and it can be implemented in most of the water bodies with sufficient depth and needs proper stocking of seeds, feeding, sampling, monitoring and better management. Tamil Nadu has water bodies like panchayat tanks, village tanks and irrigation tanks which have lot of potential to implement the cage culture of fish. To demonstrate cage culture activity in tanks to the farmers/lessee/Fishermen cooperative society members with an objective to enhance their income through fish culture totally Rs. 1.33 crore was sanctioned and scheme is in progress and expected to be completed by December 2015. Implementation of this scheme is expected to yield fish production of 2 tons per cage unit.

## **5. Implementation of fish culture in multipurpose farm ponds of Tamil Nadu**

Fish culture in multipurpose farm ponds received a greater response from agricultural farmers during the year 2013-14. Further, to continue the scheme during 2014-15, an amount of Rs.1.14 crore has been allocated and 934 ponds covering an area of 133.35 acres have been stocked with fish seed. The farmers are provided with 50% subsidy for seeds, feed and manuring. The scheme is expected to be completed by October 2015 which would result in additional fish production of 75 tons.

### **11.3. National Mission for Protein Supplement (NMPS) Integrated Aquaculture Unit**

Under NMPS 2013-2014, the Government has sanctioned Rs.5.05 crore for establishment of integrated fish culture units at Thanjavur and Tiruvarur. and the progress is furnished in the Table 7.

**Table7: National Mission for Protein Supplement  
(2013-14)**

<b>Sl. No.</b>	<b>Name of the Project</b>	<b>Amount Sanctioned (Rs.in lakh)</b>	<b>Remarks</b>
1	Integrated Aquaculture unit at Thanjavur	252.50	So far, 19 beneficiaries for construction of nursery covering an area of 5.76 ha and 37 beneficiaries for construction of Grow out pond covering an area of 20 ha have been selected and subsidy released. Construction of fish seed hatchery, Fish marketing infrastructure, are under progress
2	Integrated Aquaculture unit at Tiruvarur	252.50	So far, 9 beneficiaries for construction of nursery covering an area of 5.4 ha and 24 beneficiaries for construction of Grow out pond covering an area of 18 ha have been selected and subsidy released. Construction of fish seed hatchery, Fish marketing infrastructure, is under progress.
<b>TOTAL</b>		<b>505.00</b>	

**11.4. Schemes under National Fisheries Development Board – Inland Fisheries  
2013-14**

The National Fisheries Development Board (NFDB), has extended financial assistance for a sum of Rs.82.01 lakh for the year 2014-15 for undertaking the following inland fisheries activities in Tamil Nadu.

## **1. Introduction of Tilapia culture in farm ponds of Tamil Nadu**

Tamil Nadu being a water starved State mainly depends on monsoon rain for agriculture activities. The multipurpose farm ponds constructed under MGNREGS have water retention period of 4-6 months only. The Fish culture in multipurpose ponds will be more profitable by introducing fast growing short seasonal fish variety such as Genetically Improved Farmed Tilapia (GIFT), Pangassius etc. Genetically Improved Farmed Tilapia is having desirable qualities like high stocking density, resistance to disease and fast growth in nature. The Fisheries Department has stocked GIFT seeds in muliti purpose farm ponds with the financial assistance of Rs 13.38 Lakh from NFDB as first instalment. So far, 500 farm ponds have been stocked with GIFT seeds by the Department and a fish production of 66 tons was achieved. Second instalment of Rs.12 lakh has been released by NFDB and the scheme will be implemented in another 500 farm ponds.

## **2. Social Fisheries Development in Panchayat waters of Tamil Nadu**

Though the water bodies such as, Ooranies, Ponds and Minor irrigation tanks vested with Panchayats / Panchayat Unions are having Potential for



fish culture, the water bodies are under utilized in terms of fish production. The unit fish productivity in such water bodies is very less due to poor and lack of scientific fish culture practices adopted. In order to ensure effective utilization of these resources, the fisheries department has stocked 450 ha area of panchayat tanks in 30 districts of Tamil Nadu. Fish culture is under progress.

### **3. Fish Farmers Mela in Delta Districts**

More than 50 % of the inland fish production of the State comes from the delta districts. To create awareness on fish culture among the agriculture farmers, to propagate the ongoing various Government subsidy schemes, to educate the farmers about recent trends in aquaculture activities, to address the problems faced by the fish farmers of Delta districts and to share ideas among fish farmers. Fish Farmers Melas were conducted in Thanjavur, Thiruvarur, Nagapattinam, Trichy, and Karur districts at a cost of Rs 12.50 lakh with financial assistance from NFDB. This scheme is completed.

### **4. Training to the Fishers on marine Ornamental Fish Seed Rearing and Marketing in Ramanathapuram District**

To enhance the livelihood and socio economic condition of fishers especially the fisherwomen,

training on marine ornamental fish rearing and marketing is provided so as to create alternate livelihood and employment opportunity to the trouble prone fishers of Ramanathapuram district. An amount of Rs 1.25 lakh was sanctioned and the scheme is completed.

#### **5. Training Programme on Capacity Building to the Staff of the Fisheries Department at Rajiv Gandhi Centre for Aquaculture (RGCA) at Vijayawada**

To create awareness among aqua farmers in Tamil Nadu and propagate GIFT Tilapia, the field staff of Fisheries Department are being provided training at RGCA, Vijayawada at a cost of Rs.14 lakh. So far, 60 field staff were trained at RGCA, Vijayawada.

#### **6. Culture of Cobia Fish in Open Sea cages in Ramanathapuram District**

Sea farming is one of the options for diversification of fishing in the fully exploited inshore waters. Sea farming is being practiced in most of the South East Asian Countries as a commercial venture. The Palk Bay areas in Ramanathapuram district are suitable for taking up mariculture activities. Self Help Group- namely "Cobia' Aquaculture Fishermen Welfare Association" formed by trawl fishermen in Ramanathapuram district were provided with subsidy

for cages to undertake Cobia fish culture so as to switch over them into mariculture activity. The National Fisheries Development Board (NFDB) has released Rs.19.88 lakh for undertaking Cobia Fish Culture in 10 cages, with the technical support of Central Marine Fisheries Research Institute, Mandapam. The Cobia fingerlings stocked in cages attained a weight of 1.5 kg. to 2.5 kg. within six months period. About 13 tons of fishes were harvested and earned gross revenue of Rs.35 lakh. The success of this technology will pave the way for extension of mariculture activities in the region

## **12. PART- II SCHEMES-2014-15**

During 2014-15, the following schemes are being implemented at a cost of Rs.85.90 lakh under Part II Scheme. The status of the schemes is depicted in the table 8.

**Table 8: Status of Implementation of Part II schemes (2014-15)**

<b>Sl. No</b>	<b>Details of Scheme</b>	<b>Amount Sanctioned (Rs in lakh)</b>	<b>Present Stage</b>
1. a)	Construction of new office building to the Assistant Director of Fisheries at Royapuram, Chennai district	30.00	Construction of new office building completed.
b)	Construction of new office building to the Sub inspector of Fisheries at Kodaikanal, Dindugal District.	15.00	Work order issued. Work is in progress.
c)	Construction of new office building to the Assistant Executive Engineer, Fishing Harbour Project Sub division at Thoothukudi.	22.00	Work order issued. Work is in progress.
2.	Providing Computer with accessories and Telephone connection to the newly created and existing offices of Fisheries Department.	12.40	22 computers with accessories were purchased and supplied to the newly created and existing offices. Telephone connection was provided to the office of ADF Dharmapuri and ADF Ariyalur. Scheme was completed.
3.	Providing a Vehicle (Jeep) to the Office of the Assistant Director of Fisheries, Erode in lieu of condemned vehicle.	6.50	One vehicle (Jeep) was purchased in lieu of condemned vehicle for the office of the Assistant Director of Fisheries Erode. Scheme completed.
<b>Total</b>		<b>85.90</b>	

### **13. FISHERIES CO-OPERATIVE SOCIETIES**

The Fisheries Co-operative Societies play a pivotal role in the upliftment of fishermen and fisherwomen in the State. The Department is executing various welfare schemes to fishermen / fisherwomen through Fisheries Co-operative Societies. About 7.04 lakh fishermen / fisherwomen have been enrolled as members of 1,413 primary Fishermen / Fisherwomen Co-operative Societies / District Co-operative Federation / Tamil Nadu State Apex Co-operative Federation. Fishermen Co-operative Societies are operating 54 full time Fair price shops and 13 part time fair price shops.

Elections were conducted for the Fisheries Cooperative Societies functioning under the control of Commissioner of Fisheries and 9,903 democratically elected Board of Directors assumed charge of 1,411 cooperative Societies. Proposals for conduct of election to the remaining two newly registered primary fisheries co-operative societies have been sent to Tamil Nadu Co-operative societies Election Commission. The details of the Societies / Members are given in the following Table 9:

**Table 9: Details of Members of Fisheries  
Co-operative Societies**

<b>Type of Society</b>	<b>No. of Societies</b>	<b>Members enrolled</b>
<b>Primary Co-operative Societies</b>		
Marine Fishermen Co-operative Societies	557	3,55,717
Marine Fisherwomen Co-operative Societies	452	2,46,417
Inland Fishermen Co-operative Societies	300	85,458
Inland Fisherwomen Co-operative Societies	68	7,662
Other types societies	24	7,202
<b>Total Number of societies and members enrolled.</b>	<b>1,401</b>	<b>7,02,456</b>
District Fishermen Co-operative Federation	<b>11</b>	<b>982</b>
Tamil Nadu State Apex Fisheries Co-operative Federation	<b>1</b>	<b>673</b>
<b>Total</b>	<b>1413</b>	<b>7,04,111</b>

#### **14. TAMIL NADU FISHERMEN WELFARE BOARD (TNFWB)**

Tamil Nadu Fishermen Welfare Board established with a view to provide and ensure social security and the well being of fishermen and labourers engaged in fishing and allied activities, is functioning with its Head Office at Neelankarai, Chennai. A total of 4.35 lakh fishermen / fisherwomen labourers are enrolled as members in the Board. As per the provisions of the TNFWB Act, so far a sum of

Rs. 13.18 crore has been collected as contribution from various agencies.

The Welfare schemes being implemented by the Tamil Nadu Fishermen Welfare Board are as follows (Table-10)

**Table 10: Details of Welfare Schemes being implemented by the Fishermen Welfare Board**

Sl. No	Details of Relief Assistance		Relief / Assistance per beneficiary (Amount in Rs)		
1.	Accident Relief				
	a) Death due to Accident		1,00,000		
	b) Loss of both hands		1,00,000		
	c) Loss of both legs		1,00,000		
	d) Loss of one hand and one leg		1,00,000		
	e) Loss of sight in both eyes		1,00,000		
	f) Loss of one hand or one leg		50,000		
	g) Loss of limbs due to Major injuries other than the above items		20,000		
2	Death during fishing or after fishing due to reasons other than Accidental death		1,00,000		
3	Fishermen Missing during fishing		1,00,000		
4	Natural Death		15,000		
5	Funeral Expenses		2,500		
6	Assistance for Education to son and daughter of the Members	Day scholar		Hostellier	
		Boys	Girls	Boys	Girls
	a) Pass in 10 <sup>th</sup> Std	1,250	1,500	---	---
	b) Pass in 12 <sup>th</sup> Std	1,750	2,000	---	---
	c) ITI and Polytechnic	1,250	1,750	1,450	1,950
	d) Bachelor Degree	1,750	2,250	2,000	2,500
	e) Post Graduate Degree	2,250	2,750	3,250	3,750
	f) Under Graduate Professional Courses (Law, Engineering, Medicine, etc.)	2,250	2,750	4,250	4,750

	g) Post Graduate Professional Courses	4,250	4,750	6,250	6,750
7	Marriage Assistance			Male	Female
	a) Marriage Assistance to Member			3,000	5,000
	b) Marriage Assistance to son / daughter of a Member			3,000	5,000
8	a) Delivery @ Rs.1,000/- per month for 6 months				6,000
	b) Miscarriage				3,000
	c) Termination of Pregnancy				3,000
9	Old Age Pension (Above 65 Years)				400 per month

- During 2014-15, the Tamil Nadu Fishermen Welfare Board (TNFWB) has settled 7,248 claims for a total value of Rs.3.28 crore, besides 2,293 claims have been settled to the tune of Rs.1.31 crore upto July 2015 under various welfare schemes.
  
- In order to ensure transparency in disbursement of relief/ assistance that too within shortest period of time, the relief assistance is being disbursed to beneficiaries through National Electronic Fund Transfer (NEFT).



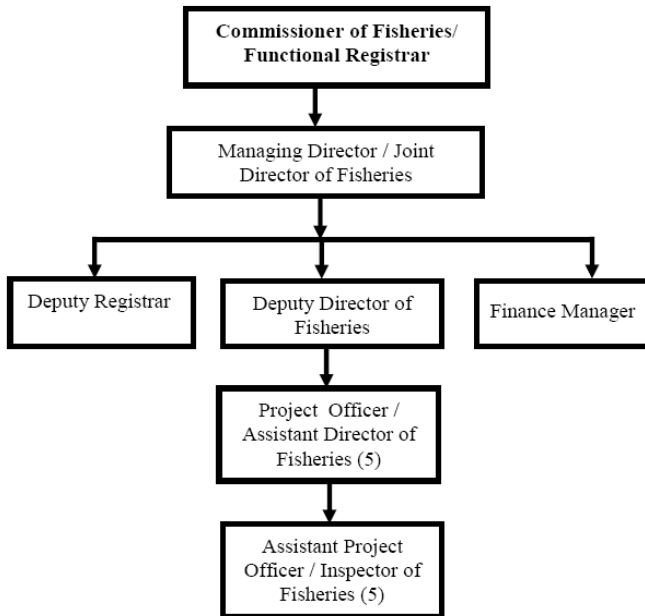
**15. TAMIL NADU STATE APEX FISHERIES  
CO-OPERATIVE FEDERATION LIMITED  
(TAFCOFED)**

Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED), has been registered under Tamil Nadu Co-operative Societies Act, 1983 and functioning since 19.10.1992 with its headquarters at Chennai. At present, 477 Marine Fishermen Co-operative Societies, 141 Inland Fishermen Co-operative Societies, 158 Fisherwomen Co-operative Societies and 9 District Fishermen Co-operative Federations have been enrolled as members in TAFCOFED with a total share capital of Rs.91.435 lakh.

Election to the Tamil Nadu State Apex Fisheries Co-operative Federation was conducted on 8-7-2013 and now TAFCOFED is administrated by the 25 elected board of management comprising 17elected Board of Directors, 7 Government nominees and one co-opted member.The 13<sup>th</sup> General Body meeting of TAFCOFED was held on 31.01.2014. Four Board meetings were conducted during 2014-15 and one Board Meeting was conducted during 2015-16.

The organisational setup of Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED) is depicted below:-

### Organizational Setup of Tamil Nadu State Apex Fisheries Cooperative Federation



The following are the major activities being carried out by Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED).

#### 15.1 Sale of Outboard Motors / Inboard Engines

The Department of Fisheries has authorised Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED) for supplying Outboard Motors/Inboard engines to the

traditional fishermen under Central and State subsidy schemes. An amount of Rs.30,000/- or 50% of the cost of the engine whichever is less, is given as subsidy. During the year 2014-15, 538 nos. of OBM/IBM have been supplied.

### **15.2 Supply of sales tax exempted Subsidised Industrial Kerosene to the Traditional Motorised Fishing Crafts**

The Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED) is supplying sales tax exempted subsidised Industrial Kerosene to the traditional motorised fishing crafts in Thoothukudi and Tirunelveli Districts through 13 primary co-operative societies. A total of 3,560 KL of Industrial Kerosene under this scheme was supplied during 2014-15 and 1262 KL of Industrial kerosene was supplied upto July, 2015.

### **15.3 Supply of Sales Tax exempted Diesel for Fishing Crafts**

TAFCOFED has established 12 Diesel Bunks all along the Tamil Nadu coast for supplying sales tax exempted diesel to fishermen at Pazhaverkadu in Tiruvallur district, Neelankarai in Kancheepuram district and Annankovil in Cuddalore district, Nagore in

Nagapattinam district, Sethubavachatram in Thanjavur district, Jegathapattinam in Pudukkottai district, Keelakarai, Mandapam and Rameswaram in Ramanathapuram district, Vembar and Tharuvaikulam in Thoothukudi district, Chinnamuttom in Kanniyakumari district. It is also proposed to set up two more TAFCOFED diesel outlets at Cuddalore in Cuddalore district and Seruthur in Nagapattinam District. So far, 21,551 KL of sales tax exempted diesel was supplied to fishermen during the year 2014-2015 and 2263 KL of sales tax exempted was supplied upto July, 2015.

#### **15.4 Fish Marketing**

TAFCOFED is running two Retail fish outlets at Neyveli Lignite Corporation Ltd., (NLC) Township and another one at Ariyalur.

During 2014-15, under NADP scheme, TAFCOFED established one modern fish retail outlet at Vaiyavoor in Kancheepuram district and supplied two mobile fish marketing vehicles to fisherwomen Co-operative societies to empower them in retail fish marketing at a total cost of Rs. 30.75 lakh.

In order to strengthen fish marketing of primary fisheries co-operative societies TAFCOFED has proposed to construct two modern fish stalls, one at

Pozhikarai in Kanniyakumari District and another at Bharathinagar in Ramanathapuram District with financial assistance of National Fisheries Development Board (NFDB) with a total project cost of Rs.20 lakh with 40% subsidy.

In order to provide quick transport of fish catches to markets, during the year 2014-15, TAFCOFED had supplied three Bolero pickup vehicles to three primary fishermen co-operative societies at a total cost of Rs.22.30 lakh with 40% financial assistance from National Fisheries Development Board (NFDB).

TAFCOFED is supplying two wheeler mopeds fitted with insulated ice boxes with 25% subsidy (30% in case of SC/ST) with financial assistance from NFDB in order to handle more volume of fish and to supply quality fish to the consumer. During the year 2014-2015, mopeds fitted with insulated ice boxes were supplied to 113 beneficiaries with a subsidy amount of Rs.10.66 lakh. The scheme will be continued in the year 2015-16.

TAFCOFED will establish a high end Modern Fish restaurant at Vanianchavadi, OMR, Chennai in an extent of 13,500 sq.ft at an estimated cost of Rs.1.5 crore. TAFCOFED will also establish a Retail Outlet for selling diesel and petrol in Vanianchavai, OMR site in

order to enhance its revenue at an estimated cost of Rs.80 lakh.

### **15.5 Training Programmes**

TAFCOFED is conducting various need based training programmes for fisherfolk with the funding support of National Fisheries Development Board (NFDB), National Agriculture Development Programme and Government of India for effective transfer of technology and propagation of welfare schemes of the Government.

TAFCOFED is conduct training programme on "Training/ skill development to marine fisherwomen on "Solar Lantern Fabrication and servicing" to 260 fisherwomen beneficiaries in 13 coastal Districts with a financial sanction of Rs.5.42 lakh from National Fisheries Development Board (NFDB). This will help the fisher women beneficiaries to become a self-entrepreneur in production and servicing of Solar Lanterns. Five training programmes in Chennai, Kancheepuram, Thiruvallur, Villupuram and Cuddalore have been completed.

TAFCOFED also conducting Training programme on Basics of Seamanship and Navigation, Electronic equipments and Maintenance Marine of Engine" to deep sea going fishermen of Tamil Nadu with technical assistance from Central Fisheries Nautical engineering

Technology and financial assistance from NFDB. 80 deep sea going fishermen were already trained at Fishermen Training Centre, Colachel, Kanyakumari district. 1000 fishermen in 40 batches will be trained under this programme and certificates will be issued.

## **16.TAMIL NADU FISHERIES DEVELOPMENT CORPORATION LIMITED (TNFDC)**

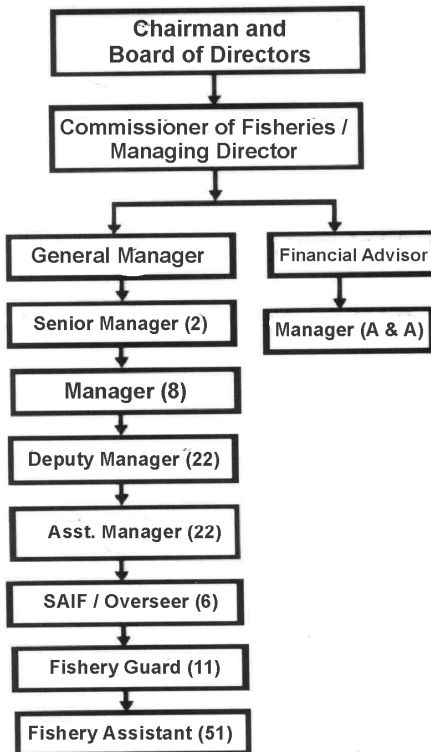
The Tamil Nadu Fisheries Development Corporation Limited was established in 1974 as a State Owned Undertaking with an authorized Share Capital of Rs.5 crore and paid up Share Capital of Rs.4.45 crore.

- The Board of Directors are appointed by the Government of Tamil Nadu.
- At present, 135 employees are working in various categories.
- TNFDC is undertaking the following commercial activities in the Fisheries Sector.
  - Reservoir Fisheries Management
  - Fish Seed Production
  - Fish Marketing and Fish food courts
  - Production and Marketing of Ornamental Fishes
  - Shrimp Hatchery and Shrimp Farm

- Sale of Diesel, Kerosene and Out Board Motors / In Board Engines.

The organisational setup of the Tamil Nadu Fisheries Development Corporation Limited (TNFDC) is depicted below:-

**Organizational Setup of Tamil Nadu Fisheries Development Corporation**





### **16.1. Reservoir Fisheries Management**

Systematic scientific stocking of fish seeds is being done for sustainable fish production in eight reservoirs which are managed by Tamil Nadu Fisheries Development Corporation Limited. Harvesting of fish is being carried out by engaging members of inland fishermen co-operative societies in the respective areas of reservoirs as share fishermen.

To supplement the revenue to the Corporation, the fishing rights of certain reservoirs have been leased out to Private Fish Farmers.

During 2014-15, TNFDC exploited 606.30 tons of fish from the reservoirs and realized revenue of Rs.5.19 crore. Upto July 2015, 169 tons of fish exploited from the reservoirs and realized revenue of Rs.70.86 Lakh.

### **16.2. Fish seed Production**

Tamil Nadu Fisheries Development Corporation Limited is having total fish seed rearing area of 3.79 hectares. Fish seeds produced by the TNFDC are stocked in the reservoirs managed by the TNFDC besides supplying to the Fisheries Department and private fish farmers.

During 2014-15, the TNFDC achieved production of 232.90 lakh of early fry and 29.60 lakh of advance fingerlings, and realized Rs.48.07 lakh as revenue. Upto July 2015, 125.60 Lakh of early fry and 4.08Lakh of advance fingerlings are produced and realized Rs. 15.87 Lakh as revenue.

### **16.3. Fish Marketing**

The Corporation is marketing fresh fish through its chain of retail fish stalls in Chennai, Madurai, Coimbatore, Tirupur, Pollachi and Thiruvannamalai and the Corporation has been operating fish food courts in Chennai, Coimbatore and Tirupur. During 2014-15, the TNFDC achieved a sale of 1,113 tons of fish and earned a profit of Rs.83.31 lakh. Upto July 2015, TNFDC achieved a sale of 335.72 tons of fish and earned a profit of Rs.29.23 Lakh.

### **16.4. Diesel Outlets**

At present, the Corporation is operating 30 diesel outlets in the Fishing Harbours and fish landing centers spread all along the coastal area in the state to supply subsidized high speed diesel to the traditional and mechanized fishing craft owners. During 2014-15, the Corporation sold 88,008 KL of high speed diesel and realized a profit of Rs.7.63 crore. Upto July 2015,

corporation sold 24,293 KL of high speed diesel and realized a profit of Rs.1.96 Crore.

#### **16.5. Supply of Sales Tax Exempted Subsidized Industrial Kerosene to the Traditional Motorized Fishing Crafts**

The TNFDC is supplying sales tax exempted subsidized kerosene to the traditional fishing crafts in Kanyakumari District. During 2014-15, 6,026 KL of Kerosene has been supplied, with the profit of Rs.28.27 lakh. Upto July 2015, 1918 KL of Kerosene has been supplied with the profit of Rs.6.67 Lakh.

#### **16.6. Supply of OBM/IBE to Traditional Fishing Crafts**

The TNFDC is supplying Outboard Motor/Inboard Engines under centrally sponsored subsidy scheme to the fishermen for motorization of the traditional fishing crafts. During the year 2015-16, upto July 2015 the Corporation supplied 95 numbers of OBM to the fishermen.

#### **16.7. Production and Marketing of Ornamental Fishes**

The TNFDC has established Ornamental Fish Breeding & Production centres at Aliyar and Thirumoorthy Nagar under the financial assistance of National Fisheries Development Board, Hyderabad.

Ornamental Fish Sales Centre-cum-Aquarium has been functioning at Aliyar, Thirumoorthy Nagar and Chennai. During 2014-15, Rs.25.83 lakh has been realized from the sale of ornamental fishes. Upto July 2015, Rs.7.40 Lakh has been realized from the sale of ornamental fishes.

### **16.8. Infrastructural Facilities leased out**

#### **❖ Fish Processing Facilities:**

The Processing facilities at Mandapam are leased out to a Private Sea Food exporter for Rs.18.82 lakh for the year 2014-15. Similarly, the fish pre-processing complex at Thoothukudi has been leased out to a private fish food processor for an amount of Rs.5.63 lakh for the year 2014-15.

#### **❖ Shrimp Hatchery at Neelankarai, Chennai**

The Hatchery facilities are leased out to "Rajiv Gandhi Centre for Aquaculture" a society of Marine Products Export Development Authority since 24.01.2004 for shrimp brood stock management and quarantine facilities. For the year 2014-15, Rs.5.63 lakh has been collected as lease amount.

### ❖ **Model Shrimp farm at Karangadu**

The shrimp farm at Karangadu in Ramanathapuram district has been leased out to private farmer during 2014-15 for a sum of Rs.4.04 lakh.

### **16.9. Other Schemes:**

The following are the new schemes under progress.

#### **16.9.1. Modernisation of wholesale fish market at Ukkadam, Coimbatore**

The TNFDC Ltd., has proposed to modernise the existing wholesale fish market at Ukkadam, Coimbatore with modern facilities such as cold storage, ice plant, waste disposal system etc., by availing financial assistance of Rs.2.25 crore from National Fisheries Development Board, Hyderabad. The construction works are carried out and completed by the Municipal Corporation, Coimbatore with the total cost of Rs.3.24 crore. The market is being operated by the Tamil Nadu Fisheries Development Corporation Ltd. from 01.03.2015.

### **16.9.2. Upgradation of Infrastructure Facilities with Ice plants at Thoothukudi Fishing Harbour:**

Under the Scheme for strengthening of infrastructure in Fishing Harbour/Fish landing centres with financial assistance from National Fisheries Development Board (NFDB) and Marine Product Export Development Authority (MPEDA), the Thoothukudi Fishing Harbour has been upgraded with the facilities of Tube ice Plant and cold storage.

### **16.9.3. Modern Mobile Fish Kiosks and Mobile Fish Food Restaurants:**

The TNFDC is operating 21 modern mobile fish marketing kiosks in major cities such as Chennai, Madurai, Trichy, Coimbatore and other towns in the State to supply fresh and hygienic Fish and seafood to the consumers at their door steps at an affordable price with the financial assistance of NFDB and NADP. Further, 5 more mobile fish marketing vehicles are being operated in Chennai city to cater to the needs of increasing demand from the general public.

A modern mobile Fish Food restaurant established under NADP Scheme at a cost of Rs.20 lakh is being operated at Marina Beach, Chennai which is supplying value added Sea Foods to the customers.

#### **16.9.4. Ornamental fish breeding Centre at Thirumoorthy Nagar**

The Tamil Nadu Fisheries Development Corporation has established an ornamental fish breeding centre at Thirumoorthy reservoir at an estimated cost of Rs.15 lakh with financial assistance of National Fisheries Development Board(NFDB) The seed production activities at this centre has been commenced.

#### **16.9.5. Establishment of Fish Handling Centre with cold storage facilities at Kuruchi, Coimbatore:**

The TNFDC Ltd., is establishing a fish handling centre at Kuruchi, Coimbatore District with facilities such as cold storage, fish handling area etc., for improving the quality standards and marketing of fresh fish through financial assistance of Rs.70 lakh from National Fisheries Development Board (NFDB) and nearing completion.

#### **16.9.6. Establishment of Inland fish landing centre at Bhavanisagar Reservoir**

The inland water bodies are the source of livelihood of inland fishermen community. In order to improve the hygienic condition of the inland fish landings and also to fetch more prices for the catches a fish landing centre with infrastructure facilities such

as net mending shed, roads, toilets etc., is being established at cost of Rs.60 lakh with financial assistance from NFDB and nearing completion.

#### **16.9.7. Establishment of modern fish stalls in Chennai, Madurai & other places of Tamil Nadu.**

The TNFDC is operating modern fish stalls in various places of Tamil Nadu and supplying fishes to general public at reasonable price in hygienic condition.

During the year 2014- 15, 8 more such modern stalls will be established at various places with financial assistance from NFDB. The work is in progress.

#### **16.9.8. Construction of Additional Administrative Building for TNFDC Ltd. at Santhome, Chennai:**

The Tamil Nadu Fisheries Development Corporation proposed to construct an additional office administrative building for its Registered Office at Santhome, Chennai at an estimated cost of Rs.2.50 crore. Detailed Project Report has been prepared and tender floated.



### **16.10. Financial position:**

Various fishermen welfare Schemes are being implemented through Tamil Nadu Fisheries Development Corporation. Apart from this, the Corporation has undertaken various commercial activities such as fresh fish marketing, sea food courts, diesel/kerosene distribution and reservoir Management etc., During the year 2013-14, the TNFDC has earned a profit of Rs.7.64 crore before tax (audited). For the Financial Year 2014-15, the Tamil Nadu Fisheries Development Corporation earned profit of Rs.8.75 crore (un audited). Upto July 2015, corporation earned profit of Rs. 2.43 Crore (Un audited)

### **16.11. Payment of dividend to Government:**

The Tamil Nadu Fisheries Development Corporation has paid a dividend of Rs.1.446 crore for the year 2013-14 to the State Government give its inception and expected to pay Rs. 1.50 crore as dividend to the Government for the year 2014-15.

### **16.12. Contribution of TNFDC Ltd., for Fisheries projects and Fishermen Welfare Schemes:**

The TNFDC has been regularly paying royalty and lease rent to the Government for the fishing rights of certain reservoirs. Apart from this, the TNFDC has paid a sum of Rs.1 crore as its contribution to Tamil Nadu Fishermen Welfare Board from its business operations during the Financial Year 2014-15.

### **16.13 Corporate Social Responsibility Contribution (CSR):**

During the year 2014-15, the TNFDC has provided financial assistance for creating awareness through Advertisement / hoardings on the importance and installation of Turtle excluder device in the fishing nets. Further, the Tamil Nadu Fisheries Development Corporation has funded Rs.2.86 lakh to take a short film titled "Meenavargalin Kaavalan".

### **17. Tamil Nadu Fisheries University (TNFU)**

To provide professionally qualified and skilled manpower resources in the State so as to augment fish production and exports, the Hon'ble Chief Minister announced the establishment of Tamil Nadu Fisheries University at Nagapattinam. In pursuance thereof to

the announcement, the Tamil Nadu Fisheries University, the first of its kind in the country, was inaugurated by the Hon'ble Chief Minister on 19.06.2012 with a Vision of "Harnessing the Science of Fisheries for Food, Nutrition and Livelihood".

Tamil Nadu Fisheries University (TNFU) is the State funded, unitary professional Fisheries University in India imparting education, research and training to enhance fish production and utilization by following the State Agricultural University (SAU) pattern and syllabi.

### **Objectives**

The objectives of Tamil Nadu Fisheries University (TNFU) are as follows:

- To impart quality professional education in different branches of Fisheries Sciences as the University may determine
- To conduct organized research in frontier areas with the objective of developing cutting edge technologies in Fisheries Sciences
- To provide extension services like training, consultancy, project formulation to fish farmers, fisher folk, unemployed youth and entrepreneurs in Fisheries Sciences

- To facilitate comprehensive development of Fisheries Sciences for increased contribution to State economy and set bench mark standards through appropriate interventions in fisheries teaching, research and extension
- To generate baseline data on aquatic biodiversity and fisheries resource potential
- To generate high quality professionals in Fisheries Sciences by following Veterinary Council of India regulations as a model
- To create better opportunities for marketing and value addition of fish and fishery products
- To set up an aquatic disease diagnosis and surveillance system in the State

### **17.1. Organizational structure of Tamil Nadu Fisheries University**

The Tamil Nadu Fisheries University (TNFU) shall have five faculties, five schools, two directorates, two centres and two training institutes. They are

#### **I. Faculties**

1. Faculty of Fisheries Sciences
2. Faculty of Basic Sciences
3. Faculty of Fisheries Engineering

4. Faculty of Fisheries Information and Social Sciences \*(Proposed)
5. Faculty of Food Science and Nutrition \*(Proposed)

## **II. Schools**

1. School of Aquaculture
2. School of Harvest and Post-Harvest Technology
3. School of Fisheries Resources and Environment Management
4. School of Fisheries Information and Social Sciences
5. School of Fisheries Business Management \*(Proposed)

## **III. Directorates**

### **1. Directorate of Research**

- i. Fisheries Research and Extension Centre, Madhavaram, Chennai
- ii. Centre for Marine Finfish Culture, Mandapam, Ramnathapuram Dt.
- iii. Tilapia Research Centre, Barur, Krishnagiri Dt.
- iv. Shrimp Brood Bank, Neendakarai, Kanniyakumari Dt.
- v. Centre for Freshwater Aquaculture, Bhavanisagar, Erode Dt.

## **2. Directorate of Extension Education**

- i. Fisheries Training and Research Centre -  
Thanjavur
- ii. Fisheries Training and Research Centre –  
Parakkai, Kanniyakumari Dt.

## **IV. Centres**

1. Centre for Fisheries Management, Planning and Policy (**CeFiMaPP**) - will function as separate Directorate with Headquarters at Vaniyanchavadi, Rajiv Gandhi Salai, Chennai
2. Centre for Sustainable Aquaculture (**CeSA**) - will function as separate Directorate with headquarters at Nagapattinam

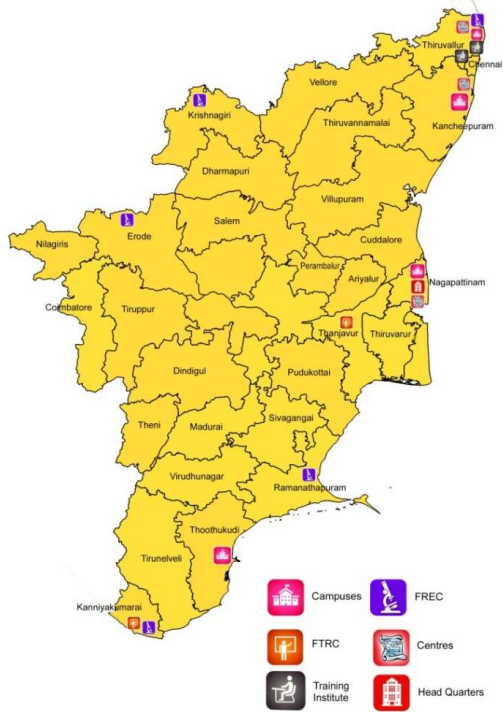
## **V. Training Institutes**

1. Staff Training Institute (to be renamed as Tamil Nadu Fisheries Academy), Chennai
2. Fisheries Institute of Technology and Training, Chennai

## **CAMPUSES OF THE UNIVERSITY**

1. TNFU Thoothukudi Campus
2. TNFU Ponneri Campus, Tiruvallur District
3. TNFU Nagapattinam Campus, Nagapattinam
4. TNFU Madhavaram Campus, Chennai
5. TNFU Vaniyanchavadi Campus, Rajiv Gandhi Salai, Chennai

The Fisheries College and Research Institute, Thoothukudi, the second oldest college in the country was established in 1977. It offers B.F.Sc, M.F.Sc and Ph.D degree Programmes. The Institute of Fisheries Technology established in 2012 at Ponneri campus started offering B.F.Sc degree Programme from 2014. The Institute of Fisheries Technology located in Nagapattinam campus presently offering certificate courses will offer B.E degree in Fisheries Engineering from 2015-16. Madhavaram and Vaniyanchavadi Campuses of this University are recognised for Post Graduate Research Programmes.



Website: [www.tnfu.ac.in](http://www.tnfu.ac.in)

## 17.2 Activities of Tamil Nadu Fisheries University (TNFU)

The activities of TNFU in the areas of Education, Research and Extension services are outlined below:



### **17.2.1. Education**

- ☆ This University is offering a four year professional degree programme in Fisheries Science (B.F.Sc) with an intake of 80 students per year( 40 students in Fisheries College and Research Institute, Thoothukudi and 40 students in Institute of Fisheries Technology, Ponneri renamed as Fisheries College and Research Institute, Ponneri), two years postgraduate degree programme in Fisheries Science (M.F.Sc) with specialization in ten disciplines viz., Fisheries Resource Management, Aquaculture, Aquatic Environment Management, Fish Processing Technology, Fisheries Engineering and Technology, Fish Quality Assurance and Management, Fisheries Biotechnology, Aquatic Animal Health, Fisheries Economics, and Fisheries Extension with an intake of 33 students; and three years Ph.D. degree programmes in seven disciplines namely Fisheries Resource Management, Aquaculture, Aquatic Environment Management, Fish Processing Technology, Fish Quality Assurance and Management, Fisheries Economics, and Fisheries Extension with an intake of 19

students. This University is also offering three certificate courses (Harvest and Post harvest Technology, Fishing Technology and Navigation, and Aquaculture) with a duration of one year; two certificate courses (Shrimp Farm Technician and Fish Processing Technician) with a duration of six months and two certificate courses (Ornamental Fish Culture Technology and Better Management Practices (BMPs) in Shrimp Farming) with a duration of three months.

- ★ The total number of eligible applications received for B.F.Sc. degree was 1,568 for the sanctioned seat of 60 during 2014-15.
- ★ The University is extending financial assistance in the form of State and Central Government scholarships and fellowships to the students for undergoing their undergraduate and postgraduate degree programmes. Student amenities such as library with computer and internet facilities, e- learning facilities, student's placement cell, gym, indoor and outdoor game facilities, are available in the University to promote the interests of students in acquiring knowledge on various aspects of fisheries science as well as in finding their suitable placements. The faculty members of this

University are deputed to various faculty improvement trainings, summer / winter schools, seminars, etc. to upgrade their technical skills.

- ★ Details of sanctioned strength of students for admission during the year 2014-15 at TNFU are furnished below.

**Table 11. Students' admission strength**

<b>Courses</b>	<b>FC&amp;RI, Thoothukudi</b>	<b>FC&amp;RI, Ponneri</b>	<b>IFT, Nagapattinam</b>	<b>Total</b>
B.F.Sc	40	40	-	80
M.F.Sc	19	-	-	19
Ph.D.	9	-	-	9
<b>Certificate Courses</b>				
1. One year Certificate course on Aquaculture	--	--	9	9
2. One year Certificate course on Harvest and Postharvest Technology	--	7	--	7

3. Three months Certificate course on Freshwater Fish Farming Technology	--	11	--	11
4. Three months Certificate course on Ornamental Fish Farming Technology	--	11	--	11

- ❖ B.F.Sc degree programme has been started at the Institute of Fisheries Technology, Ponneri with an intake of 20 students during 2014-15. This institute has been renamed as Fisheries College and Research Institute, Ponneri (G.O.Ms.No.89, AH,D&F (Fs4) Dept. dated: 23.04.2015) and intake of students has been increased to 40 from the year 2015-16 (G.O.Ms.No.166 AH,D&F Dept dated: 12.08.2015).
- ❖ New Ph.D degree programmes in Fish Quality Assurance and Management, Aquatic Environment Management, Fisheries Economics, and Fisheries Extension have been introduced during 2014-15 with an intake of two students each.

- ❖ TNFU is the only University in India that offers Ph.D. degree in Fish Quality Assurance and Management, in view of the importance of food safety and food security in India.
- ❖ M.F.Sc. degree in Aquatic Animal Health was introduced during 2014-15.
- ❖ Government order has been issued to start college of Fisheries Engineering in Nagapattinam and to admit 20 students every year in B.E Fisheries Engineering from the year 2015-16

### **17.2.2. Research**

- ❖ The Government of Tamil Nadu funded 24 Plan schemes with a financial outlay of Rs.34.75 crore during 2014-15 for strengthening the infrastructure facilities for higher education, innovations, research and dissemination of knowledge.
- ❖ TNFU received seven externally funded Research projects to the tune of Rs. 8.82 crore during 2014-15.

- ❖ The Indian Council of Agricultural Research (ICAR), Govt. of India, New Delhi has sanctioned an amount of Rs. 3.056 crore towards the establishment of 'Niche Area of Excellence programme in Fish Safety and Quality Assurance' at the Department of Fish Quality Assurance and Management, Fish Quality Monitoring and Certification Centre, Fisheries College and Research Institute, Tamil Nadu Fisheries University, Thoothukudi.
- ❖ A 'Hatchery for production and distribution of genetically improved Tilapia' was constructed at the Dept. of Fisheries Biotechnology, Fisheries College and Research Institute, Thoothukudi under NADP funding at a cost of Rs. 1.48 crore.
- ❖ TNFU established a 'Chemical residue monitoring laboratory for fish' at the Department of Fish Quality Assurance and Management, Fish Quality Monitoring and Certification Centre, Fisheries College and Research Institute, Thoothukudi under NADP funding at a cost of Rs. 1.40 crore.
- ❖ A 'Fish feed quality testing laboratory for the benefit of the fish farmers' was established at

the Dept. of Aquaculture, Fisheries College and Research Institute, Thoothukudi under NADP funding at a cost of Rs. 1.01 crore.

- ❖ TNFU developed 'Improved breeding strategies and innovative farming protocols for high value ornamental fishes' at the Fisheries Research and Extension Centre, TNFU Madhavaram Campus, Chennai under NADP funding at a cost of Rs.1.11 crore.
- ❖ A 'Marine engine and sea safety training centre for the fisherfolk' was established at the Dept. of Fishing Technology and Fisheries Engineering, Fisheries College and Research Institute, Thoothukudi under NADP funding at a cost of Rs.2 crore.
- ❖ Technologies for 'Mass breeding and production of ornamental fishes and major carp seeds' were developed at the Fisheries Training and Research Centre, Parakkai, Kanniyakumari District under NADP funding at a cost of Rs.1.12 crore.
- ❖ TNFU is establishing a 'Centre for Marine Finfish Culture' at Mandapam coast

Ramanathapuram District under NADP funding at a cost of Rs. 1.85 crore.

- ❖ TNFU is establishing a 'Shrimp Brood Bank' at Kanniyakumari District under NADP funding at a cost of Rs. 1.99 crore.
- ❖ A 'Tilapia Research Centre' is being established at Barur, Krishnagiri District under NADP funding at a cost of Rs. 1.21 crore.
- ❖ A 'Biosecured Microbial Flocculent driven Farming for Domesticating eco- friendly and viable culture practices for Vannamei shrimp (*Litopenaeus vannamei*) and Milk fish (*Chanos chanos*) in Tamil Nadu' is being established at the TNFU Vaniyanchavadi Campus, Rajiv Gandhi Salai, Chennai under Part II funding at a cost of Rs. 44.39 lakh.
- ❖ Project on "Design upgradation of line fishing gears for species specific fishing along south east coast of Tamilnadu has been taken up in Fisheries College and Research Institute, Thoothukudi at a cost of Rs. 17.10 lakh under Part II funding.



- ❖ A part II scheme on "Popularisation of cost effective fish compost in Thoothukudi district of Tamilnadu at a cost of Rs 11.10 lakh has been in progress at Fisheries College and Research Institute, Thoothukudi.

### **17.2.3. Cooperation with Overseas University/ Institute**

- ❖ A high level delegation led by the Vice-President, Prof. Zhu Jianzhen from the Guangdong Ocean University (GDOU), China visited the TNFU campus, Thoothukudi from 15.10.2014 to 16.10.2014 and held discussion with the Vice-Chancellor and other Officers of TNFU to have academic and research cooperation between GDOU, China and TNFU, India.
- ❖ Tamil Nadu Fisheries University (TNFU) in collaboration with World Aquaculture Society – Asia Pacific Chapter (WAS-APC), conducted an International Meet on "Advanced Vannamei Farming Strategies and International Success Stories" (IWASSSS'15) on the 24th of January, 2015 at Chennai.

#### **17.2.4. Technologies developed**

- TNFU developed 18 technologies for the benefits of fish farmers, processors, fisherfolk and fish entrepreneurs. They are
  - Pond culture of cobia
  - Sea cage culture of cobia
  - Development of feed for cobia brood stock
  - Development of low cost cage farming technology for reservoir fisheries
  - Raceway technology for gold fish and rosy barb using aerobic microbial flocculent
  - Culture of Koi carp using biofloc technology in lined ponds
  - Indoor live feed culture techniques for *Daphnia* sp.
  - Technology for mass production of *Mesocyclops* sp.
  - FRP plywood Squid jigging platform
  - Improved Collapsible Trap
  - Developed RT-PCR assays for the detection of toxigenic strains of viable *Vibrio cholerae* by targeting mRNA of *rtxA*, *ctxA*, *groEL*, and *tsf* genes

- Developed a RT-PCR assay for the detection of viable *Salmonella* by targeting mRNA of *invA* gene
- Developed PCR-RFLP method for the detection of five different species of sardines, viz., *Sardinella gibbosa*, *S. longiceps*, *S. albella*, *S. fimbriata*, and *S. sirm* by targeting *mt cyt b* gene and employing the restriction enzymes, *HinfI* and *MnlI*
- Developed PCR-AFLP markers for the detection of five different species of tunas viz., *Thunnus albacares*, *T. obseus*, *Katsuwonus pelamis*, *Euthynnus affinis*, and *Auxis thazard* using the primer combination of *EcoRI-AGA/MseI-CTG*
- Developed a new colour test kit for detection of formalin in fish
- Value added products using cultured cobia meat
- Developed fish collagen films with sorbitol as cross linking agent
- Developed fish collagen-chitosan-calcium acetate films and scaffolds

TNFU has filed two patents, which are

- ★ Designing and fabrication of inland raceways for intensive rearing of ornamental fishes

- ★ Mass production of *Daphnia magna* (live feed) in organic medium for ornamental fish feeding

#### **17.2.5. Advocacy/ certification/consultancy services**

- This University is involved in certification of the seafood products through the Fish Quality Monitoring and Certification Centre at Thoothukudi.
- One State Referral Laboratory at Chennai, and two Regional Laboratories at Thoothukudi and Nagapattinam are functioning for aquatic animal diseases surveillance.

The laboratories set up at the Fish Quality Monitoring and Certification Centre at the Dept. of Fish Quality Assurance and Management of Fisheries College and Research Institute, Thoothukudi and the Disease Diagnosis Laboratory of Fisheries Research and Extension Centre, Madhavaram, have been put into use for testing water, fish, shrimp, and seafood samples for various quality parameters and earned a revenue of Rs. 12.30 lakh during 2014-15.

#### **17.2.6. Extension activities**

This University is instrumental in bringing out developments in the fisheries sector in the State of Tamil Nadu through various extension and training

programs covering all aspects, including farm advisory services, answer to farmers' queries, organizing Mass awareness programmes, Fish farmers' meets, Stakeholders linkage through mass media, Industry-Institute meets and Exhibitions. The University has been conducting various training programmes with the objective of planning and execution of all outreach programmes in close coordination with other line departments / agencies such as the Department of Fisheries, Tamil Nadu Fisheries Development Corporation and other Government organisations, the details of which are given in the following Table 12.

**Table 12: Important Training programmes conducted during 2014-15**

Sl. No.	Title of the Training Program	No. of Trainees Attended		Total No. of Trainees
		Male	Female	
1.	Freshwater fish farming	582	65	647
2.	Ornamental fish breeding and farming	410	168	578
3.	GIFT - Tilapia culture	68	0	68
4.	Vannamei Shrimp farming	551	114	665
5.	Shrimp farming	11	0	11

6.	Seaweed farming	55	65	120
7.	Spirulina cultivation	37	3	40
8.	Construction and maintenance of fish ponds	14	1	15
9.	Water quality management in aquaculture systems	67	10	77
10.	Disease management in freshwater fish culture system	240	0	240
11.	Disease management in Vannamei culture system	260	0	260
12.	Value added fishery products	145	285	430
13.	Preparation of fast foods	0	92	92
14.	Hygienic handling of fishes	30	11	41
15.	Hygienic production of dry fishes	181	422	603
16.	Methods of fish preservation	6	7	13
17.	Quality analysis of fish meal and dried fish	2	0	2
18.	Sea safety for fishermen	60	0	60
19.	Net fabrication	20	0	20
20.	Conservation of aquatic life	18	20	38
21.	Demonstration of fisheries technologies	98	136	234
	<b>Total</b>	<b>2855</b>	<b>1399</b>	<b>4254</b>

- Participated in exhibitions conducted on Fish in Human Health & Aqua Diversity from 08.05.2014 to 12.05.2014 at Anna Gem School, Anna University Campus, Chennai, and AGRI INDEX 2014 at CODISSIA Complex, Coimbatore from 18.07.2014 to 20.07.2014.
- TNFU organised an International Conference 'Aquaculture Chennai 2014 Sustainable Shrimp Farming – Way Forward' at Chennai from 13.06.2014 to 14.06.2014.
- Conducted Farm Radio School with AIR Chennai, Trichy and Tirunelveli on Ornamental Fish Farming, Best Management Practices (BMP) in Vannamei culture and Freshwater Fish Farming Practices.
- Fish Farmers Meet on "Vannamei Culture in Low Saline Water" was organised at Thanjavur on 14.11.2014, Mannarkudi of Tiruvarur District on 20.11.2014, Thalaignayuru on 07.11.2014 and Sirkali on 18.12.2014 of Nagapattinam District.

### **17.2.7. Future Programmes**

- Establishment of State Level Referral Laboratory for Fish Diseases Diagnostics at TNFU Madhavaram Campus, Chennai
- Establishment of 'Jayanthi' Rohu Multiplier System at Centre for Freshwater Aquaculture at Bhavanisagar, Erode district
- Establishment of Faculty of Fisheries Engineering

### **17.3 Thrust areas of research**

- ❖ Recirculatory aquaculture system for sustainable farming
- ❖ Breeding technology for marine cultivable species
- ❖ Conservation and improvement of native germplasm
- ❖ Stock assessment for sustainable fishing
- ❖ Marine nutraceuticals and functional foods
- ❖ Fish safety, quality, and authentication
- ❖ Monitoring of chemical residues in fish and fishery products



- ❖ Disease diagnosis, surveillance and vaccine development
- ❖ Development of convenience foods from fish
- ❖ Development of extruded fish feeds using indigenous ingredients
- ❖ Sea safety and responsible fishing
- ❖ Aquatic pollution monitoring
- ❖ Algal culture technology

The Tamil Nadu Fisheries University will continue to provide quality education and undertake research and extension programmes intensively and strive hard for the development of fisheries sector in the State of Tamil Nadu.

## **18. BUDGET FOR 2015-16**

For the year 2015-16, a sum of Rs.728.68 crore has been provided in the budget. Out of this, the projected revenue expenditure is Rs.435.93 crore and the capital expenditure is Rs.292.75 crore.

## **19. CONCLUSION**

Fisheries sector has witnessed a steady growth, simple traditional activity in the fifties have transformed to a livelihood activity providing considerable employment opportunities and contribution to the food and nutrition security and foreign exchange earnings. It is estimated that for

every fisherman engaged in primary fishing activity about four others are getting additional employment by way of post- harvest operation, fish marketing and a host of other allied activities. This Government's initiatives such as providing special relief assistance of Rs.4,000/- per marine fishermen family during the lean fishing season and a relief amount of Rs.2,000/- during the fishing ban period have alleviated the hardship faced by our fisher-folk. During 2014-15, the relief assistance under the National Savings cum Relief Scheme for fishermen and fisherwomen has been enhanced from Rs.1,800/- to Rs.2,700/-. The Government have sanctioned a total sum of Rs.180.54 crore towards relief assistance during the fishing ban period and lean season in the current year.

Fishing at sea has been recognized as the most dangerous occupation in the world. Understanding the need for reorienting the welfare programmes in a manner which provides long-term gains to the fishers, this Government introduced an array of schemes such as a scheme for providing seamless communication to marine fishermen and Scheme of subsidy assistance for purchase of SCUBA apparatus etc., towards sea safety measures. This Government accords prime importance and topmost priority to the safety and wellbeing of the fishers and is committed to protect

their traditional fishing rights, always lending immediate support to the fishermen whenever they are in distress. The unrelenting and assiduous efforts of the Hon'ble Chief Minister, had secured the release of 2,024 Tamil Nadu fishermen over the past four years and their 356 fishing boats from Sri Lankan custody.

In an unprecedented move, the High Court of Colombo delivered a judgment convicting and sentencing 5 Tamil Nadu fishermen with death penalty on fabricated charges of transferring narcotics. The Government of Tamil Nadu had been relentlessly raising the issue of securing the release of these 5 fishermen with the Government of India ever since their arrest in 2011. This Government rendered all possible legal and livelihood assistance for these 5 fishermen and their families during their incarceration in Sri Lankan jail. The Government expended a total sum of Rs.65,10,891/- in this regard. Similarly, an ex-gratia amount of Rs.5 lakh each was given from the Chief Minister's Public Relief Fund to the wife of the deceased fishermen Thiru S.Thomas Cletus of Rajakamangalamthurai Village in Kanyakumari District who was shot in Gulf country in the sea and died on the spot, Thiru T.Karthikeyan of Thirupalaikudi Village in Ramanathapuram District, Thiru S. Mathivalan of Polikarai Village in Kanniyakumari District.

A sound regulatory framework developed in consultation with the fishermen community and other stakeholders is expected to pave the way for sustainable development of marine fisheries of the State. This Government remains committed to amend the Tamil Nadu Marine Fishing Regulation Act which was introduced in the year 1983 to suit the requirements of contemporary fisheries development and connected conservation and management principles.

Inshore waters have been almost totally exploited while the deep sea resources still remain unexploited. The exploitation of deep sea resources requires investments in the deep sea fishing sector by way of technical man power, vessels suitable for exploiting the deep sea resources and also a strong legal support. Considering the higher capital cost involved in construction of Tuna long-liner with modern facilities for deep sea fishing, this Government had introduced a scheme for providing 50% subsidy assistance subject to a maximum of Rs.30lakh for fishermen to procure New Tuna Long-liner cum Gill Netter. The Government had also announced an innovative project on establishment of "Mid Sea Fish Processing Units-cum-Carrier Mother Vessel" on a pilot basis, under Public-Private-Partnership (PPP) mode, to

help Tamil Nadu fishermen to take up deep sea fishing and to reduce the fishing pressure in inshore waters.

In the marine sector, the available landing and berthing facilities are considered inadequate to meet the requirements of the available fishing fleet, leading to congestion and spoilage of fish resulting in economic loss. Reducing losses by providing proper landing and berthing facilities will facilitate proper handling and improved processing which will yield better value to the catch. To bring the sector on par with international hygiene standards, over the past four years, this Government has taken up development of fishing infrastructure on a massive scale, at a cost of Rs.899.80 crore. Projects in this regard include construction of major fishing harbours at Colachel, Thengaipattinam and Poompuhar and upgradation of existing harbours at Chennai, Cuddalore, Pazhayar, Nagapattinam, Thoothukudi and Chinnamuttom, besides developing 30 new fish landing centres.

To ensure development of sustainable and responsible fishing and aquaculture, infrastructure development for fish seed and feed with post harvest is needed. Seed being the basic requirement for into culture system, its production has been accorded priority in terms of brood stock management, establishment of hatcheries, refinement of induced

breeding techniques, rearing and production of quality seeds across the state. This Government had initiated several steps to increase fish seed production to all time high of 45 crore fingerlings.

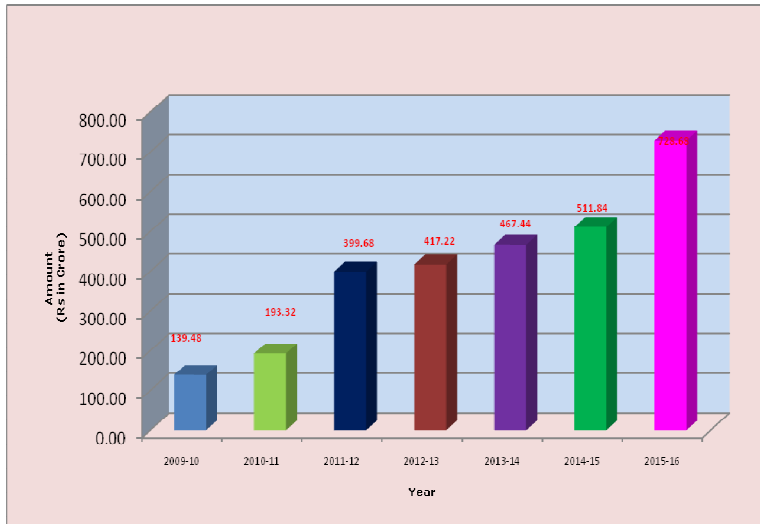
This Government has already laid strong foundation to store run off rain water by constructing multipurpose farm ponds under MGNREGS Scheme and these ponds are effectively stocked with fish seeds, thereby providing additional income to the farmers by through fish culture activity. Owing to this new initiative, an additional fish production to the tune of 500 tonnes has been ensured annually. Introduction of short seasonal fast growing fish varieties such as GIFT and Pangasius species in farm ponds and fixed cages has been taken up intensively which has paved way for the utilization of underutilized short seasonal tanks for fish culture and also increasing the fish production of the State.

To provide professionally qualified and skilled manpower resources in the State so as to augment fish production and exports, the Hon'ble Chief Minister inaugurated the Tamil Nadu Fisheries University at Nagapattinam, the first of its kind in the country with a Vision of "Harnessing the Science of Fisheries for Food, Nutrition and Livelihood"

The Fisheries Sector is provided with Rs.728.68 crore in the Budget Estimates 2015-16 which is the highest in the history of this centennial Department and stands as the proof of paramount importance being given to Fisheries sector by this Government.

**K.A. JAYAPAL**  
**Minister for Fisheries**

## An overview of Budget allocation (From 2009 – 10 to 2015 -16)







Hon'ble Chief Minister of Tamil Nadu inaugurated various new fish landing centres and office buildings of Fisheries Department/ Tamil Nadu Fisheries University and laid foundation stones for new fish landing centres and office buildings on 15.07.2015



Hon'ble Chief Minister of Tamil Nadu announced the scheme on '50% subsidy assistance subject to the maximum of Rs 30 lakh per boat for fishermen to procure new tuna longliner cum gill netters for the first time in the country. Hon'ble Chief Minister inaugurated the scheme on 15.07.2015 by distributing work orders to fishermen, which is to directly benefit 580 fishermen at a cost of Rs 51.30 crore.



Hon'ble Chief Minister ordered an ex-gratia amount of Rs.5 lakh to the family of the fisherman Thiru.S.Mathivalan of Pozhikarai, Kanniyakumari district who was shot dead by the unknown person while engaged in fishing in Saudi Arabia and the relief amount was given to his family in person by the Hon'ble Chief Minister of Tamil Nadu on 25.06.2015

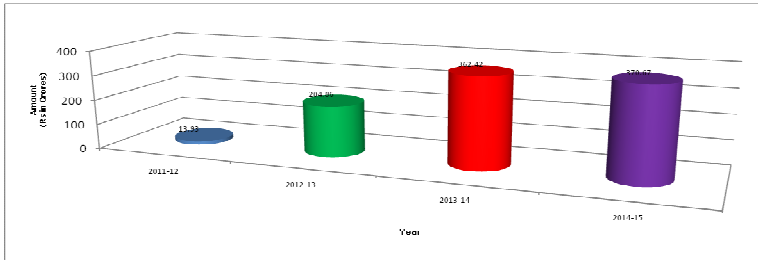


Due to the continuous efforts made by the Tamil Nadu Government, the 5 fishermen who have been sentenced death penalty by Colombo High Court were released on 19.11.2014. Tmt. P. Valarmathi, Hon'ble Minister for Social welfare, Thiru. K.A. Jeyapal, Hon'ble Minister for Fisheries, Dr. S.Sundararaj, Hon'ble Minister for Youth welfare and Sports Development received the 5 fishermen at Chennai airport on 20.11.2014 and handed over the additional relief amount Rs. 3 lakhs each to start their new life in Tamil Nadu.



The third round of talks between Tamil Nadu and Sri Lanka fishermen was held on 24.03.2015 at Chennai

## Fund Allocation for Infrastructure Development





Modernization of Thoothukudi Fishing Harbour  
(Rs.12.05 crore) -Auction Hall



Colachel Fishing Harbour ongoing work at a cost of Rs 87.75 crore





Chinnamuttom Fishing Harbour - Rs 73.52 crore



Poompuhar Fishing Harbour ongoing work at a cost of Rs 148 crore



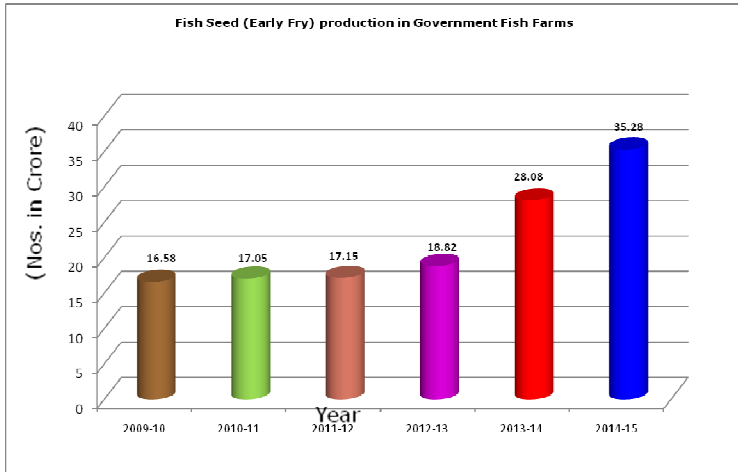
Improvement of Chennai Fishing Harbour - Rs 75 crore



Fish Landing centre at Tharuvaikulam in  
Thoothukudi dt  
- Rs 16.26 crore



Establishment of Sports Fishing cum Eco Park at Chetpet, Chennai ongoing work at a total cost of Rs 42 crore





**Fish culture in Multi Purpose Farm Ponds –  
Pattamangalam village in Nagapattinam district**



Capacity building training to the field staff of Fisheries Department at Vietnam and China under TN\_IAMWARM Project





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Culture of Cobia Fish in open sea cages in Ramanathapuram District



The modern wholesale fish market established at Ukkadam in Coimbatore district by Tamil Nadu Fisheries Development Corporation Ltd and Corporation of Coimbatore with the funding assistance of National Fisheries Development Board



The mobile sea food restaurant run by the Tamil Nadu Fisheries Development Corporation Ltd



Cage culture activities in Tiruvallur district at Poondi reservoir in 64 cages at a cost of Rs. 3.34 under National Agriculture Development Programme is in progress.



Entrepreneurship training on 'Making and Repair of Solar Lantern' is imparted to 256 fisherwomen from 13 coastal districts through the Tamil Nadu State Apex Fisheries Cooperative Federation Ltd



His Excellency the Governor of Tamil Nadu presided over the first convocation of Tamil Nadu Fisheries University and presented medals and degree certificates on 19.02.2015