



**ANIMAL HUSBANDRY, DAIRYING,  
FISHERIES AND FISHERMEN WELFARE  
DEPARTMENT**

**FISHERIES AND FISHERMEN  
WELFARE**

**POLICY NOTE  
2023-2024**

**DEMAND No.7**

**Thiru. ANITHA R. RADHAKRISHNAN**  
Minister for Fisheries-Fishermen Welfare  
and Animal Husbandry



**Government of Tamil Nadu**

**2023**

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# **FISHERIES AND FISHERMEN**

## **WELFARE DEPARTMENT**

### **POLICY NOTE**

**2023–2024**

#### **1. INTRODUCTION**

The rich fisheries biodiversity of the State provide livelihood opportunities to more than a million people directly and in the ancillary activities. During the year 2021-22, the sector's contribution to the State agriculture GDP is 5.78%. The State's contribution from fisheries sector in the foreign exchange is Rs.6,559.64 crore by exporting 1.14 lakh metric tonnes of fish and fishery products during the year 2021-22.

The Government provides utmost care and importance to ensure the livelihood and welfare of the fishers. Social security of the fishers is being ensured through the welfare schemes during the

fishing ban and lean periods. The well-established seamless communication system is further strengthened to ensure the safety and security of the fishermen at sea, besides protecting the traditional fishing rights of the fishermen.

Fisheries sector of the State has enormous potential for extending its reach to hitherto under exploited resources in both marine and inland waters, as well as to increase the production from aquaculture. Ponds and tanks including farm ponds play a crucial role in harvesting and holding rainwater for recharging the groundwater, besides contributing considerably to the inland fish production. Due to the ever growing population of the country, requirement towards the healthy fish protein is also increasing, which needs to be addressed in a sustainable manner. To match such demands, the Government works constantly towards harnessing the fullest potential of the

resources and for creating additional fishery resources.

The Government is undertaking various innovative programmes for enhancing the fish production through conservation of fishery resources and sustainable marine capture fish production. State of the art infrastructure facilities such as fishing harbours, fish landing centres, shore facilities, fish markets, cold storages and ice plants etc are essentially required for the safe berthing of the fishing crafts and hygienic handling of fishes. In view of fulfilling this objective, the Government invests highly in creation of these infrastructure facilities.

## **2. FISHERIES POLICY PERSPECTIVE**

The fisheries policy perspective of the Government of Tamil Nadu is to ensure fishermen welfare, to augment fish production, to enhance the income of the fishers and fish farmers and to ensure safety and security of fishermen.

## **2.1 Vision**

*"Ensuring safety, security and wellbeing of the fishers of Tamil Nadu by providing avenues for safety and sustainable fishing, optimal utilization, management of fishery resources and increasing the fish production through aquaculture".*

## **2.2 Mission**

To develop, manage, conserve and sustainable utilization of all aquatic resources for improving livelihoods, generating employment, food and nutritional security, economic prosperity and ensuring safety and security of fishers.

## **2.3 Major Policies**

The major fisheries policies of the Government are as follows:

1. Protection of traditional fishing rights and welfare of fishermen of Tamil Nadu.

2. Improving the living standards of fishers through various welfare schemes.
3. Enhancing the productivity and production of fish from inland, brackishwater and marine resources.
4. Creating alternative livelihood opportunities to the fishers.
5. Creation and upgradation of infrastructure facilities such as Government fish farms, Fishing Harbours (FHs), Fish Landing Centres (FLCs), cold chain, value addition, forward and backward linkages.
6. Generating additional rural employment opportunities through fish culture.
7. Empowerment of fisherwomen in livelihood activities.
8. Conservation, management and sustainable utilization of potential inland fishery resources to provide livelihood, generation of



employment opportunities, food & nutritional security and economic prosperity.

9. Bridging the gap between demand and supply of fish seed.
10. Harnessing the opportunity of expanding export market for high value fish and fishery products.
11. Conserving fishery resources, stock enhancement and management through enforcement of relevant Acts, Rules and Regulations.
12. Capacity building and skill upgradation for fishers and departmental officials in Human Resource Development, Research & Development and technological interventions in Fisheries sector.
13. Re-assessment of the fishery resources and their potential in the State of Tamil Nadu.

14. Ensuring transparency in implementation and monitoring of developmental schemes and welfare measures through e-Governance.

## **2.4 Major activities of the Department**

The following are the major activities of the Fisheries and Fishermen Welfare Department:

1. Protection of traditional fishing rights of Tamil Nadu fishermen.
2. Ensuring fishermen safety at sea.
3. Search, Rescue and Rehabilitation measures during natural calamities and disasters.
4. Implementing various social security welfare schemes for fisherfolk.
5. Enforcement of fisheries Acts and Rules.
6. Conservation and management of fishery resources in inland and marine waters through ranching programme.

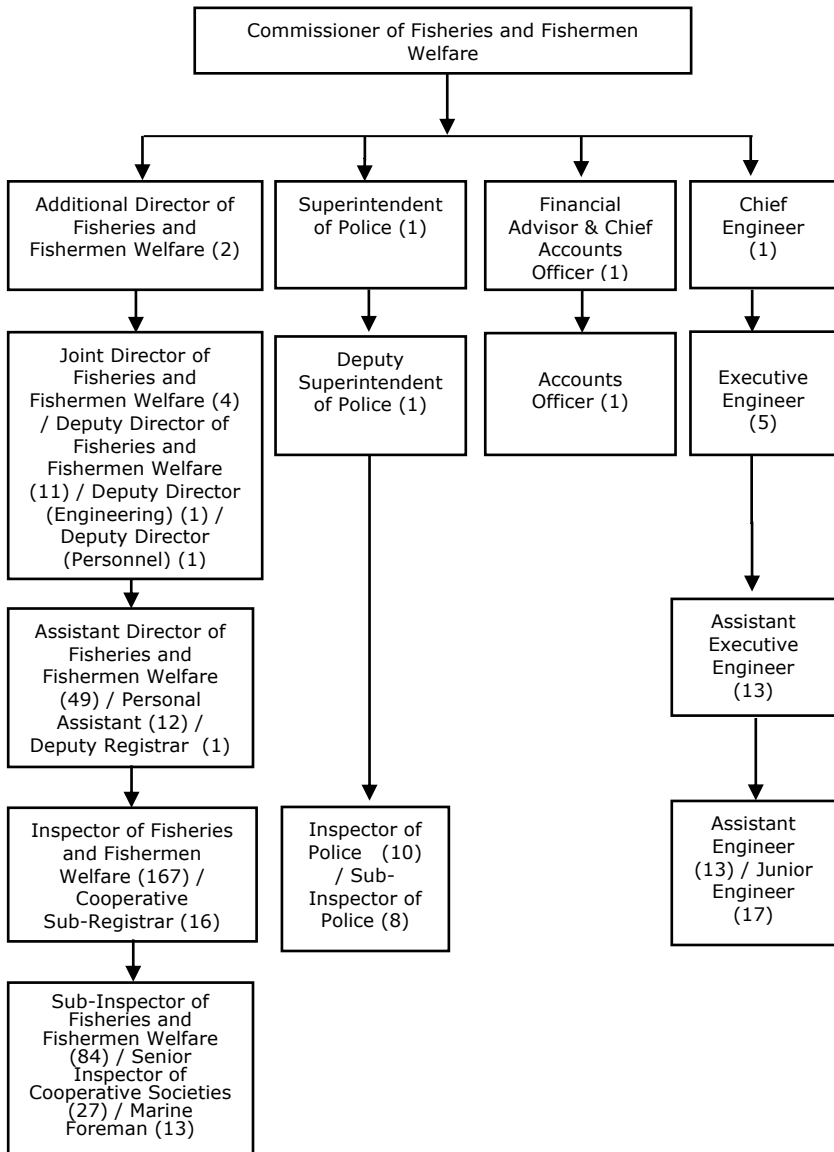
7. Development of inland fisheries and aquaculture through Union and State Government schemes.
8. Development of infrastructure facilities such as fishing harbours, fish landing centres and Government fish farms.
9. Hygienic marketing of fish and fishery products and establishing cold chain facilities.
10. Special focus on alternative livelihood of fisherwomen.
11. Capacity building and skill development for fish farmers and fishers.
12. Outreach and extension activities.
13. Management of fisheries cooperatives.
14. Improving the socio-economic status of the fishers through alternative livelihood activities.

15. Introduction of advanced technologies to increase fish production.
16. Implementation of welfare schemes to the fishers by providing tax exempted diesel and subsidized kerosene.
17. Providing relief and assistance through Tamil Nadu Fishermen Welfare Board.

### **3. ADMINISTRATIVE SETUP**

The Department is headed by the Commissioner of Fisheries and Fishermen Welfare. The Commissioner of Fisheries and Fishermen Welfare is also the Managing Director of Tamil Nadu Fisheries Development Corporation Limited (TNFDC), the Functional Registrar of all Fishermen and Fisherwomen Co-operative Societies including Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED) and the Member Secretary of Tamil Nadu Fishermen Welfare Board (TNFWB).

# Organogram



The total sanctioned staff strength of the Fisheries and Fishermen Welfare Department is 1,796. The category-wise staff strength is given in Table 1.

**Table: 1**

**Category wise staff strength**

<b>Sl. No.</b>	<b>Name of the Post</b>	<b>No. of Posts (Sanctioned+deputation)</b>
1.	Commissioner of Fisheries and Fishermen Welfare	1
2.	Additional Director of Fisheries and Fishermen Welfare	2
3.	Joint Director of Fisheries and Fishermen Welfare	4+1
4.	Deputy Director of Fisheries and Fishermen Welfare	11+2
5.	Deputy Director (Personnel)	1
6.	Deputy Director (Engineering)	1
7.	Financial Advisor & Chief Accounts Officer	1
8.	Assistant Director of Fisheries and Fishermen Welfare / Assistant Director (Mechanical)	49+8

<b>Sl. No.</b>	<b>Name of the Post</b>	<b>No. of Posts (Sanctioned+ deputation)</b>
9.	Deputy Registrar	1
10.	Accounts Officer	1
11.	Inspector of Fisheries and Fishermen Welfare	167
12.	Sub-Inspector of Fisheries and Fishermen Welfare	84
13.	Ministerial and field staff	1,263+1
	<b>Total</b>	<b>1,586+12</b>
<b>Engineering Wing</b>		
1.	Chief Engineer	1
2.	Executive Engineer	5
3.	Assistant Executive Engineer	13
4.	Assistant Engineer	13
5.	Junior Engineer	17
6.	Senior Draughting Officer	1
7.	Draughting Officer	8
8.	Junior Draughting Officer	4
9.	Divisional Accountant	4
10.	Technical Assistant	23
11.	Ministerial and supporting staff	9
	<b>Total</b>	<b>98</b>

<b>Sl. No.</b>	<b>Name of the Post</b>	<b>No. of Posts (Sanctioned+ deputation)</b>
<b>Marine Enforcement Wing</b>		
1.	Superintendent of Police	1
2.	Deputy Superintendent of Police	1
3.	Inspector of Police	10
4.	Sub Inspector of Police	8
5.	Head Constable / Constable	53
6.	Police Driver	19
7.	Superintendent	1
8.	Assistant	2
9.	Camp Clerk	17
	<b>Total</b>	<b>112</b>
	<b>Grand Total</b>	<b>1,796+12</b>

#### **4. FISHERIES SECTOR IN TAMIL NADU - AN OVERVIEW**

Tamil Nadu has 1,076 km long coastline, which is the 2<sup>nd</sup> largest in the country. Marine fish production (2021-22) of the State is



5.95 lakh MT, of which 1.14 lakh MT, valued at Rs.6,559.64 crore has been exported.

Tamil Nadu possess 3.85 lakh hectare inland water spread area comprising reservoirs, major and minor irrigation tanks, ponds, rivers, backwaters and other water bodies. The inland fisheries sector supports the livelihood of 2.36 lakh inland fisherfolk of the State.

An estimated brackish water area of 56,000 hectare is available in the form of lagoons, estuaries and back waters, which are potential source of capture fisheries. There are 2,177 farms spread over in an area of 4,207.34 hectare is under coastal aquaculture.

#### **4.1 Marine Fisheries**

An overview of the marine fisheries sector is given in Table 2:

**Table: 2**  
**Marine Fisheries Statistics- 2022-23**

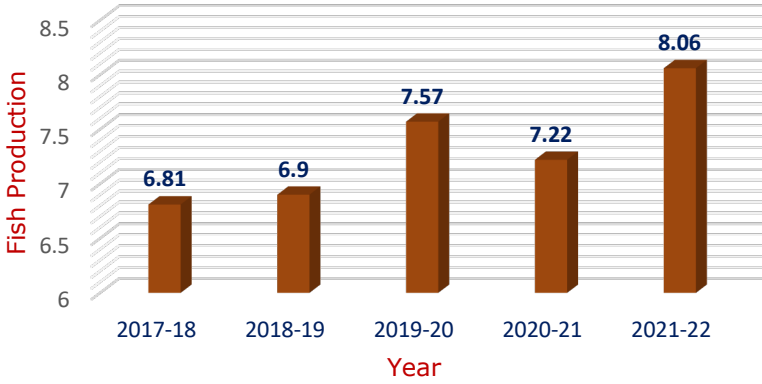
Coastal length	1,076 km
Exclusive Economic Zone (EEZ)	1.9 lakh sq. km
Continental shelf	41,412 sq. km
Number of Coastal Districts	14
Number of Fishing Villages	608
Marine Fisherfolk Population	10.48 lakh
Marine Fisherfolk enrolled in Tamil Nadu Fishermen Welfare Board	4,41,977
<b>Fishing Crafts registered (online)</b>	
Mechanized boats	5,830
Traditional fishing Crafts (Motorized and non-motorized)	45,685 (41,593 + 4,092)
<b>Infrastructure Facilities</b>	
Major Fishing Harbours - 9	<ol style="list-style-type: none"> <li>1. Chennai,</li> <li>2. Poompuhar, Mayiladuthurai District</li> <li>3. Nagapattinam,</li> <li>4. Mookaiyur, Ramanathapuram District</li> <li>5. Thoothukudi,</li> </ol>

	<ol style="list-style-type: none"> <li>6. Chinnamuttom, Kanniyakumari District</li> <li>7. Muttom (PPP), Kanniyakumari District</li> <li>8. Colachel, Kanniyakumari District</li> <li>9. Thengapattinam, Kanniyakumari District</li> </ol>
<p>Medium Fishing Harbours - 4</p>	<ol style="list-style-type: none"> <li>1. Pazhayar, Mayiladuthurai District,</li> <li>2. Mallipattinam, Thanjavur District</li> <li>3. Cuddalore</li> <li>4. Nambiyar Nagar, Nagapattinam District.</li> </ol>
<p>Fishing Harbours under construction - 5</p>	<ol style="list-style-type: none"> <li>1. Thiruvottiyurkuppam ,Chennai District</li> <li>2. Azhagankuppam, Villupuram District &amp; Alambaraikuppam, Chengalpattu District</li> </ol>

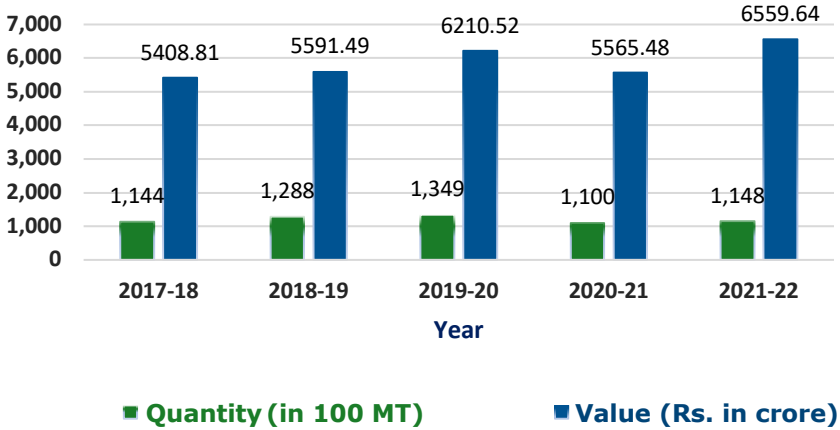
	<p>3. Vellapallam, Nagapattinam District</p> <p>4. Tharangambadi, Mayiladuthurai District</p> <p>5. Arcottuthurai, Nagapattinam District</p>
Fishing Harbours under Modernization - 3	<p>1. Thengapattinam, Kanniyakumari District</p> <p>2. Thoothukudi, 3. Pazhayar, Mayiladuthurai District.</p>
Fish Landing Centres/ Jetties	52
Fish Landing Points	251
Marine Fish Production (2021-22)	5.95 lakh MT
Marine Products Export (2021-22) *	<p>Quantity: 1,14,810 MT;</p> <p>Value : Rs.6,559.64 crore</p>

Source: \* Marine Products Export Development Authority

### Total Fish Production of Tamil Nadu (in lakh tonnes)



### Fish and Fishery Products Export of Tamil Nadu



## 4.2 Inland Fisheries

Tamil Nadu is endowed with 3.85 lakh ha of inland water resources. The inland fishery resources include reservoirs, major and minor irrigation tanks, ponds, rivers and other water bodies which are amenable to both capture and culture fisheries.

An overview of the inland fisheries sector is given in Table: 3.

**Table: 3**

### **Inland Fisheries Statistics 2022-23**

Inland Fishery Resources	3,85,761 ha
Reservoirs (90 Nos)	62,015 ha
Major, Minor Irrigation Tanks and Ponds	2,67,746 ha
Brackish water area	56,000 ha
Population of inland fishers	2.36 lakh
Inland Fisherfolk enrolled in Tamil Nadu Fishermen Welfare Board	57,772

<b>Inland Fisheries Infrastructure</b>	
<b>Fish Seed Production Centres</b>	
Government Fish Seed Production Centre	10+1(TNFDC)
Private Fish Seed Production Centre	42
<b>Fish Seed Rearing Centres</b>	
Government Fish Seed Rearing Centre	39+5(TNFDC)
Private fish Seed Rearing Centre	290
Fish Seed Rearing in cages (Government)	3
Inland Fish Production (2021-22)	2.11 lakh MT

### **4.3 Brackish Water Fisheries Management**

Brackish water area are dynamic ecosystem provide diverse habitat for the proliferation of diadromous and estuarine resident fish species to complete their life cycle. Brackish water fisheries resources include estuaries, Backwater, Mangroves & Lagoons. They are one of the finest nurseries and breeding grounds for a number of commercially as well as ecologically important species of fish, prawn and crabs.

The major estuaries and Brackish water area in Tamil Nadu are Pulicat lake, Araniar, Ennore, Muttukadu back water, Pazhayar, Pitchavaram, Punnakayal, Muthupet lagoon, Manakudi, Thengapattinam, Coleroon, Gedilam and Adyar back water. Brackish water lakes and estuaries are highly complex, but very productive ecosystems with a larger economic, social and environmental significance. The total brackish water area of Tamil Nadu has been estimated to be 56,000 ha, which accounts for 3.98% of the total estimated area of brackishwater in India.

#### **4.4 Coastal Aquaculture and Mariculture**

Marine fish stock and catch is dwindling in many parts of the world. Declining fish catch, increasing input costs of fishing operations and the unrelenting demand for marine products has prompted an interest in Mariculture and Coastal Aquaculture. The Government's policy framework promotes responsible and sustainable Coastal aquaculture and mariculture, by means of an integrated approach involving all stakeholders.



Shrimp is one of the most traded seafood commodities and shrimp aquaculture is considered to be one of the successful venture of modern aquaculture. Shrimp farming sector generates employment opportunities and provides foreign exchange to the Country.

In Tamil Nadu 2,177 shrimp farms with an extent of 4,207.34 ha area have been registered under Coastal Aquaculture Authority (CAA). In Tamil Nadu, 78 shrimp hatcheries are catering to the seed requirements of our State as well as neighbouring States.

## **5. Marine Fisheries activities and schemes**

The Government of Tamil Nadu have released an amount of Rs.319.04 crore to marine fishers under various welfare schemes during the year 2022-23.

The details of various welfare schemes are given below:

## **5.1 STATE SCHEMES**

### **5.1.1 Special allowance to marine fishermen families during Lean Fishing Period**

To alleviate the sufferings of the marine fishermen families who are actively involved in marine fishing activities, the Government of Tamil Nadu is extending relief assistance to marine fishermen families during lean fishing months.

During the year 2021-22, the Government enhanced the relief assistance from Rs.5,000/- to Rs.6,000/- to marine fishermen families. Accordingly, the Government sanctioned an amount of Rs.104.38 crore for disbursement of special relief assistance to fishermen families for the year 2022-23, out of which an amount of Rs.92.63 crore has been disbursed to 1,54,384 marine fishermen families in 12 coastal Districts. For Thoothukudi and Tirunelveli

Districts, disbursement of relief assistance will be completed by May, 2023.

This scheme will be continued in the year 2023-24 also.

### **5.1.2 Fishermen Savings-cum-Relief Scheme**

Marine Fishermen savings-cum-relief scheme has been implemented as State scheme from the year 2022-23. Under this scheme, relief amount of Rs.4,500/- including fishermen contribution of Rs.1,500/- is being provided to fishermen during fishing lean months.

The Government have sanctioned an amount of Rs.63.26 crore for this scheme during 2022-23, out of which an amount of Rs.52.43 crore has been disbursed to 1,74,772 marine fishermen of 12 coastal Districts viz., Tiruvallur to Ramanathapuram and Kanniyakumari Districts. For Thoothukudi and Tirunelveli Districts, disbursement of relief will be completed by May, 2023.

This scheme will be continued in the year 2023-24 also.

### **5.1.3 Savings-cum-Relief scheme for marine fisherwomen**

Marine fisherwomen savings -cum- relief scheme is being implemented as State scheme from the year 2006-07. Under this scheme, a total relief amount of Rs.4,500/- per fisherwomen is being disbursed during fishing lean months, which includes their contribution amount of Rs.1,500/-.

The Government have sanctioned an amount of Rs.63.36 crore for this scheme during the year 2022-23, out of which an amount of Rs.52.67 crore has been disbursed to 1,75,588 marine fisherwomen of 12 coastal Districts viz., Tiruvallur to Ramanathapuram and Kanniyakumari Districts. For Thoothukudi and Tirunelveli Districts, disbursement of relief assistance will be completed by May, 2023.

This scheme will be continued in the year 2023-24 also.

#### **5.1.4 Supply of Tax-exempted Diesel to Fishing Boats**

The Government of Tamil Nadu provides sales tax exempted diesel to the registered mechanized fishing boats at the rate of 18,000 litres per boat per year at the rate of 1,800 litres for 10 months except two months of fishing ban period and to registered motorized country crafts at the rate of 4,000 litres per craft per year through Tamil Nadu Fisheries Development Corporation Limited and Tamil Nadu State Apex Fisheries Cooperative Federation Limited.

During the year 2022-23, a total quantity of 93,992 KL of diesel has been supplied with a total sales tax exemption of Rs. 169.27 crore.

### **5.1.5 Supply of subsidized Industrial Kerosene to Traditional Fishing Crafts**

The Government is providing 3,400 litres of industrial kerosene per motorized country boat per year at the subsidized rate of Rs.25/- per litre to the registered fishing crafts of Thoothukudi, Tirunelveli and Kanniyakumari Districts.

During the year 2022-23, a total quantity of 17,100 KL of industrial kerosene has been supplied with a total subsidy amount of Rs.112.02 crore.

This scheme will be continued in the year 2023-24 also.

### **5.1.6 Daily relief to marine fishermen apprehended by neighbouring Countries**

The Government supports the families of fishermen who are apprehended by Sri Lanka and other neighbouring countries while fishing, by providing a daily allowance of Rs.250/- to the family of the apprehended fishermen. The relief

assistance under this scheme is being provided through the District Collectors. During the year 2022-23, a sum of Rs.10.53 lakh has been released as daily relief to 121 fishermen families.

This scheme will be continued during 2023-24 also.

### **5.1.7 Daily relief to the families of missing fishermen while fishing**

The State Government is providing daily relief assistance of Rs.250/- (Rs.7,500/-per month) to the families of fishermen who went missing while fishing at sea for two years or until they receive monetary benefits through Group Accident Insurance Scheme/ Tamil Nadu Fishermen Welfare Board. A sum of Rs.7.81 lakh has been released as daily relief assistance to 18 fishermen families for the year 2022-23.

This scheme will be continued in the year 2023-24 as well.

### **5.1.8 Relief to the families of deceased fishermen/ injured fishermen due to shooting incidents by Sri Lankan Navy**

The fishermen of coastal Districts, who fish in traditional waters of the Palk Bay are apprehended/ harassed and sometimes even shot 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 in shooting at sea. In the case of deceased fisherman being the sole bread-winner 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.



### **5.1.9 Providing 50% subsidy to procure new Tuna Long liner-cum-Gill netter boats**

To support the fishers to harvest the relatively underexploited oceanic fishery resources like Tuna and Tuna-like fishes, the Government is implementing the scheme of 'Providing 50% subsidy for fishermen to procure new Tuna Long liner-cum-Gill Netter boats'. Under this scheme, 50% of the estimated unit cost of Rs.60 lakh or up to a maximum of Rs.30 lakh is provided as subsidy for construction of new Tuna Long liner-cum-Gill netter boat.

Under this scheme, an amount of Rs.51.30 crore was released by the Government for construction of 171 boats. An amount of Rs.29.35 crore has been released as subsidy to 103 completed boats and two boats are under construction. Work orders have been issued to 66 new beneficiaries and boat construction works have been started.

## **5.2 CENTRALLY SPONSORED SCHEMES**

### **5.2.1 Livelihood assistance to marine fishermen families during Fishing Ban Period**

In order to conserve the marine fishery resources, seasonal fishing ban is being imposed every year since 2001. This 61 days fishing ban period is being implemented from April 15<sup>th</sup> to June 14<sup>th</sup> in the East Coast region (Tiruvallur to Arockiyapuram in Kanniyakumari District) and June 1<sup>st</sup> to July 31<sup>st</sup> in the West Coast region (Rajakkamangalamthurai to Neerodi in Kanniyakumari District).

To alleviate the sufferings of the fishermen during fishing ban period, the Government is providing fishing ban relief assistance at the rate of Rs.5,000/- to marine fishermen families of 14 Coastal Districts, in which the Government of India is providing Rs.1,500/- as central share under Pradhan Mantri Matsya Sampada Yojana (PMMSY). During the year 2022-23, a sum of

Rs.89.24 crore has been disbursed to 1,78,472 fishermen families of 14 coastal Districts.

### **5.2.2 Group Accident Insurance Scheme for fisherfolk**

This scheme is being implemented through the National Fisheries Development Board (NFDB) under Pradhan Mantri Matsya Sampada Yojana (PMMSY). Under this scheme, an amount of Rs.5 lakh is provided as relief to deceased fisherman and an amount of Rs.2.50 lakh is provided as relief to injured fishermen. For the year 2022-23, an amount of Rs.1.57 crore (40% of the premium amount) has been paid to the National Fisheries Development Board as State share of premium for 5,43,949 fisher beneficiaries. This scheme policy is valid until 25.07.2023.

### **5.2.3 Motorization of Traditional Crafts**

Subsidy assistance of Rs.48,000/- or 40% in the unit cost of the engine is being

provided to the fishermen for purchase of Outboard Motor (OBM)/ Inboard Engine (IBE) for traditional fishing crafts.

During the year 2022-23, a total subsidy assistance of Rs.9.60 crore has been provided to the traditional fishermen for purchase of 2,586 OBM/IBE.

#### **5.2.4 Subsidy assistance for Diversification of Trawl Fishing in Palk Bay Districts to Deep Sea Fishing**

The Government of Tamil Nadu is implementing the flagship scheme on 'Diversification of trawl fishing in Palk Bay Districts to deep sea fishing with Central and State Government's financial assistance for a unit cost of Rs.80 lakh per boat with 70% subsidy assistance. Out of the total cost of Rs.80 lakh, the Government of India provides 50% of unit cost @ Rs.40 lakh and the Government of Tamil Nadu provides 20% of unit cost @ Rs.16 lakh as subsidy and 20% of unit cost @ Rs.16 lakh

sourced from Institutional financing and 10% of unit cost @ Rs.8.00 lakh is borne by the beneficiary.

Under this scheme, construction of 55 deep sea fishing vessels have been completed and handed over to beneficiaries and another 24 boats are in various stages of construction.

#### **5.2.5 Subsidy assistance for construction of FRP boats with accessories as a replacement for Traditional/ Wooden Boats**

Under the Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme, the Government is providing Fibre Reinforced Plastic (FRP) boats having 10m overall length (OAL) with engine, nets and ice boxes at a total unit cost of Rs.5.00 lakh, in which 40% subsidy assistance of Rs.2.00 lakh is being provided as subsidy to the fishermen for replacement for traditional/ wooden fishing boats.

During the year 2022-23, administrative sanction for providing 300 FRP boats has been

issued by the Government at a total estimated cost of Rs 15 crore and works are in progress.

### **5.3 Fishing Regulation and Law Enforcement**

#### **5.3.1 Registration of Fishing Vessels**

To monitor the operation of fishing boats and also to ensure coastal security, fishing vessels are registered through 'ReALCraft' website. A total of 5,830 mechanized fishing boats, 41,593 motorized and 4,092 non-motorized traditional crafts have been registered online.

#### **5.3.2 Marine Enforcement Wing**

In order to enforce the Tamil Nadu Marine Fishing Regulation (TNMFR) Act and Rules and to handle inter sector conflicts and law and order issues arising due to fishing and related activities, an exclusive Marine Enforcement Wing was established in Fisheries and Fishermen Welfare Department with 112 staff including 92 police personnel.

The Marine Enforcement Wing is actively involved in enforcing the Tamil Nadu Marine Fishing Regulation Act, 1983 along the 14 coastal Districts in the State with permanent posts of 1 Superintendent of Police, 1 Deputy Superintendent of Police, 10 Inspectors of Police, 8 Sub-Inspectors of Police, 53 Police Constables and 19 Police Drivers.

The main function of the Marine Enforcement wing is to conduct patrolling in the sea to enforce the regulations of fishing and to prevent illegal fishing, destructive fishing and the use of banned fishing nets and to convey the information about the anti-social activities and intelligence gathered during patrolling to the Coast Guard and local Police authorities for further action.

#### **5.4 Disaster preparedness, Rescue and Rehabilitation Measures**

The Department of Fisheries and Fishermen Welfare is practising the following Standard Operating Procedure (SOP) to ensure the safety

and security of fishermen at times of natural disaster and adverse weather conditions:

1. Dissemination of weather information and cyclone warnings to fishers.
2. Operating a Central Control Room at the office of the Commissioner of Fisheries and Fishermen Welfare with essential communication equipments which are functioning round the clock with a dedicated telephone line (044-29530392).
3. Coordinating with all security agencies such as Coastal Security Group / Indian Coast Guard / Indian Navy for Search and Rescue (SAR) of fishermen.

#### **5.4.1 Measures for Communication and Safety of Fishermen at Sea**

##### **5.4.1.1 Providing Wireless Communication Network Facilities**

In order to ensure the safety of fishermen at sea, communication network facilities have been established throughout the 14 coastal



Districts of Tamil Nadu with 18 communication towers and control rooms.

Control rooms have been established in 15 locations for effective communication between shore station and fishing boats inside the sea. The Government have provided a total of 20,930 VHF sets, which includes 17,795 Nos of 5-watt hand held VHF sets to motorized fishing crafts at free of cost and 3,135 Nos of 25-watt VHF sets to mechanized fishing crafts with 75% subsidy.

#### **5.4.1.2 Installation of 'Transponders' in Mechanized Fishing Boats**

Transponders have been developed by Indian Space Research Organization (ISRO) as a means of communication and tracking system for deep sea fishing vessels, which will help in monitoring the fishing vessels and rendering assistance at the time of distress in deep sea up to 200 nautical miles.

The Government of India has sanctioned an amount of Rs.18.01 crore for installation of transponders in 4,997 mechanized fishing boats of Tamil Nadu. The Hon'ble Chief Minister of Tamil Nadu inaugurated the fitment of transponders in mechanized fishing boats on 30.12.2022. Subsequently, installation of transponders in mechanized fishing boats are in progress.

#### **5.4.1.3 Providing Satellite Phones, 'NavIC' and 'Navtex'**

To enhance the safety and security of fishermen while fishing in the deep sea, 160 Satellite phones, 200 NavIC and 80 NavTex message receivers have been installed in 80 clusters of boats at a total cost of Rs.2.28 crore. Further, 500 satellite phones have been distributed with 75% subsidy to deep sea fishing boats of Tamil Nadu at a cost of Rs. 5 crore.

#### **5.4.1.4 WebGIS based Mobile app 'Thoondil'**

The Department of Fisheries and Fishermen Welfare in association with the National Centre for Coastal Research (NCCR), Ministry of Earth Sciences (MoES), created a mobile application "THOONDIL", a Web GIS based Decision Support System for monitoring the movements of fishing vessels and registering the crews venturing for fishing. This application assists the fishermen by dispensing vital information on real time positioning, navigation to safe locations, facility to mark fishing grounds, Potential Fishing Zones (PFZ), weather forecast and fishing trip records etc.

#### **5.4.2 Relief assistance to fishing boats damaged during non-cyclone period**

A revolving fund has been created by the Government of Tamil Nadu to provide immediate relief assistance to the fishermen whose boats / fishing implements / houses for damages during non-cyclone period. An amount of Rs.10 lakh each

to all the coastal Districts totalling to Rs.1.30 crore has been provided as revolving fund to the coastal District Collectors. During the year 2022-23, Rs.10.89 lakh has been released as relief to 9 fishing boats that were damaged due to inclement weather conditions.

This scheme will be continued in the year 2023-24 also.

#### **5.4.3 Relief assistance to fishing boats damaged during 'Mandous' Cyclone**

During the 'Mandous' Cyclone 2022, mechanised fishing boats, FRP boats, fishing nets and engines were damaged due to heavy rain fall and wind in Chennai, Chengalpattu, Ramanathapuram and Mayiladuthurai Districts. Hence, considering the livelihood loss of the fisherfolk, the Government has sanctioned a total relief amount of Rs.4.67 crore towards the damages caused during the Cyclone Mandous in 2022.

#### **5.4.4 Conservation of Sea Turtles**

In order to conserve the Sea Turtles, the Government has notified to fix 'Turtle Excluder Devices (TEDs)' before the cod end of trawl nets. Upto five nautical mile radius around the turtle nesting and breeding grounds is prohibited for fishing during turtle nesting and breeding season, i.e., from 1<sup>st</sup> January to 30<sup>th</sup> April of every year (both days inclusive).

### **5.5 Protection of Traditional Fishing Rights of Tamil Nadu Fishermen**

#### **5.5.1 Retrieval of Katchatheevu**

There are 2,490 mechanized fishing boats, 12,443 motorized fishing crafts and 1,020 country crafts that are engaged in fishing. In the traditional waters of Palk Bay area 2,08,827 fisherfolk are living in 286 fishing villages. Around 80,000 fishermen directly depend on fishing in Palk Bay Districts viz. Ramanathapuram, Thanjavur, Tiruvarur,

Pudukottai and Nagapattinam Districts for their livelihood and a large section of coastal community indirectly depends on the fishing in the traditional waters of Palk Bay.

Tamil Nadu fishermen are often arrested while fishing in their traditional waters by Sri Lankan Navy in the pretext of crossing International Maritime Boundary Line (IMBL). The prolonged incarceration of our fishermen and their fishing boats by the Sri Lankan Government have been causing a sense of anxiety and insecurity among the fishermen community of Tamil Nadu as a whole.

Hence, retrieval of "Katchatheevu" back to India and restoration of the traditional fishing rights of Indian fishermen in the Palk Bay area are on the topmost agenda of the Government of Tamil Nadu. The Government is taking tireless efforts for the retrieval of "Katchatheevu" unilaterally given by the Union Government to

Sri Lanka in 1974. An unanimous resolution was also passed in the Tamil Nadu Legislative Assembly in this regard. Accordingly, the Government of Tamil Nadu impleaded itself in the case filed before the Hon'ble Supreme Court of India and urged the Union Government to retrieve Katchatheevu.

In the SLP.No.8013/2017, an individual sought *Writ of Mandamus* against the Union Government to give effect to/enforce Article 6 of the 1974 agreement entered between India and Sri Lanka and delete objectionable provision of the letter dated 23.03.1976. The Government of Tamil Nadu has filed Counter Affidavit in the Hon'ble Supreme Court of India on 05.08.2021.

In this regard, the Hon'ble Chief Minister has addressed the Hon'ble Prime Minister of India, through a Memorandum on 17.06.2021. Subsequently, the Hon'ble Minister for Fisheries-Fishermen Welfare and Animal Husbandry

submitted a Memorandum to Hon'ble Union Minister for Fisheries, Animal Husbandry and Dairying on 01.04.2022 to arrive at a permanent solution to the problems faced by the Tamil Nadu fishermen and to restore their right to fish in the traditional waters. The Government of Tamil Nadu, therefore, reiterate 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 restoring their rights to fish in their traditional waters.

### **5.5.2 Efforts taken by the Government to release Tamil Nadu Fishermen and their Fishing Boats apprehended by the Sri Lankan Navy**

The Tamil Nadu fishermen are often apprehended while fishing in their traditional waters by the Sri Lankan Navy in the pretext of crossing International Maritime Boundary Line (IMBL). With a deep sense of concern on the



repeated incidents, the Hon'ble Chief Minister of Tamil Nadu has written many letters to the Hon'ble Prime Minister of India bringing the incidents to the notice for immediate remedial action through diplomatic channels.

The Government of Tamil Nadu have been constantly demanding the Union Government to decisively use diplomatic channels to secure the immediate release of apprehended fishermen of Tamil Nadu and also to prevent the recurrence of such incidents. Whereas, the arrested fishermen had spent a longest duration of 113 days in Sri Lankan custody during the yesteryears, now due to the efforts taken by this Government, the fishermen were released with a shortest span of 16 days. The Hon'ble Minister for Fisheries-Fishermen Welfare and Animal Husbandry submitted a Memorandum to the Hon'ble Union Minister for Fisheries, Animal Husbandry and Dairying on 01.04.2022 to release the arrested

fishermen and the apprehended fishing boats at the earliest.

As of now, out 110 apprehended fishing boats, 6 boats were released by Sri Lankan Government, 1 fishing boat repatriated back to Tamil Nadu. Continuous efforts are being taken by Government of Tamil Nadu to repatriate the remaining 5 released fishing boats and to release 12 fishermen along with 104 unreleased fishing boats which are under the custody of Sri Lanka.

### **5.5.3 India-Sri Lanka Joint Working Group (JWG) on Fisheries**

Joint Working Group meetings are being conducted to release the fishermen and fishing boats, procedures and protocols to be followed during the patrolling, apprehension and also to handle the fishermen in humanitarian manner and release. So far, five rounds of India and Sri Lanka Joint Working Group meetings were conducted. During these meetings, the issue of release and repatriation of Tamil Nadu fishermen and their

fishing boats apprehended by the Sri Lankan Navy were reiterated.

## **5.6 Brackish water fisheries, Coastal Aquaculture and Mariculture**

### **5.6.1 Brackish water fisheries**

The importance and necessity of action plan for the promotion of brackish water fisheries is felt very much critical for long term survival and sustainability of fisheries in the State. Brackish water fisheries policy attempts to enhance this endeavour by giving higher priority and judicious effective utilisation of brackish water/ saline water resource by adopting environmental friendly and cost effective brackish water culture based capture fisheries, mainly ranching of shrimps, Mud crab and other economically important fin fishes.

In this backdrop, the State envisages the following strategy and action plan for the management of brackish water lakes and estuarine fisheries.

1. Effective management of brackish water lakes and estuarine fisheries resources for economical, social and environmental stability.
2. Ensuring the integration of Brackish water lakes and estuarine habitat in the coastal zone development plan with specific guidelines for the management of Brackish water lakes and estuarine fisheries
3. Ensuring the productivity of breeding and nursery areas as well as the migrating routes of fish species for effective recruitment thereof good fishing in Brackish water lakes and estuaries region.
4. Encouraging greater participation of community in fisheries management and conservation of bio-diversity in brackish water lakes and estuarine region.
5. Generation of relevant data and information through comprehensive research and

monitoring of brackish water lakes and estuaries to support effective management.

### **5.6.2 Coastal Aquaculture**

The importance of coastal aquaculture in the context of augmenting fish production, improving rural economy and productive utilisation of water resources is well-established. At present, the State coastal aquaculture is dominated by shrimp culture. Apart from encouraging the farmers to grow shrimps in coastal areas, the Government is committed to promote the culture of alternative species such as mud crab, milk fish, mullet and sea bass through cage culture and pond based culture. Farming for diversified species such as Sea bass, Milk fish, Silver pompano, Mullet, Pearlsport and Crab will be encouraged to be taken up by small farmers under appropriate schemes through State and Union Government. Also, in the pond based coastal aquaculture, Zero water exchange

aquaculture systems, renewable energy utilization culture systems, organic aquaculture systems and other innovative technologies which minimizes usage of water and other natural resources are being encouraged by the State.

According to the resource mapping study undertaken in Tamil Nadu by CIBA, the State is having 10,099 ha potential coastal land for aquaculture. Hence, there is an ample scope for further development of coastal aquaculture that can improve the livelihoods of the coastal population living in remote areas. In order to promote the coastal aquaculture activities, the following initiatives need to be undertaken;

1. Suitable lands for fin fish/shell fish farming have to be identified in Coastal District of Tamil Nadu through remote sensing and GIS system coupled with field investigation.

2. Proper land leasing policy has to be evolved for lands under the control of Government to promote Coastal aquaculture.
3. Promotion of Coastal aquaculture will be encouraged in fallow lands unfit for crop cultivation and development of Exclusive/Special Coastal Aquaculture Zones will be promoted in large land parcels.
4. Private sector will be encouraged to establish brood banks, SPF hatcheries for shrimp and fin fishes and feed mills using indigenous raw materials.

In order to simplify the shrimp farm registration and renewal process, the CAA rules have been amended and a provision has been made in the rules to form Sub-Divisional Level Committee and District Level Committee. To give effect to the above amendment, the Government of Tamil Nadu has issued necessary orders.

The Government have accorded administrative sanction to the tune of Rs.18.50 crore for the development of shrimp farming in Tamil Nadu under Pradhan Mantri Matsya Sampada Yojana (PMMSY) and the schemes are under implementation. The details of the schemes are given below;

**Table: 4**

<b>Sl. No</b>	<b>Activities</b>	<b>No. of units</b>	<b>Project cost (Rs. in Lakh)</b>
1	Construction of New Brackish water Shrimp farms	100 ha	800.00
2	Inputs for cultivation of shrimp	100 ha	600.00
3	Construction of Biofloc ponds for brackishwater/saline/alkaline areas including inputs	25 nos	450.00
<b>Total</b>			<b>1850.00</b>

The State has set up a Marine Finfish Seed Rearing Centre at Mandapam in Ramanathapuram District to supply fish seeds to the marine cage culture. This unit has produced 73,000 marine fin fish seeds. Subsidy assistance has been extended



to fish farmers for establishment of two marine finfish nursery rearing units at a total cost of Rs.30 lakh under PMMSY.

### **5.6.3. Mariculture**

Mariculture is a sector of aquaculture that involves rearing of aquatic organisms under controlled or semi-controlled conditions in coastal and offshore waters. Mariculture is the fast growing subsector of aquaculture and has very high growth potential. Mariculture activities such as Seaweed culture and Open sea cage culture, have been successfully taken up by the State as a livelihood measure to the coastal fishers.

Open sea Cage farming has emerged as a viable option to increase production of high value marine finfish and shellfish. Cage farming promotes fish production and self-employment for the coastal fisher youth. Hence, there is tremendous scope for the further expansion of cage farming in Tamil Nadu to minimize the fishing pressure of inshore waters.

To develop a sustainable, eco-friendly, socially acceptable Mariculture sector in the State and to augment the State's production of seaweed, finfish, shellfish and to provide social and economic development to the stakeholders, the following initiatives have been undertaken by Fisheries and Fishermen Welfare Department;

1. Mariculture zoning viz., area specific, species specific plans to be formulated using modern scientific tools for development.
2. Suitable sites will be demarcated for different mariculture activities based on scientific criteria including the socio-cultural attributes and other logistics.
3. The State will provide handhold technical support to integrate development through Central and State Schemes and programmes.
4. Integrated Mariculture Development Plan for each of the potential coastal blocks and Districts through banks/lending agencies.

#### **5.6.4 Seaweed culture**

Seaweed sector is an emerging area for the development of rural economy, especially in the coastal Districts. There is enormous potential for the development of small scale individual family and community based seaweed cultivation along Tamil Nadu coastline. Our State is the top producer of seaweeds in India and the Government promotes the seaweed farming as an alternative livelihood activity for fisher folk. Empowerment of fisherwomen through seaweed culture in Tamil Nadu is being done by the Government. A total sum of Rs.2.43 crore has been provided to 1,956 coastal fisher women for procurement of 16,000 monoline and rafts for seaweed cultivation.

The total potential area for seaweed culture all along the Tamil Nadu coast is 5048 ha. Present demand for seaweed in Tamil Nadu is about 1,15,150 MT. However, the actual estimated

production is only 13,300 MT. Therefore, the Government has decided to establish Multipurpose Seaweed Park in Tamil Nadu at a total cost estimate of Rs.127.71 crore. Under this flagship project, an appropriate full-fledged infrastructure facility for holistic development of seaweed farming and value addition of seaweed will be created in Hub-I and Hub-II facilities. The Government is determined to augment the opportunities of self-employment to fisher folk especially in Southern coastal District of Tamil Nadu through this project by infusing advanced technologies in culture and processing of seaweeds.

#### **5.6.5 Open sea cage culture**

Open sea cage farming has emerged as a viable option to increase the production of high value marine finfish and shellfish. Suitable commercially important fish species for open sea cage farming are Cobia, Sea bass, Groupers,

Pompano and Lobsters. Under various Government schemes, 384 cages have been distributed to coastal fisher folk at a project cost of Rs.16.56 crore for undertaking open sea cage culture. During the year 2022-23, based on the administrative sanction obtained from the Government for distribution of 50 Open sea cages to marine fisherfolk at a cost of Rs. 2.50 crore, action is being taken to provide open sea cages to coastal fisherfolk to undertake fish culture in open sea.

## **6. Development of Inland Fisheries**

Inland fisheries sector is poised to play a significant role in the State economy in the near future. It is an important food production sector, which is contributing to the livelihood as well as food security to the rural people. It also plays a vital role in enhanced food production, nutritional security and employment generation.

**The main objectives of inland fisheries and fish culture are:**

1. Production and supply of quality fish seed to fish farmers.
2. Increase the fish seed production and to fulfill the fish seed demand.
3. Optimum utilization of inland fishery resources.
4. Geo-spatial mapping of inland water resources to assess the fishery potential.
5. Expansion of fish farming area.
6. Increase the overall inland fish production of the State.
7. Enhancing the fish productivity, doubling the fish production and increase the income of farmers.
8. Promotion of scientific stocking of fish seeds in all water bodies to contribute fish food and nutritional security.
9. Conservation of indigenous fishery resources, effective management, stock

enhancement and monitoring of prevention of illegal entry of exotic species.

10. Creation of employment opportunities to the rural sector through advanced fish culture practises, hygienic marketing facilities in the State.
11. To ensure food and nutritional security and increasing per capita availability of quality fish.

### **6.1 Special initiatives in Inland Fisheries**

Tamil Nadu has 3.85 lakh ha of inland water spread area amenable for fisheries development. However, these water bodies mainly depend on seasonal rains for receipt of water. Erratic rainfall associated with mismatch between breeding season of fishes and water availability for quality fish seed production, short retention period of water bodies, non-availability of low cost and quality feed are the major obstacles for inland fish production of Tamil Nadu.

In order to overcome the above obstacles, the following initiatives have been taken up by the Government.

1. Promotion of intensive cage culture in irrigation tanks and reservoirs on cluster basis to increase the inland fish production and fish seed rearing in fixed cages to increase quality fish seed availability.
2. Scientific stocking of fish seed in potential water bodies owned by various Departments for effective utilization and increase the fish production.
3. Popularization of intensive fish culture technologies among the farmers by providing subsidy and enhancing their income through skill development trainings.
4. Promotion of eco-friendly aquaculture practices through integrated fish culture with agriculture, horticulture & livestock to provide additional income to the farmers.
5. Introduction of diversified fish species and promotion of fast growing fish culture viz., Amur Carp, Jayanthi Rohu and Genetically



Improved Farmed Tilapia (GIFT).

6. Creation of employment opportunities to the rural people by promoting fish seed rearing and fish culture on cluster basis.
7. A fish feed mill unit owned by the Department has been operated successfully in Thanjavur District and supplying quality fish feed to the Government fish farms and private farmers.
8. Pure-line brood stock facilities in Mettur Dam and Bhavanisagar Government fish farms have been established for improving the quality of fish seed produced and reared in Government fish farms.
9. Promotion of Biofloc fish culture as an intensive fish culture technology to enhance the unit productivity and sustainable aquaculture practices with higher profit.
10. Promotion of Re-circulatory Aquaculture System (RAS) by adopting minimal usage of water for intensive fish culture by providing subsidy assistance to fish farmers

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

The Government of Tamil Nadu has formed District Fish Farmers Development Agencies (DFFDA) in 38 Districts except Chennai, to popularize fish culture, channelize subsidies to the fish farmers and to generate employment opportunities in rural areas. These DFFDA are functioning under the Chairmanship of the respective District Collectors.

The main activities of DFFDA are encouraging farmers to take up fish culture, providing technical guidance and by extending subsidy assistance, imparting training on advanced fish culture practices. Registration of fish seed hatcheries, nurseries and grow out fish culture farms are being carried out by the DFFDA to regularize the inland fisheries sector taking on fish culture practices under various Government schemes.

### **6.3 Reservoir Fisheries Management**

In Tamil Nadu, there are 62 reservoirs are under the control of the Department of Fisheries and Fishermen welfare. Among these, 54 reservoirs are under the control of Department of Fisheries and Fishermen Welfare and 8 reservoirs are under the control of Tamil Nadu Fisheries Development Corporation Limited (TNFDC). The Reservoir fisheries management is carried out to augment the inland fish production in Tamil Nadu.

- 1) The main objective of Reservoir fisheries management is to enhance the fish production and revenue of the inland fishers who depend on these reservoirs for their livelihood.
- 2) Reservoir fisheries is managed by leasing of fishery rights through 'Tender cum Auction' method, licensing and share fishing methods.

- 3) During the year 2021-2022, 39 reservoirs are under lease and Rs.9.68 crore revenue has been realized.
- 4) The Department of Fisheries and Fishermen Welfare has identified and also taken special initiative to bring in potential reservoirs for fishery management.

#### **6.4 Government Fish Seed Production Centres**

In Tamil Nadu, 11 Government owned fish seed production centres are operating successfully. The details of Government fish seed production centres are given below:-

**Table: 5**

#### **Government Fish farm - Seed Production 2022-23**

<b>Sl. No</b>	<b>District</b>	<b>Government fish seed production centres</b>	<b>Early Fry production (in lakh)</b>
1	Tirunelveli	Manimuthar	1,495.00
2	Thanjavur	Karanthai & Thatankulam	727.00
3	Tiruvarur	Nallikkottai	50.50
4	Karur	Thirukampuliyur	367.00
5	Erode	Bhavanisagar	1,920.00
6	Salem	Mettur Dam	1,872.00

<b>Sl. No</b>	<b>District</b>	<b>Government fish seed production centres</b>	<b>Early Fry production (in lakh)</b>
7	Krishnagiri	Krishnagiri (GIFT)	60.00
8	Tiruvallur	Poondi	276.80
9	Theni	Manjalar (GIFT)	4.12
10	Thiruvannamalai	Sathanur*	122.50
<b>Total</b>			<b>6,894.92</b>

\* TNFDC

The Government has taken various measures to strengthen the infrastructure facilities in the Government fish farms every year. During the year 2022-23, the Department of Fisheries and Fishermen welfare has produced 68.90 crore early fry and supplied. Further, the Government is also encouraging private farmers to establish fish seed hatcheries by providing subsidy assistance.

Considering the limited water availability in the State, the Government has taken steps for promotion of fast growing fish varieties in short seasonal water bodies of Tamil Nadu and established Genetically Improved Farmed Tilapia (GIFT) hatchery in Government fish farm,

Krishnagiri, with a capacity to produce 25 Lakh GIFT seeds every year, which are being supplied to the farmers of Tamil Nadu as well as to neighbouring States. In order to meet out the growing demand of GIFT seeds in Tamil Nadu especially in the southern Districts, another Government GIFT hatchery at Manjalar Dam at Theni District has been established with a production capacity of 15 lakh GIFT seeds/ year under World Bank funded TN-IAM Project.

### **6.5 Government Fish Seed Rearing Centres**

In Tamil Nadu, 39 Government fish seed rearing centres are functioning under the control of Department of Fisheries and Fishermen Welfare and 5 fish seed rearing centers are functioning under TNFDC. A total of 8.84 crore quality fish fingerlings of various fish species have been reared and supplied so far to various agencies during the year 2022-23. The seeds supplied were stocked in reservoirs, irrigation tanks and in fish

farms of private farmers leading to increase in inland fish production of the State. The details of Government fish seed rearing centres are given below:-

**Table: 6**  
**Government Fish farm-Seed Rearing**  
**2022-23**

<b>Sl. No.</b>	<b>District</b>	<b>Fish seed rearing centres</b>	<b>Seed Rearing (in lakhs)</b>
1	Kanniyakumari	Pechiparai, Chittar-I, Chittar -II	13.96
2	Tirunelveli	Manimuthar, Kuniyur	58.56
3	Tenkasi	Gadana	20.42
4	Theni	Vaigai, Manjalar	49.90
5	Sivagangai	Piravalur	15.12
6	Virudhunagar	Pilavakkal	13.73
7	Dindigul	Anaipatti	28.06
8	Pudukkottai	Thattamanaipatti, Kurungalur, Karuvidaicherry	13.75
9	Thanjavur	Neithalur, Agarapettai, Karanthai, Thirumangalakottai	88.18

<b>Sl. No.</b>	<b>District</b>	<b>Fish seed rearing centres</b>	<b>Seed Rearing (in lakhs)</b>
10	Tiruvarur	Nallikkottai	9.90
11	Trichy	Asoor, Kulithalai	11.94
12	Karur	Thirukampuliyur	14.49
13	Erode	Bhavanisagar	129.44
14	Salem	Mettur Dam, Anaimaduvu	113.35
15	Dharmapuri	Hogenakkal, Chinnar	61.06
16	Krishnagiri	Krishnagiri, Pambar, Kelavarapalli	127.05
17	Vellore	Mordhana	8.67
18	Villupuram	Vidur	10.50
19	Cuddalore	Lalpet, Agaram	29.62
20	Tiruvallur	Poondi	23.15
21	Kancheepuram	Chembarampakkam	4.12
22	Chengalpattu	Athur	15.13
	<b>Total (A)</b>		<b>860.10</b>
<b>Fish seed rearing farms under TNFDC</b>			
23	Dindigul	PalarPorandalar	1.05
24	Tirupur	Amaravathy, Thirumurthy	5.83
25	Coimbatore	Aliyar	11.10
26	Tiruvannamalai	Sathanur	6.15
<b>Total (B)</b>			<b>24.13</b>
<b>Grand Total (A+B)</b>			<b>884.23</b>



The Government is encouraging private farmers to establish fish seed rearing centres by providing subsidy assistance. To ensure the availability of fish seeds for stocking in irrigational tanks on receipt of water during North East Monsoon, fish seed rearing in cages also promoted by the Government.

## **6.6 Protection of native fish species**

The Government has committed to protect the native fish species of the State through ranching of fish seed for replenishment and conserving the native fish species germplasm. The native species of the State are often having high demand as they are considered as local delicacies and also has immense health benefits.

In order to address the huge demand for native fish species such as Pearl spot, Calbasu and Cauvery carp and to make availability of protein rich food to the rural mass, the Government has taken earnest efforts for

establishment of native fish species hatcheries in 3 Districts viz., Salem, Thanjavur and Cuddalore at a total cost of Rs 4.40 crore. With regard to establishment of native fish hatcheries viz., Pearl spot hatchery at Parangipettai in Cuddalore District at a cost Rs.2.45 crore, Calbasu hatchery at Agarapettai in Thanjavur District at a cost Rs. 1.64 crore and Cauvery carp hatchery at Mettur in Salem District at a cost of Rs. 25 lakh, tenders floated and received bids are under scrutiny. Upon establishment of native fish hatcheries, awareness programmes and training will be conducted among the fishers for conservation of native fish stock and also to increase the fish production. The fish seed produced in the native fish species hatcheries will also be supplied to the fish farmers for promotion of culture of native fish species in the State, to ensure availability of delicious fish throughout the State. This will surely fetch higher returns to the farmers.

## **6.7 River Ranching programme**

River Ranching of native fish species in rivers paves way for restoration of fishery wealth in Tamil Nadu by replenishing the wild stock. Conservation and Restoration of native fishery wealth will also uplift the socio economic status of the inland fisherfolk who are living adjacent to inland water bodies. In Tamil Nadu, river ranching programme has been carried out at a cost of Rs. 1.24 crore. Through this programme, 40 lakh advanced fingerlings have been stocked in Cauvery, Bhavani and Thamirabharani rivers and its tributaries. The native fish species restoration programme in the State includes breeding of native fish species in captivity, rearing and ranching in the natural water bodies to ensure increased fish production.

## **6.8 National Agricultural Development Programme (NADP) 2021-22**

### **6.8.1 Promotion of Poly culture of Indian Major Carps and Scampi in Farm Ponds**

The Government has sanctioned a sum of Rs. 25.25 lakh under NADP during the year 2021-22 for renovation of farm ponds and inputs for fish culture have been completed and subsidy has been released to the beneficiaries.

### **6.8.2 Improving the water retention efficiency through High-density Poly ethylene (HDPE) lining for fish culture in farm ponds**

The Government has sanctioned a sum of Rs. 75.75 lakh under NADP for the year 2021-22 for "Improving the water retention efficiency through HDPE lining for fish culture in farm ponds" by the beneficiaries, works are completed and subsidy has been released to the beneficiaries.

### **6.8.3 Provision of Input assistance for Murrel Fish culture**

The Government has sanctioned a sum of Rs. 30.30 lakh under NADP for the year 2021-22 for "Provision of Input assistance for Murrel Fish culture" to the farmers, scheme was completed and subsidy has been released to the beneficiaries.

### **6.8.4 Establishment of Government GIFT Seed Rearing centre at Barur in Krishnagiri District**

The Government has sanctioned a project on "Establishment of Government GIFT Seed Rearing centre at Barur in Krishnagiri District" under NADP for the year 2021-22 at a cost of Rs.4.50 crore and the works are nearing completion.

### **6.8.5 Renovation of Anaimaduvu Government fish farm in Salem District**

The Government has sanctioned a project on "Renovation of Anaimaduvu Government fish

farm in Salem District” under NADP for the year 2021-22 at a cost of Rs. 70 lakh and the works have been completed.

#### **6.8.6 Improvement works in Chittar-II Government fish farm in Kanniyakumari District**

The Government has sanctioned a project on “Improvement works in Chittar-II Government fish farm in Kanniyakumari District” under NADP for the year 2021-22 at a cost of Rs. 32.00 lakh and the works have been completed.

#### **6.8.7 Improvement of Government fish farm at Pechiparai Dam in Kanniyakumari District**

The Government has sanctioned a project on “Improvement of Government fish farm at Pechiparai Dam in Kanniyakumari District” under NADP for the year 2021-2022 at a cost of Rs. 20.00 lakh and the works have been completed.

### **6.8.8 Establishment of Fish Brood Bank under PMMSY**

The Government has sanctioned a project on "Establishment of Fish Brood Bank in Lalpet, Cuddalore District and Ramanathi, Tenkasi District" under PMMSY 2020-21 at a total cost of Rs.10 crore. The works have been completed

### **6.8.9 Integrated Reservoir Fisheries Development**

The Government has sanctioned a project on "Integrated Reservoir Fisheries Development" in 5 reservoirs viz., Mettur Dam, Bhavanisager, Sathanoor, Krishnagiri and Chittar under PMMSY 2020-21 at a total cost of Rs. 11.08 crore and works are in progress.

### **6.8.10 Establishment of New Freshwater Finfish Hatcheries**

The Government has sanctioned a sum of Rs. 25 lakh as subsidy to the beneficiaries under PMMSY 2020-21 for "Establishment of New Freshwater Finfish Hatcheries" 2 Nos. In which,

work has been completed in Thanjavur District and work is in progress in Tiruvarur District.

#### **6.8.11 Construction of New Seed Rearing Ponds and Inputs for culture**

The Government has sanctioned a sum of Rs. 32.20 lakh as subsidy to the beneficiaries under PMMSY 2020-21 for "Construction of New fish seed Rearing Ponds and Inputs for culture" in 10 ha and the works are in progress.

#### **6.8.12 Construction of New Grow out Fish Ponds**

The Government has sanctioned a sum of Rs. 3.22 crore as subsidy to the beneficiaries under PMMSY 2020-21 for "Construction of New Grow out Fish Ponds" in 100 ha subsidy is being released to the beneficiaries.

#### **6.8.13 Inputs subsidy for fresh water aquaculture**

The Government has sanctioned a sum of Rs. 1.84 crore as subsidy to the beneficiaries under PMMSY 2020-21 for "Inputs subsidy for



fresh water aquaculture” in 100 ha subsidy is being released to the beneficiaries.

#### **6.8.14 Construction of Bio-floc ponds (Medium) for freshwater areas including inputs**

The Government has sanctioned a sum of Rs. 98 lakh as subsidy to the beneficiaries under PMMSY 2020-21 for “Construction of Bio-floc ponds (Medium) for freshwater areas including inputs”. Totally 15 units are being established under the scheme. Subsidy is being released to the beneficiaries.

#### **6.8.15 Establishment of Re-circulatory Aquaculture System (RAS) for fresh water fish culture**

The Government has sanctioned a sum of Rs. 69 lakh as subsidy to the beneficiaries under PMMSY 2020-21 for “Establishment of Re-circulatory Aquaculture System (RAS) for fresh water fish culture”. Totally 20 units are being established under the scheme. Subsidy is being released to the beneficiaries.

### **6.8.16 Establishment of Small Biofloc fish culture system**

The Government has sanctioned a sum of Rs. 34.50 lakh as subsidy to the beneficiaries under PMMSY 2020-21, for “Establishment of Small Biofloc fish culture system”. Totally 10 units are being established under the scheme. Subsidy is being released to the beneficiaries.

### **6.9 Pradhan Mantri Matsya Sampada Yojana (PMMSY) 2021-22**

The Government of India has accorded Administrative sanction for the Inland fisheries development schemes under the funding assistance of PMMSY for the year 2021-2022. The Works are in progress.

**Table: 7**

<b>Sl. No.</b>	<b>Activities</b>	<b>No. of units</b>	<b>Total project cost (Rs. in lakh)</b>
1.	Establishment of New Freshwater Finfish Hatcheries	8 Units	200.00
2.	Construction of New Fish Rearing ponds (Nursery /Seed Rearing)	40 ha	280.00
3.	Construction of New Grow-out fish culture ponds	85 ha	595.00
4.	Inputs for fresh water Aquaculture	85 ha	340.00
5.	Establishment of Bio-floc fish culture system	100 nos	750.00
6.	River Ranching of native fish species in Tamil Nadu	40 lakh AFL*	124.00
	<b>Total</b>		<b>2289.00</b>

\*AFL- Advanced Fingerlings

### **6.10 Pradhan Mantri Matsya Sampada Yojana (PMMSY) 2022-23**

The Government of India has accorded Administrative sanction for the Inland fisheries development schemes under the funding assistance of PMMSY for the year 2022-2023.

**Table: 8**

<b>Sl. No</b>	<b>Activities</b>	<b>No. of units</b>	<b>Total project cost (Rs in lakh)</b>
1.	Construction of New Grow-out fish culture ponds	10 ha	70.00
2.	Inputs for fresh water Aquaculture	10 ha	40.00
	<b>Total</b>		<b>110.00</b>

**6.11.Input assistance for fish culture in multi-purpose farm ponds under State fund 2022-23**

To provide support to the farmers to take up fish culture, the Government is implementing a scheme on “Input assistance to the farmers for promotion of fish culture in multi-purpose farm ponds” at a total cost of Rs.1 crore. Subsidy assistance is being provided to the farmers for the purchase of fish seed, feed and fertilizers to cover totally 550 farm ponds during this year to increase the inland fish production and to improve the revenue of small and marginal farmers of the State.

## **6.12 Tamil Nadu Irrigated Agriculture Modernisation Project (TN-IAMP)**

The World Bank funded project on Tamil Nadu Irrigated Agriculture Modernization Project (TN-IAMP) is being implemented since 2018-19 in 66 sub-basins of Tamil Nadu. The main fisheries interventions implemented are fish culture in long and short seasonal irrigational tanks, aquaculture in farm ponds and earthen fish seed rearing and culture farms mainly to increase the fish production from available water resources by adopting the technology of fast growing and high value fish species thereby doubling the farmers income.

The Government of Tamil Nadu has sanctioned a sum of Rs.39.50 crore to implement the project effectively, in a phased manner.

During the year 2018-19 to 2021-22, an expenditure to the tune of Rs.30.76 crore was incurred for developing pure-line brood stock and maintenance centre at Bhavanisagar and Mettur Dam Government fish farms for the supply

of quality fish breeders to the farmers, establishment of fast growing GIF Tilapia hatchery at Manjalar Dam, renovation of Government fish seed farms at Lalpet and Agaram in Cuddalore District mainly to enhance quality fingerlings supply of the State.

In order to increase the inland fish production of the State, 26,396 ha of seasonal irrigational tanks were stocked with fish fingerlings and 1027 nos. of farm ponds were brought under aquaculture activities. Also 85 nos. of earthen fish seed rearing cum culture farms were created to increase the revenue of agriculture farmers. In addition to this, 100 nos. of fish seed rearing in cages and 15 nos. of grow-out fish culture in floating cages were established. Further, to improve the fishing efficiency of inland fishermen, 495 nos. of fishing implements were supplied to the inland fishermen of the State.

To improve the fish marketing channel, 18 nos. of modern fish kiosks have been established in the sub-basin areas.

During the year 2022-23, the following fisheries activities are being implemented to the tune of Rs.6.43 crore.

**Table: 9**

**TN-IAM PROJECT- 2022-23**

<b>Sl. No</b>	<b>Activities</b>	<b>Units (Nos)</b>
1	Direct stocking of fish seeds in long and short seasonal tanks	743 ha
2	Aquaculture in farm ponds	231
3	Supply of Fishing implements	20
4	Earthen fish seed rearing and culture farms	3
5	Establishment of Modern Fish Kiosks	6
6	Establishment of Government Fish Seed Rearing centre at Nagapattinam	1
7	Fish Culture in Modular Tanks	40
8	Model Village Activities	11

### **6.13 Ornamental Fish Culture**

Tamil Nadu is the second largest exporter of ornamental fish in the country. To promote ornamental fish culture and to generate employment, a pilot project on “Development of Ornamental Fisheries in Tamil Nadu” has been taken up in the State with a total project outlay of Rs.4.70 crore with an eligible subsidy of Rs.2.25 crore comprising of Central share of Rs.1.50 crore and State share of Rs.0.75 crore. Various components of this project are construction/ renovation of backyard ornamental fish rearing units, medium-scale ornamental fish rearing units, integrated ornamental fish units, aquatic plant production units, establishment of aquarium fabrication cum retail units, establishment of aquarium tanks for hobby development in schools and colleges and capacity building training to the ornamental fish entrepreneurs.



Further, under the centrally sponsored beneficiary oriented component of Pradhan Mantri Matsya Sampada Yojana (PMMSY), the Government have sanctioned an amount of Rs.13.85 crore towards construction of Backyard, Medium Scale and Integrated Ornamental Fish unit in Tamil Nadu and the schemes are under implementation.

In order to increase the ornamental fish production and trade in the State, Government have announced to set up an "Ornamental Fish Trade centre" at Kolathur, Chennai at a total cost estimate of Rs. 50 crore. Suitable site for an extent of 3.94 acres in Villivakkam, Aminjikarai Taluk belonging to Arulmigu Agastheeswarar temple and an extent of 4,785 sq ft. at Peravallur Village, Ayanavaram Taluk belonging to Arulmigu Selliamman Temple have been identified for establishment of ornamental fish trade centre and administrative office respectively. Preliminary works are in progress.

## **7. Development of Fisheries Infrastructure**

The Government invests a huge amount towards implementation of various infrastructure projects under different funding supports for improving fish landing points as fish landing centres, upgrading fish landing centres as fishing harbours and modernization of existing fishing harbours/ fish landing centres. These efforts ensure the safety of fishing boats and fishermen, hygienic handling of fish, enhancing export avenues and better price realization for fish catch. Establishment of fishing harbours create direct and indirect job opportunities to the fishermen and general public.

### **7.1 Construction of New Fishing Harbours and Development of Existing Fishing Harbours.**

#### **7.1.1 Construction of Tuna Fishing Harbour at Thiruvottiyurkuppam, Chennai District**

The Government have accorded administrative sanction for Rs.200 crore under

Fisheries and Aquaculture Infrastructure Development Fund (FIDF) for construction of Tuna fishing harbour in Thiruvottiyurkuppam in Chennai District. The fishing harbour is designed with Northern breakwater to a length of 510m, Southern breakwater up to 849m and other landside facilities for the hygienic handling of Tuna and Tuna-like fish varieties. The works are nearing completion.

### **7.1.2 Establishing Fishing Harbours in Kaluveli waters at Alambaraikuppam in Chengalpattu District and Azhagankuppam in Villupuram District**

The Government have accorded administrative sanction of Rs.235 crore for the construction of fishing harbours in Kaluveli waters at Alambaraikuppam in Chengalpattu District and Azhagankuppam in Villupuram District under FIDF. State level Coastal Regulation Zone (CRZ) clearance has been obtained. This project is designed with water side facilities such as training

wall 900m, shore protection structure 300m, diaphragm wall 1,100m, Slipway 2 nos., dredging & reclamation, revetment 400m and other land side facilities for hygienic handling of catches. The preliminary works are in progress.

### **7.1.3 Renovation of Fishing Harbour at Mudhunagar in Cuddalore District**

Renovation of fishing harbour at Mudhunagar in Cuddalore District has been undertaken at a total estimated cost of Rs.100 crore under FIDF. Renovation work consists of water side facilities such as 1,040m diaphragm wall, 600m retaining wall, additional facilities and other land side facilities for hygienic handling of fish catch. The works are nearing completion.

### **7.1.4 Construction of Fishing Harbour at Tharangambadi, Mayiladuthurai District**

A fishing harbour at Tharangambadi, Mayiladuthurai District is being established at a

total estimated cost of Rs.120 crore, for which the Government have accorded administrative sanction under FIDF. The harbour has been designed with a Northern breakwater to a length of 340m, Southern breakwater to a length of 1,070m and other land side facilities for hygienic handling of fish catch. The work is nearing completion.

#### **7.1.5 Upgradation of Pazhayar Fishing Harbour in Mayiladuthurai District.**

The Government have accorded administrative sanction for Rs.26.26 crore under PMMSY for upgradation of Pazhayar Fishing Harbour in Mayiladuthurai District. This Fishing Harbour will be upgraded with construction of R.C.C Diaphragm wall to a length of 180m, Retaining Wall to a length of 80m, ice plant of 30MT capacity and other landside facilities. Preliminary works are in progress.

### **7.1.6 Construction of Fishing Harbour at Vellapallam, Nagapattinam District**

A fishing harbour with modern facilities is being established at an estimated cost of Rs.100 crore at Vellapallam, Nagapattinam District for which the Government have accorded administrative sanction under FIDF. This fishing harbour has been designed with Northern breakwater to a length of 1,080m and Southern breakwater to a length of 1,300m and 240m length diaphragm wall and other land side facilities for hygienic handling of fish catch. The work is in progress and 33% of the works have been completed.

### **7.1.7 Construction of Fishing Harbour at Arcottuthurai in Nagapattinam District**

The Government have accorded administrative sanction for the construction of fishing harbour at Arcottuthurai in Nagapattinam District at an estimated cost of Rs. 150 crore under FIDF. This project is designed with Northern

breakwater of 1,650m, Southern breakwater of 2,000m and piled Jetty of 340m, dredging and reclamation and other land side facilities. The work is in progress and 62% of the works have been completed.

#### **7.1.8 Development of Cold Chain and Infrastructure Facilities in Mookaiyur Fishing Harbour, Ramanathapuram District**

The Government have accorded administrative sanction for Rs.20 crore under FIDF for the development of forward-backward linkages, cold chain facilities and export infrastructure in Mookaiyur Fishing Harbour in Ramanathapuram District. The work is in progress and 25% of the works have been completed.

#### **7.1.9 Providing additional Berthing facilities in Thoothukudi Fishing Harbour**

The Government have accorded administrative sanction for Rs.25 crore under FIDF for providing additional berthing facilities in

existing wharf at Thoothukudi Fishing Harbour. The work is in progress and 74% of the works have been completed.

#### **7.1.10 Expansion and Modernization of Thengapattinam Fishing Harbour in Kanniyakumari District**

The Government have accorded administrative sanction for an amount of Rs.253 crore under FIDF and NABARD RIDF for "Expansion and Modernization of Thengapattinam Fishing Harbour in Kanniyakumari District". This project is designed with extension of main breakwater for a length of 637m as per the recommendations of Central Water and Power Research Station (CWPRS), Pune and establishment of landside facilities. The work is in progress and 21% of the works have been completed.



### **7.1.11 Conducting Studies to establish new Fishing Harbours at Pulicat, Uvari, Rameswaram and Vaniyakudi and new mini fishing harbour at Samanthanpettai**

The Government have accorded administrative approval for a total sum of Rs.4 crore for conducting feasibility studies to establish fishing harbours at Pulicat in Tiruvallur District (Rs.1 crore), Uvari in Tirunelveli District (Rs.1 crore), Rameswaram in Ramanathapuram District (Rs.1 crore), Vaniyakudi in Kanniyakumari District (Rs.1 crore) and to establish mini fishing harbour at Samanthanpettai in Nagapattinam District (Rs.15 lakh) under the State scheme. The study works are in progress.

### **7.1.12 Conducting Studies for Expansion and Modernisation of Fishing Harbours at Thoothukudi and Colachel**

The Government have accorded administrative sanction for a sum of Rs.2 crore for conducting studies for expansion of fishing harbours at Thoothukudi (Rs.1 crore) and

Colachel in Kanniyakumari District (Rs.1 crore) under State fund. The study works are in progress.

**7.1.13 Consultancy Services for Conducting Detailed Surveys and Model Studies for Preparing Techno-economic Feasibility Report and Detailed Project Report for Modernization of Mallipattinam Fishing Harbour in Thanjavur District and Extension of Training wall at Mookaiyur Fishing Harbour in Ramanathapuram District.**

The Government have accorded administrative sanction for Rs.1 crore under State fund for consultancy services for conducting Detailed Surveys, Mapping of Existing Structures, Investigation and Model Studies for preparing Techno-economic Feasibility Report and Detailed Project Report for Modernization of Mallipattinam Fishing Harbour in Thanjavur District (Rs.50.00 lakh) and Extension of Training wall at Mookaiyur Fishing Harbour in Ramanathapuram District (Rs.50.00 lakh). The works will be commenced shortly.

## **7.2 Construction of New Fish Landing Centres and Development of Existing Fish Landing Centres**

### **7.2.1 Providing additional Facilities to Fish Landing Centres at Annankovil and Mudasalodai in Cuddalore District**

The Government have accorded administrative sanction for Rs.19.50 crore under FIDF for providing additional facilities to Fish Landing Centres at Annankovil and Mudasalodai villages in Cuddalore District. The works are in progress and 54% of the works have been completed.

### **7.2.2 Construction of Fish Landing Centre at Thazhankuda in Cuddalore District**

The Government have accorded administrative sanction of Rs.13.06 crore for the construction of fish landing centre at Thazhankuda in Cuddalore District under NABARD-RIDF. The works are in progress and 88% works have been completed.

### **7.2.3 Construction of Fish Landing Centre at Pudhukuppam and C. Pudhupettai in Cuddalore District**

The Government have accorded administrative sanction for Rs.13 crore under NABARD-RIDF for construction of fish landing centre at Pudhukuppam and C. Pudhupettai in Cuddalore District. Works have been commenced at Pudhukuppam and 94% of the works have been completed at C. Pudhupettai.

### **7.2.4 Construction of Fish Landing Centres and shore protection works at Roachmanagar, Thangachimadam in Ramanathapuram District and Chinnameedu, Kodyampalayam in Mayiladuthurai District**

The Government have accorded administrative sanction of Rs.21.62 crore for construction of fish landing centres and shore protection works at Roachmanagar and Thangachimadam in Ramanathapuram District and Chinnameedu and Kodyampalayam in Mayiladuthurai District under NABARD-RIDF.

92% of work at Thangachimadam, 64% of work at Chinnamedu, Kodyampalayam fish landing centres have been completed and the works are in progress.

### **7.2.5 Development of Fish Landing Centres at Thirumullaivasal in Mayiladuthurai District , Sethubavachatram in Thanjavur District, Sippikulam, Therespuram and Keelavaippar in Thoothukudi Districts**

The Government have accorded administrative sanction for Rs.66 crore under NABARD-RIDF for the development of fish landing centres at Thirumullaivasal in Mayiladuthurai District, Sethubavachatram in Thanjavur District, Sippikulam, Therespuram and Keelavaippar in Thoothukudi District. All works are in progress and 22% of work at Sippikulam, 37% of work at Keelavaippar, 11% of work at Thirumullaivasal and 82% of work at Sethubavachatram have been completed. Preliminary works have been commenced at Therespuram.

### **7.2.6 Improvements to Vanagiri Fish Landing Centre in Mayiladuthurai District**

The Government have accorded administrative sanction for Rs.55 crore under NABARD-RIDF for the improvements to Vanagiri Fish Landing Centre in Mayiladuthurai District. This fish landing centre is being upgraded with construction of training wall of 245m length (2 nos.), construction of short groynes of length 50m (2 nos.), construction of wharf and diaphragm wall-580m and approach road-300m. Preliminary works are in progress.

### **7.2.7 Construction of Fish Landing Centre at Chandrapadi Village in Nagapattinam District.**

The Government have accorded administrative sanction for Rs.10 crore under FIDF fund for construction of Fish Landing Centre at Chandrapadi Village in Nagapattinam District. Preliminary works are in progress.

### **7.2.8 Construction of Fish Landing Centres (FLC) at Vanagiri in Mayiladuthurai District, Keelathottam in Thanjavur District, Vadakkammappattinam, Pudhukudi and Kottaipattinam in Pudukkottai District.**

The Government have accorded administrative sanction for Rs.22 crore under FIDF for construction of fish landing centres at Vanagiri in Mayiladuthurai District, Keelathottam in Thanjavur District, Vadakkammappattinam, Pudhukudi and Kottaipattinam in Pudukkottai District. 75% of works at Vanagiri, 79% of works at Keelathottam, 65% of works in Vadakkammappattinam, Pudhukudi and Kottaipattinam FLCs have been completed and the works are in progress.

### **7.2.9 Construction of Fish Landing Centres at Mandapam North and South in Ramanathapuram District**

The Government have accorded administrative sanction for Rs.20 crore under FIDF for the construction of fish landing centres at

Mandapam North and South in Ramanathapuram District. The works are in progress and 94% of the works have been completed.

#### **7.2.10 Construction of Fish Landing Centre at Keelamunthal in Ramanathapuram District**

The Government have accorded administrative sanction for Rs.10 crore under FIDF for the construction of fish landing centre at Keelamunthal in Ramanathapuram District. The works are in progress and 85% of the works have been completed.

#### **7.2.11 Providing Infrastructure Facilities for fish landing centre at Mullimunai, Ramanathapuram District**

The Government have accorded administrative sanction of Rs.1.69 crore for providing infrastructure facilities at Mullimunai in Ramanathapuram District. 70% of the works have been completed and works are in progress.



### **7.2.12 Providing Landside Facilities to the Fish Landing Centre at Kunthukal in Ramanathapuram District.**

The Government have accorded administrative sanction for Rs.4 crore under Sagarmala funds for providing Landside Facilities at Kunthukal Fish Landing Centre in Ramanathapuram District. The works will be commenced shortly.

### **7.2.13 Renovation of Boat Jetties at Rameswaram, Ramanathapuram District Fish Landing Centre**

The Government have accorded administrative sanction for Rs.22.77 crore under NABARD-RIDF for the improvements and renovation of the boat jetties at Rameswaram in Ramanathapuram District. This project is designed with construction of approach jetty of 200m length and landing jetty of 150m length. The works are in progress and 28% works have been completed.

#### **7.2.14 Construction of Fish Landing Centres at Jeeva Nagar, Amali Nagar, Alanthalai and Fishermen Colony (Near Thermal-II) in Thoothukudi District**

The Government have accorded administrative sanction for Rs.7 crore under NABARD-RIDF for the construction of fish landing centre at Jeeva Nagar, Amali Nagar, Alanthalai and Fishermen Colony (Near Thermal - II) in Thoothukudi District. All the works are in progress and 38% of work at Amali Nagar, 54% of work at Alanthalai and 76% of work at Fishermen Colony in Thoothukudi District have been completed.

#### **7.2.15 Construction of Fish Landing Centres at Aruvikarai, Tirunelveli District**

The Government have accorded administrative sanction for Rs.10 crore under FIDF for construction of fish landing centre at Aruvikarai village in Tirunelveli District. Preliminary works are in progress.

### **7.2.16 Improvements to the Fish Landing Centres at Kodimunai, Simon colony and Kurumpanai in Kanniyakumari District**

The Government have accorded administrative sanction for Rs.100 crore under NABARD-RIDF for improvements to the fish landing centres at Kodimunai, Simon colony and Kurumpanai in Kanniyakumari District. These projects are designed mainly with construction of two short groynes of length 160m and 116m at Kodimunai, two short groynes of length 163m and 100m at Simon colony and short groynes of length 100m at Kurumpanai. All works are in progress and 29% of work at Kodimunai FLC, 31% of work at Simon colony FLC and 88% of work at Kurumpanai FLC have been completed.

### **7.3 Permanent Stability of Barmouth and Shore Protection Works.**

#### **7.3.1 Permanent Stability of Barmouth at Pulicat (Pazhaverkadu) in Tiruvallur District**

The Government have accorded administrative sanction of Rs.26.85 crore for the

permanent stability of barmouth at Pulicat in Tiruvallur District under NABARD-RIDF. Statutory clearance and Ministry of Environment and Forests (MoEF) clearances were obtained. Works will be commenced shortly.

### **7.3.2 Construction of Fish Landing Centre and Shore Protection Works at Kadalore Periyakuppam, Kadalore Chinnakuppam, Kokilamedu and Alikuppam in Chengalpattu District**

The Government have accorded administrative sanction for Rs.39 crore under NABARD-RIDF for the construction of fish landing centres and shore protection works at Kadalore Periyakuppam, Kadalore Chinnakuppam, Kokilamedu and Alikuppam in Chengalpattu District. All these works have been commenced.

### **7.3.3 Providing Shore Protection Works and Construction of Fish Landing Centres at Pazhaya Nadukuppam, Pudhu Nadukuppam, Karikattukuppam Chemmencherrykuppam and Angalamankuppam in Chengalpattu District**

The Government have accorded administrative sanction for Rs.57 crore under NABARD-RIDF for providing shore protection works and construction of fish landing centres at Pazhaya Nadukuppam, Pudhu Nadukuppam, Karikattukuppam, Chemmencherrykuppam and Angalamankuppam in Chengalpattu District. All these works have been commenced.

### **7.3.4 Construction of Fish Landing Centre and Shore Protection Works at Pudhukalpakkam in Chengalpattu District**

The Government have accorded administrative sanction for Rs.9.70 crore under NABARD-RIDF for construction of fish landing centre and shore protection works at Pudhukalpakkam in Chengalpattu District. All the works have been commenced.

### **7.3.5 Construction of Fish Landing Centre and Shore Protection Works at Pillaichavadi in Villupuram District**

The Government have accorded administrative sanction for Rs.14.50 crore under NABARD-RIDF for the construction of fish landing centre and shore protection works at Pillaichavadi in Villupuram District. The works are in progress and 25% works have been completed.

### **7.3.6 Construction of Fish Landing Centres and Shore Protection Works at Periyakuppam in Cuddalore District, Ekkiyarkuppam and Anumanthai in Villupuram District**

The Government have accorded administrative sanction for Rs.22 crore under NABARD-RIDF for the construction of fish landing centres and shore protection works at Periyakuppam in Cuddalore District and Ekkiyarkuppam, Anumanthai in Villupuram District. All these works have been commenced.

### **7.3.7 Providing Permanent Stability of Vellar barmouth and Chinnavaikal Barmouth at Killai in Cuddalore District**

The Government have accorded administrative sanction for Rs.70 crore under NABARD-RIDF for providing permanent stability of Vellar barmouth and Chinnavaikal barmouth at Killai in Cuddalore District. For permanent stability of barmouth at Vellar, two training walls of length 512m will be constructed. For permanent stability of barmouth at Chinnavaikal, two training walls of length 305m will be constructed. All the works are in progress.

### **7.3.8 Construction of additional Groynes for Shore Protection at Nambiyar Nagar in Nagapattinam District**

The Government have accorded administrative sanction for Rs.10 crore under NABARD-RIDF for the construction of additional groynes for shore protection at Nambiyar Nagar fishing harbour in Nagapattinam District. All the works are nearing completion.

### **7.3.9 Providing Shore Protection Works at Mandapam North, Ramanathapuram District**

The Government have accorded administrative sanction for Rs.30 crore under NABARD-RIDF for providing shore protection works at Mandapam North in Ramanathapuram District. This project is designed with construction of Northern breakwater of 843m length and construction of fish auction Hall. The works are in progress and 15% works have been completed.

### **7.3.10 Providing Shore Protection Works at Mandapam South in Ramanathapuram District**

The Government have accorded administrative sanction for Rs.50 crore under NABARD-RIDF for providing shore protection works at Mandapam South in Ramanathapuram District. This project is designed with construction of Southern breakwater of 1,032m length, construction of short groynes of length 84m and



construction of fish auction hall. The works are in progress and 10% works have been completed.

### **7.3.11 Providing Permanent Stability of Barmouth and Development of Fish Landing Centre at Manapad, Thoothukudi District**

The Government have accorded administrative sanction for Rs.45 crore under NABARD-RIDF for providing permanent stability of bar mouth and development of fish landing centre at Manapad in Thoothukudi District. Two training walls of length 940m (South) and 120m (North) will be constructed for permanent opening of barmouth. The works are in progress and 65% of the works have been completed.

### **7.3.12 Construction of additional Groynes for Shore Protection at Kesavanputhenthurai & Puthenthurai and Fish Landing Centres at Keelamanakudy and Melamanakudy in Kanniyakumari District**

The Government have accorded administrative sanction for Rs.101 crore under

NABARD-RIDF for construction of additional groynes for shore protection at Kesavanputhenthurai, Puthenthurai and construction of fish landing centres at Keelamanakudy, Melamanakudy in Kanniyakumari District. All works are in progress and 14% of work at Kesavanputhenthurai, 26% of work at Keelamanakudy FLC and 92% of work at Melamanakudy FLC have been completed. In Puthenthurai works have been commenced.

#### **7.4 Inland Fisheries and Other Infrastructure works**

##### **7.4.1 Establishment of Fish Brood Banks for Indian Major carps at Lalpet in Cuddalore District and Ramanadhi Dam in Tenkasi District.**

The Government have accorded administrative sanction for Rs.10 crore under PMMSY for establishment of Fish Brood Banks for Indian Major Carps at Lalpet in Cuddalore District and Ramanadhi Dam in Tenkasi District. 93% of work at Lalpet Fish brood bank and 88% of work

at Ramanadhi fish brood bank are completed and the works are in progress.

#### **7.4.2 Construction of Integrated Office Buildings and Training Centres at Cuddalore and Tiruchirappalli Districts**

The Government have accorded administrative approval for a sum of Rs.9 crore for the construction of integrated office buildings and training centres at Cuddalore and Tiruchirappalli under FIDF. 85% of the works completed and the building works in Cuddalore is nearing completion.

#### **7.4.3 Construction of Fish Landing Centres and Modern Fish Kiosks in Five Reservoirs in Tamil Nadu**

The Government have accorded administrative sanction for Rs.2.50 crore under PMMSY for construction of Fish Landing Centre and Modern Fish Kiosks in Five Reservoirs in Tamil Nadu. The works are in progress.

#### **7.4.4 Supply and Installation of Floating Fish Seed Rearing Cages and Grow Out Fish Culture Cages in Five Reservoirs in Tamil Nadu.**

The Government have accorded administrative sanction for Rs.4.60 crore under PMMSY for Supplying and Installation of Floating Fish Seed Rearing Cages and Grow Out Fish Culture Cages in Five Reservoirs in Tamil Nadu. The works are in progress.

#### **7.5 Construction / Renovation of Government Fish Seed Farms and Integrated Office Building cum Training Centre**

The Government have accorded administrative sanction for the construction/renovation of the following Government Fish Seed Farms and integrated office building cum training centres at a total estimated cost of Rs.75.70 crore under FIDF. The works will be commenced shortly.

**Table: 10**

<b>Sl. No</b>	<b>Name of Work</b>	<b>Project Cost (Rs in Crore)</b>
1	Renovation of Government Fish seed Farm in Chittar Dam II in Kanniyakumari District and Hogenakkal in Dharmapuri District.	4.00
2	Establishment of Training Centre with Integrated Office Building in Thoothukudi District and at Mettur Dam in Salem District.	8.00
3	Establishment of Additional Fish Seed Rearing Facilities at Vembakottai and at Pilavakkal Government fish seed farms in Virudhunagar District.	7.00
4	Modernization of Government Fish Farm at Vidur in Villupuram District and at Asoor in Trichy District.	6.20
5	Establishment of GIFT Seed Hatchery in Government Fish Farm at Thirumangalakottai in Thanjavur District, Barur in Krishnagiri District and Agaram in Cuddalore District.	10.80
6	Establishment of Public Aquarium cum Ornamental Fish Retail Unit in Tirunelveli District.	5.00

<b>Sl. No</b>	<b>Name of Work</b>	<b>Project Cost (Rs in Crore)</b>
7	Modernization of Government Trout Fish Farm at Avalanche in Nilgiris District.	2.50
8	Establishment of Government Fish Seed Rearing Centre at Kadamba in Thoothukudi District and Vadakkenendhal in Kallakurichi District.	10.00
9	Establishment of Government Fish Seed Hatchery at Andiyapanoor Odai Reservoir in Tirupattur District.	5.00
10	Improvement to the Existing Fish Farm at Palar Porandalar Dam in Dindigul District.	5.00
11	Modernization of Government Fish Seed Farm at Nallikottai in Tiruvarur District and at Thirukkampuliyur in Karur District.	7.20
12	Establishment of Brooder facilities in government old fish farm at Bhavanisagar in Erode District	5.00
	<b>Total</b>	<b>75.70</b>

## **7.6 Fishermen Housing Scheme**

Under fishermen housing scheme, the Government of Tamil Nadu have sanctioned a sum of Rs.85 crore to construct 5,000 houses to inland and marine fisherfolk. The unit cost of the house is Rs.1.70 lakh. Out of the sanctioned amount, Rs.61.97 crore was released to Rural Development and Panchayat Raj Department. So far, construction of 2,879 houses have been completed and 1,242 houses are under various stages of construction.

## **8. Marketing of Fish and Fishery Products**

The total fish production of the State was 8.06 lakh MT in 2021-22. The per capita consumption of fish of the State during the year 2020-21 was 9.3 Kg. In the State, fish consumption is promoted through modernized and hygienic fish markets, fish stalls and mobile vehicles and online marketing. The per capita consumption of fish of the State is expected to

increase by 10.66 Kg *vis-à-vis* National per capita fish consumption of 6 Kg.

## **8.1 Construction of Fish Markets**

The Government is taking efforts to construct new fish markets in various places in order to ensure hygienic handling of fish and to provide quality fish and fishery products to the consumers. The project is being implemented with the financial assistance from the State Government, National Fisheries Development Board (NFDB) and the civic bodies with a total project cost of Rs.17.54 crore.

An amount of Rs.6.69 crore as State Government share and Rs.7.19 crore as NFDB share was released to the concerned civic bodies/ fishermen cooperative societies towards the construction of following 21 fish markets in the State.



**Table:11**

<b>Sl. No.</b>	<b>District</b>	<b>Fish Markets Constructed / renovated</b>	<b>Total Project cost (Rs. in lakh)</b>
1	Cuddalore	1	22.50
2	Ranipet	1	61.29
3	Pudukkottai	1	53.70
4	Trichy	1	250.00
5	Salem	2	139.30
6	Tiruppur	1	93.00
7	Erode	1	100.00
8	Sivagangai	1	100.00
9	Nagapattinam	4	158.57
10	Tenkasi	1	38.76
11	Thoothukudi	1	13.60
12	Ramanathapuram	3	293.39
13	Kanniyakumari	2	179.47
14	Villupuram	1	250.00
	<b>Total</b>	<b>21</b>	<b>1,753.58</b>

Construction of 21 fish markets have been completed.

## **8.2 Export of Fish and Fishery Products**

Fish and Fishery products is emerging as one of the largest group in agricultural exports from India, with 13.69 lakh MT in terms of quantity and Rs. 57,586.48 crore in value.

The State exported 1.14 lakh MT of marine products and earned a foreign exchange of Rs.6,559.64 crore during the year 2021-22. Marine products mainly comprise of frozen shrimp, frozen finfish, frozen cuttle fish, frozen squid, dried fish, chilled varieties and live fish. The major export markets for fishery products are USA, Japan, European Union, China, South East Asia and Middle Eastern countries.

The Government of Tamil Nadu is promoting export of fish and fishery products through establishment of shore infrastructure facilities and has an excellent landing and shore infrastructure in 9 major fishing harbours, 4 medium fishing harbours and 52 fish landing centres, which ensure hygienic fish handling and maintaining fish quality. Chennai and Thoothukudi are the major export oriented fish processing hubs of the State.

## **9.Training and financial services**

### **9.1 Maritime Education for Fisher Youth**

An amount of Rs.12 lakh has been released to 37 fisher youth to study maritime education during the year 2022-2023 for improving the skills and creating employment opportunities to the fisher youth in Tamil Nadu. Under this scheme, financial assistance of Rs.50,000/- per student is being provided to the children of fishermen families for studying 6 specific courses notified by the Government in Maritime Education.

This scheme will be continued in the year 2023-24 also.

### **9.2 All India Civil Service Special Coaching to Fisher Youth**

The Department of Fisheries and Fishermen Welfare is providing six months special coaching to 20 fisher youth every year to enable them to excel in competitive exams for joining in the Indian Civil Services since 2017. The training is

being given by Anna Administrative Staff College (All India Civil Service Coaching Centre). So far, five batches of trainings have been completed and 102 fisher folk students have got benefitted at an expenditure of Rs.12.50 lakh. The training expenditure is met from the fund of the Tamil Nadu Fisheries Development Corporation. 18 Fisher youth are being trained during 2022-23.

This scheme will be continued in the year 2023-24 also.

### **9.3 Kisan Credit Cards (KCC) to Fishers and Fish Farmers**

To meet out the working capital requirements of fishers and fish farmers, the Union Government has extended the Kisan Credit Card (KCC) facility to fisheries sector and the scheme is being implemented in the State.

The KCC facility will help the fishers and fish farmers to meet their short-term credit requirements for fishing activities, fish culture,

shrimp culture, seaweed culture, bivalve farming and capture of fish, etc. Under KCC facility, the eligible fishers/ fish farmers have the credit limit of Rs.2.00 lakh to meet their working capital requirements for fisheries activities.

Interest subvention is available at 2% per annum at the time of disbursal of loan and additional interest subvention of 3% per annum in case of prompt repayment as Prompt Repayment Incentive. So far, 4,712 KCCs have been issued to fishers/ fish farmers for a loan value of Rs.35.88 crore.

## **10. Extension and other activities**

The Extension wing of the Department disseminates the welfare schemes of the Government to the fishers, fish farmers and fisheries stakeholders and general public. The Fisheries and Fishermen Welfare Department participates in various exhibitions, trade fairs and showcase various activities/ schemes being

implemented by the Department. Awareness campaign to the stakeholders on sustainable fishery resource management, sea safety measures, hygienic handling of fish, cleanliness and hygienic practices in fishing harbours and fish landing centres are being organized regularly. To address the grievances of fishermen/ fish farmers, fishermen grievance day and fish farmers meetings are being organized by the Department. Annual days like World Ocean Day (8<sup>th</sup> June), National Fish Farmers Day (10<sup>th</sup> July) and World Fisheries day (21<sup>st</sup> November) are being celebrated throughout the State by conducting various competitions for school/ college students, awareness rallies and medical camps for fishers/ fish farmers. On these occasions, awards under various categories are being given to the best performing fishers/ fish farmers in order to recognize and appreciate their contribution to fisheries sector.

On the occasion of 'World Fisheries Day 2022' celebrations, 9 awards have been presented to fishermen and fish farmers under various categories.

### **10.1 Tamil Nadu Marine Fisherfolk Census**

The last Decennial census exclusively for Tamil Nadu Marine fisher folk was conducted by the Department of Fisheries and Fishermen Welfare during the year 2010.

The Government of Tamil Nadu is presently in the process of creating household database for the entire State. The household data pertaining to fisheries sector can be obtained from this database for formulating policies and welfare schemes for the betterment of fishers.

### **10.2 Study on Socio-Economic Status of Fisher folk in Tamil Nadu**

For the improvement of the socio-economic conditions of fisherfolk the Government is implementing various schemes and developing

infrastructure facilities all over Tamil Nadu. The Government have sanctioned an amount of Rs.50 lakh to study the improvement in the living standards of fisher folk that have been achieved through various schemes, to assess the impact of various schemes on the socio-economic status of fisher folk and also to study the areas for further intervention. The study will support the Government in planning, making policy decisions, devising appropriate schemes, providing infrastructure facilities, skill development and frame a road map for the fisheries sector of Tamil Nadu.

## **11. 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 7.52 lakh fishermen / fisherwomen have been enrolled in 1,457 Primary Fishermen / Fisherwomen Co-operative Societies, 12 District Co-operative Federations and 1 State Apex Co-operative Federation. Fishermen Co-operative societies are operating, 62 full time and 12 part time fair price shops.

The details of fisheries cooperative societies are given in the table 12.

**Table: 12**

**Members of Fisheries Co-operative Societies**

<b>Society</b>	<b>No. of Societies</b>	<b>Members enrolled</b>
<b>Primary Co-operative Societies</b>		
Marine Fishermen Co-operative Societies	576	3,66,846
Marine Fisherwomen Co-operative Societies	476	2,94,116
Inland Fishermen Co-operative Societies	330	82,677
Inland Fisherwomen Co-operative Societies	75	7,990
<b>Total number of societies and members enrolled</b>	<b>1,457</b>	<b>7,51,629</b>

<b>Society</b>	<b>No. of Societies</b>	<b>Members enrolled</b>
District Fishermen Co-operative Federation	<b>12</b>	<b>998</b>
Tamil Nadu State Apex Fisheries Co-operative Federation	<b>1</b>	<b>834</b>
<b>Total</b>	<b>1,470</b>	<b>7,53,461</b>

## **12. SUSTAINABLE DEVELOPMENT GOALS (SDG)**

To achieve a sustainable future by 2030, United Nations has framed 17 Sustainable Development Goals (SDG) to combat poverty, inequality and environmental degradation. Fisheries and aquaculture offer ample opportunities to alleviate poverty, hunger and malnutrition, generate economic growth and ensure better use of natural resources.

The Department of Fisheries and Fishermen Welfare contributes towards 'Responsible Consumption and Production (Goal-12)' with one indicator and 'Life below Water (Goal-14)' with three indicators. The Department has taken steps

to achieve Goal-12 by increasing the fish production of the State through various schemes. The fish production of the State has increased from 7.23 lakh MT during 2020-21 to 8.06 lakh MT during 2021-22. The per capita fish consumption of the State has also increased from 9.3 kg during 2020-21 and is expected to increase to 10.66 Kg during 2021-22. To achieve Goal-14, the Department is taking various measures to enhance marine fish production through deployment of artificial reefs, ranching of fish seeds, mariculture activities, capacity building to fisherfolk and enforcing Tamil Nadu Marine Fishing Regulation Act, 1983 for attaining sustainable fishing practices.

To achieve Goal-14, the Government has deployed artificial reefs at 90 places at a total cost of Rs. 28.50 crore under various schemes. There has been an increase in marine fish production of the State during subsequent years of installation

of artificial reefs. Steps are also being taken for installation of 217 units of artificial reefs at a cost of Rs.79.00 crore in the 3 Palk Bay Districts and 200 units at a cost of Rs. 64 crore in other Districts. Due to positive impacts of installation of artificial reefs, fishermen are requesting for the installation of more number of artificial reefs along the coast of Tamil Nadu.

SDG Unit has been formed to work in co-ordination with field level officers and SDG data are periodically updated in the dashboard. Growth rate of fish production has been included as an Indicator for ranking in District Good Governance Index (DGGI).

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

To provide social security and to ensure well being of fishermen and labourers engaged in fishing and allied activities, Tamil Nadu Fishermen Welfare Board (TNFWB) was established in 2007.

TNFWB is headed by the Hon'ble Minister for Fisheries- Fishermen and Animal Husbandry as President and the Commissioner, Fisheries and Fishermen Welfare as Member Secretary having official and Non-official members. About 4.99 lakh members have been enrolled in TNFWB.

TNFWB is functioning from the contribution funds collected from various sources such as member contribution of Rs.20/- per member for every year, at the rate of 10 paise per litre of diesel sold by the Tamil Nadu Fisheries Development Corporation (TNFDC) and Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED) diesel bunks, at the rate of 20 paise per litre of tax free diesel purchased by the mechanized fishing boat owners from TNFDC and TAFCOFED diesel bunks, 7% of fishing lease amount from water bodies and Rs.2/- for every Kilogram of fish sold by Mettur Dam fishermen co-operative marketing

society. A sum of Rs.5.34 crore has been collected as contribution fund during 2022-23.

The schemes being implemented by TNFWB are detailed in the Table 13.

**Table: 13**  
**List of Schemes in TNFWB**

Sl. No.	Details of Relief / Assistance	Amount in Rs.			
		Day Scholar		Hosteller	
		Boys	Girls	Boys	Girls
1	Educational Assistance to Sons and Daughters of the Members				
	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 (per year)	1,250	1,750	1,450	1,950
	d) Bachelor Degree (per year)	1,750	2,250	2,000	2,500
	e) Post Graduate Degree (per year)	2,250	2,750	3,250	3,750
	f) Under Graduate Professional Courses (Fisheries science, Agriculture, Veterinary Science, Law, Engineering, Medicine, etc.) (per year)	2,250	2,750	4,250	4,750
	g) Post Graduate Professional Courses (per year)	4,250	4,750	6,250	6,750

Sl. No.	Details of Relief / Assistance	Amount in Rs.	
		Male	Female
2	Marriage Assistance		
	a) Marriage of Member	3,000	5,000
	b) Marriage of Son/ Daughter of the member	3,000	5,000
3	Delivery or Miscarriage of Pregnancy or Termination of Pregnancy		
	a) Delivery @ Rs.1,000/- per month for 6 months		6,000
	b) Miscarriage		3,000
	c) Termination		3,000
4	Accident Relief		
	a) Death due to Accident		2,00,000
	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) Total and irrecoverable loss of sight in both eyes		1,00,000
	f) Loss of one hand or one leg		1,00,000
	g) Loss of limbs from grievous injuries other than those specified above		50,000
5	Death while fishing or immediately thereafter not due to Accident		2,00,000
6	Missing fishermen while fishing		2,00,000
7	Natural Death		15,000
8	Funeral Expenses		2,500

To facilitate quick processing and delivery of relief/assistance to the beneficiaries and for enrollment of members, an exclusive web portal

[www.tnfwb.tn.gov.in](http://www.tnfwb.tn.gov.in) has been developed in co-ordination with National Informatics Centre (NIC).

All the District Assistant Directors of Fisheries and Fishermen Welfare have been provided with User ID for accessing the web portal to upload details of beneficiary directly to TNFWB which paves way to easy and expeditious delivery of schemes to the beneficiaries through NEFT.

As a measure to provide an opportunity for the fishermen wards to pursue B.F.Sc. (Bachelor of Fisheries Science) and B.Tech. (Fisheries Engineering) in Tamil Nadu Dr. J Jayalalithaa Fisheries University (TNJFU), TNFWB is sponsoring full educational fee for 5% of students admitted under Fishermen quota. During the year 2022-23, a sum of Rs.14.02 lakh has been provided towards the educational sponsorship for the students of TNJFU.

Details of the relief/assistance disbursed during the year 2022-23 are detailed in the Table 14.



**Table 14****Relief assistance disbursed during the year  
2022-23**

<b>Sl. No</b>	<b>Details of Schemes</b>	<b>No. of Claims</b>	<b>Amount (Rs. in lakh)</b>
1	Educational Assistance to Sons and Daughters of the Members	1,860	35.19
2	Marriage Assistance	94	3.46
3	Death due to Accident	147	292.00
4	Loss of limbs	4	3.50
5	Death while fishing	20	40.00
6	Missing fishermen while fishing	2	3.00
7	Natural Death	1,104	165.60
8	Funeral Expenses	1,223	30.57
<b>Total</b>		<b>4,454</b>	<b>573.32</b>

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

Tamil Nadu State Apex Fisheries Co-operative Federation Limited is a registered Apex society under Tamil Nadu Co-operatives Societies Act, 1983. TAFCOFED was registered on 6.11.1991 and functioning since 19.10.1992 with its headquarters at Chennai. At present, 474 Marine Fishermen Cooperative Societies, 198 Marine Fisher Women Cooperative Societies, 153 Inland Fishermen / Fisherwomen Cooperative Societies and 10 District Fishermen Cooperative Federations have been enrolled as members in TAFCOFED with a total share capital of Rs.91.29 lakh.

The Commissioner of Fisheries and Fishermen Welfare is the Functional Registrar of the Apex Federation and it is administered by Managing Director in the cadre of Additional /Joint Director of Fisheries and Fishermen Welfare, TAFCOFED has five Project Offices at Chennai,

Nagapattinam, Ramanathapuram, Thoothukudi and Nagercoil.

The schemes being implemented by the Tamil Nadu State Apex Fisheries Cooperative Federation Ltd., are as follows:

**14.1 Supply of Subsidized Industrial Kerosene to Motorised Fishing Crafts**

During 2022-23, TAFCOFED has supplied 6,602 KL of subsidized Industrial Kerosene to the traditional motorised fishing crafts in Thoothukudi and Tirunelveli Districts through 14 outlets and earned a revenue of Rs.1.32 crore.

**14.2 Supply of Tax exempted Diesel to Fishing Crafts**

During 2022-23, TAFCOFED has supplied 22,088 KL of tax exempted diesel to Mechanised and Motorised fishing boats through 17 diesel bunks established in coastal Districts and earned a revenue of Rs.4.62 crore.

### **14.3 Fish Stalls**

In order to supply good quality fish to general public at a reasonable price, TAFCOFED has established fish stalls at Kanniyakumari, Vannarapettai in Tirunelveli District, Ramanathapuram and Paramakudi in Ramanathapuram District, Palanganatham in Madurai District, Ariyalur, Neyveli Township in Cuddalore District, Vaniyanchavadi in Chengalpattu District and Vaiyavur in Kancheepuram District. During the year 2022-23, a total rental income of Rs.7.44 lakh has been earned from these fish stalls.

### **14.4 Micro Credit to Fisherwomen**

Fishers especially fisherwomen depend on credit from local money lenders and procurement agents at higher interest rates for their day to day fish business which often lead to minimum earnings for their livelihood. To help the fisherwomen, TAFCOFED made intervention by

providing micro credit at a lower interest rate which enable the fisherwomen free from money lenders and ensure better income. During 2022-23, TAFCOFED has provided Rs.30.75 lakh as micro credit to 205 fisherwomen of 41 Joint Liability Groups (JLGs) at Thoothukudi and Cuddalore Districts at the rate of Rs.15,000/- per fisherwomen.

#### **14.5 Cooperative Stores in Fishing Harbours/Fish Landing Centres**

Tamil Nadu State Apex Fisheries Cooperative Federation Limited has established cooperative stores at Chinnamuttom, Colachel, Thengapattinam, Thoothukudi and Nagapattinam Fishing Harbours and Tharuvaikulam Fish Landing Centre through which fishing implements and accessories required by the fishermen are sold at reasonable rates. Fishermen can access their daily needs of fishing at the harbour premises itself. On requirement basis, the store materials are supplied from these Cooperative stores to other Fish Landing Centres also and earned revenue of Rs.3.34 lakh.

## **14.6 Supply of Outboard Motor (OBM)**

TAFCOFED has supplied Outboard motor for the traditional fishing crafts under State Scheme. Subsidy assistance of 40% of the unit cost of the engine or Rs.48,000/- whichever is less is provided for purchasing OBM. During the year 2022-23, under State scheme, 333 OBMs have been supplied to Kanniyakumari District fishermen with a total subsidy amount of Rs.1.44 crore.

## **14.7 Construction of Project Office**

Construction of TAFCOFED Project Office at Thoothukudi fishing Harbur at a cost of Rs.35 lakh under Chennai Integrated Cooperative Development Project and it was inaugurated on 27.01.2023 and functioning.

## **14.8 Establishment of Diesel Bunk**

Diesel Bunk at Vanagiri in Mayiladuthurai was established and functioning from 23.09.2022 for supplying sales tax exempted diesel to the fishermen.

## 14.9 Pradhan Mantri Matsya Sampada Yojana

Tamil Nadu State Apex Fisheries Cooperative Federation Limited has implemented the PMMSY scheme for supply of Two Wheeler fitted with Ice Box, Three Wheeler fitted with Ice Box, Fish Kiosks and Insulated vehicles with 40% subsidy for General category and 60% subsidy for SC/Women category for retail fish marketing. TAFCOFED is the Nodal agency for implementing this scheme as follows.

**Table: 15**

Sl. No	Components	2021 - 2022		2022 - 2023	
		Nos.	Subsidy amount (Rs.in lakh)	Nos.	Subsidy amount (Rs. in lakh)
1	Fish Kiosk	10	40.00	6	24.00
2	Insulated Vehicle	2	16.00		-
3	Three wheeler fitted with Ice Box	15	21.00	40	52.20
4	Two wheeler fitted with Ice Box	500	157.50	225	77.70
<b>Total</b>		<b>527</b>	<b>234.50</b>	<b>271</b>	<b>153.90</b>

### **14.10 Financial Performance**

During the year 2022-23, TAFCOFED has made a turnover of Rs. 228.86 crore and earned a Gross profit of Rs.5.93 Crore (unaudited up to February, 2023). An amount of Rs. 38.33 lakh has been paid as contribution to Tamil Nadu Fishermen Welfare Board.

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

The Tamil Nadu Fisheries Development Corporation Limited (TNFDC) was registered under Companies Act in 1974 as a public sector undertaking with an authorized share capital of Rs.5 crore. It was established to undertake commercial activities in the State fisheries sector. The TNFDC is being administered by the Board of Directors with its Chairman being appointed by the Government.

The Commissioner of Fisheries and Fishermen Welfare is the Managing Director of the



TNFDC. The administrative activities of the Corporation are managed by the General Manager, Senior Managers (Marine & Inland), Manager (Audit & Accounts) in the registered office and the field activities are carried out by the Managers, Deputy Managers, Assistant Managers with the support of ministerial staff.

## **15.1 Inland Fisheries**

### **15.1.1 Reservoir Fisheries**

Reservoir fisheries management in 8 reservoirs viz., Bhavanisagar, Perumpallam in Erode District, Aliyar in Coimbatore District, Amaravathy, Thirumoorthy, Uppar in Tiruppur District, Palar-Porandalar in Dindigul District and Sathanur in Thiruvannamalai District which were taken on lease from the Department of Fisheries and Fishermen Welfare is presently undertaken by TNFDC. The total fish exploitation from these reservoirs is 791.15 tonnes with an income of

Rs.7.08 crore upto February, 2023. The fishing rights of all the above reservoirs have been leased out to private parties to generate more revenue.

### **15.1.2 Fish seed production and rearing**

Fish farms of the Department of Fisheries and Fishermen Welfare at Sathanur, Aliyar, Amaravathy, Thirumoorthy and Palar- Porandalar to an extent of 3.83 ha has been taken on lease by the Corporation. Indian Major Carp seed production is being carried out in Sathanur and 1.22 crore seeds have been produced till February, 2023. Rearing of fish seed is being carried out in Sathanur, Aliyar, Amaravathy, Thirumoorthy and Palar- Porandalar fish farms and 24.13 lakh fingerlings have been reared till February, 2023. Quality fish seeds produced are being utilized for stocking in the reservoirs managed by TNFDC and are also sold to the farmers.

### **15.1.3 Ornamental Fish culture & Aquarium Keeping**

An exclusive ornamental fish production unit is functioning at Aliyar and species like Koi carp, Gold Fish, Flower horn, Cichlid varieties are being bred, reared and marketed by TNFDC. Ornamental Fish Aquaria in Aliyar, Thirumoorthy and Sathanur are also being operated by the Corporation for attracting tourists. Public aquaria of Municipal Corporations at Coimbatore and Tiruppur are maintained by TNFDC. An exclusive aquarium shop for marketing of aquarium accessories and ornamental fishes is being setup at Ecopark, Chetpet in Chennai. A total revenue of Rs.17.21 lakh has been earned during this year upto February, 2023.

## **15.2 Marine Fisheries**

### **15.2.1 Supply of Tax-exempted High Speed Diesel**

The tax exempted high speed diesel provided by the Government of Tamil Nadu for

the benefit of marine fishers is being supplied by TNFDC through 32 diesel outlets in the fishing harbours and fish landing centres located all along the coastal area in the State. During this year, 75,008.41 KL of tax exempted high speed diesel have been supplied to the traditional crafts and mechanized boats, with a turnover of Rs. 591.49 crore till February, 2023. During the current year, a new diesel outlet has been opened at Mookaiyur Fishing Harbour in Ramanathapuram District.

TNFDC is in the process of establishing more diesel outlets in newly established fishing harbours and fish landing centres.

### **15.2.2 Supply of subsidized Industrial Kerosene to Fishing Boats**

The subsidized industrial kerosene is provided by the Government of Tamil Nadu for the benefit of marine fishers who are having traditional crafts with kerosene operated outboard motors in Kanniyakumari District is being supplied

through 11 outlets of TNFDC. During this year, 10,504 KL of subsidized kerosene have been supplied till February, 2023 with a turnover of Rs.94.05 crore.

### **15.2.3 Supply of Petrol**

TNFDC has established a petrol outlet at Therespuram in Thoothukudi District to augment additional income from existing fuel outlets. During this year, 175.56 KL of Petrol has been sold to the public with a turnover of Rs.1.82 crore. Additional petrol outlets will be established in other existing diesel outlets of TNFDC in near future.

### **15.2.4 Supply of Outboard Engines**

TNFDC has procured and supplied 544 subsidized outboard engines to traditional craft fishermen belonging to Nagapattinam, Mayiladuthurai, Thanjavur, Tiruvarur and Pudukottai Districts and an amount of Rs.1.77 crore have been given as subsidy to the Fishermen by the Government.

## **15.3 Fish Marketing**

### **15.3.1 Fresh fish marketing**

From its inception, fish marketing is one of the main thrust areas of TNFDC's business, by which quality fresh fish and value-added sea food products are being marketed at a reasonable price. TNFDC is currently operating a chain of 43 retail fish stalls at Chennai, Madurai , Dindigul, Coimbatore, Pollachi, Tiruppur, Tirunelveli and 12 mobile units at Chennai, Tiruvannamalai, Neyveli, Madurai, Pollachi, Thoothukudi and Kanniyakumari.

During the year 2022-23, a total quantity of 472.86 tons of fish has been marketed till February, 2023 with a turnover of Rs. 14.51 crore. Efforts are being taken to expand the retail fish marketing network by establishing more modern and mobile fish retail outlets in different cities of the State.

### **15.3.2 Value added fish marketing**

To generate additional income from fish marketing, value addition is important, for which three mobile seafood restaurants are being operated at Marina beach (2 nos.), Saidapet (1 no.) and one sit & dine facility at CIBA complex, Santhome, Chennai. Fish and shrimp pickles are also being produced and marketed through the retail outlets of TNFDC. The corporation has also established a fish food sales counter in the trade fair at Island Grounds, for promoting fish food consumption as well as to create awareness on the importance of fish food to the public. So far, a turnover of Rs.1.65 crore has been earned till February, 2023 through value added seafood sales.

### **15.3.3 Online Fish Marketing**

TNFDC is undertaking online fish marketing through the web portal *www.meengal.com* and mobile app 'Meengal'. The online fish marketing

facilities are well utilized for supply of fishes to the customers at their doorsteps through e-commerce platform. Since its inception in April 2020, a total of 38,324 deliveries have been completed and 57.73 MT of fish have been sold to the value of Rs.3.16 crore till February, 2023.

TNFDC has developed a brand logo with caption of "IDHU NAMMA OORU MEENGAL" (இது நம்ம ஊரு மீன்கள்) and also carrying out promotional activities in social media to increase the fish sales.

#### **15.3.4 Wholesale fish market, Ukkadam in Coimbatore District**

A wholesale fish market was established at Ukkadam in Coimbatore in cooperation with Coimbatore City Municipal Corporation. The fish market was revamped by renovating existing shops and drainage facilities. In order to facilitate more freshness and quality, an ice plant and cold storage of 10 MT capacities each are being



constructed under National Agriculture Development Programme (NADP) at a cost of Rs.1.10 crore. The works will be completed shortly.

#### **15.4 Management of Chetpet Sport Fishing cum Eco Park**

The Sport fishing cum Eco Park established by the Department of Fisheries and Fishermen Welfare is being operated and maintained by TNFDC. The Chetpet Sport fishing cum Eco Park, which has the following facilities viz., aquarium-cum-aquatic virtual reality centre, boating, angling, food court, walking track, children play area, multimedia amphitheatre, multi-level car parking etc., attract huge number of public, especially children to the Eco Park. During the year 2022-23, 1,78,539 people have visited this park and an entry fee of Rs.39.69 lakh has been collected till February, 2023.

The recreational facilities in the Eco-Park are being leased out to private parties and an income

of Rs.1.29 crore has been earned. The income is being utilized for the maintenance of Eco-Park. Additional recreational facilities will also be created in near future.

### **15.5 Operation of Fish Feed Mill**

The fish feed mill established under National Agriculture Development Programme (NADP) at Achampatti in Thanjavur District is being operated by TNFDC. The feed produced is supplied to the Government fish seed farms. During the year 2022-23, 154.31 MT fish feed have been produced and supplied till February, 2023.

### **15.6 Financial Performance**

A turnover of Rs.788.25 crore and earned a profit of Rs.10.23 crore (unaudited) is expected for the year 2022-23.

### **15.7 Contribution of Funds by TNFDC**

TNFDC has paid a sum of Rs.2.59 crore to the State Government as dividend from the profit

of the financial year 2021-2022. TNFDC also paid a sum of Rs.1.98 crore as its contribution to the Tamil Nadu Fishermen Welfare Board for the year 2022-23 upto February, 2023.

An amount of Rs.24.25 lakh has been contributed from CSR funds of TNFDC for the year 2022-23 for the infrastructure development works.

## **16. Tamil Nadu Dr. J Jayalalithaa Fisheries University (TNJFU)**

Tamil Nadu Dr.J Jayalalithaa Fisheries University (TNJFU) is a State Government funded University established on 19.06.2012 at Nagapattinam as per Tamil Nadu Fisheries University Act, 2012. The University and fisheries science colleges are accredited by ICAR till March, 2026 awarded with a grade of "A".

### **16.1 Vision of the University**

"Harnessing the Science of Fisheries for Food, Nutrition and Livelihood"

### **16.2 Mission**

Excelling in teaching, research and extension initiatives in fisheries sciences to produce professionally acclaimed and socially responsible graduates achieving nutritional security and sustainable development of the fisheries sector.

### **16.3 Objectives**

- To impart quality professional educations in different branches of Fisheries Sciences.
- To conduct organised research in the frontier area to develop cutting-edge technologies in Fisheries Sciences.
- To provide extension services in Fisheries Sciences
- To facilitate comprehensive development of Fisheries Sciences for increased contribution of State's Economy and set benchmark standards through appropriate interventions.

### **16.4 Administrative Setup**

The University headquarters located in Nagapattinam has the office of Vice-Chancellor, Registrar, Director of Research, Director of Extension Education, Controller of Examinations, Director of Sustainable Aquaculture, Finance Officer and Estate Officer. There are 8 constituent colleges, 3 Paraprofessional Institutes and

5 Directorates located in 12 Districts of Tamil Nadu.

## 16.5 Academics

**Table:16**

<b>Faculty</b>	<b>Courses offered</b>	<b>No. of colleges</b>
Fisheries Sciences	1. B.F.Sc 2. M.F.Sc(13 disciplines) 3. Ph.D(13 disciplines)	3
Basic Sciences	1. B.Tech (Bio-technology) 2. B.B.A(Fisheries Enterprise Management) 3. M.B.A(Fisheries Enterprise Management) 4. Ph.D(Life Sciences)	3
Fisheries Engineering	1. B.Tech (Fisheries Engineering) 2. B.Tech (Energy and Environmental Engineering) 3. M.Tech(2 disciplines)	1
Food Science and Nutrition	B.Tech (Food Technology)	1

\* Further B.Voc., in three subjects are also offered in three Paraprofessional Institutes

During the year 2022-23, there are 320 students admitted in various UG programmes and 61 in PG programmes. The overall strength of this University is 1500 students.

There are 33 students secured their admission in PG and Ph.D. as JRF and SRF with fellowship in CIFE, Mumbai and other SAUs through ICAR – AIEEA exam.

In academic year 2022-23, 17 students benefitted from 7.5% reservation of Government School students in Undergraduate programmes and 25 students benefitted from 20% reservation allotted for fishermen community in B.F.Sc., and B.Tech. Fisheries Engineering.

During the year 2022, out of 570 girls students studying in 09 UG programmes, 31 girls students benefitted from Tamil Nadu Government 'Pudhumai Penn' scheme.

## **16.6 Naan Muthalvan**

To create awareness among the students about fisheries education, prospectus and placement details under the caption "Kalluri kanavugal", an exhibition was organized on 25.06.2022 in Chennai followed by faculties were nominated to explain about fisheries education in all Districts of Tamil Nadu in which more than 10,000 students benefitted.

## **16.7 Convocation**

The Seventh Convocation of Tamil Nadu Dr. J Jayalalithaa Fisheries University was held on 19.08.2022 at University headquarters, Nagapattinam. A total of 366 graduates were conferred with the degrees 'In Person' and a total of 48 graduates received their degrees 'In absentia' under different categories. A total of 19 candidates were awarded with medals



under different categories. The convocation was chaired by the Hon'ble Governor of Tamil Nadu. The University confers 50 endowment awards for the academic excellence of the students every year.

### **16.8 Infrastructure facilities Developed and inaugurated**

Farmers Training centre, road formation and Arch in University headquarters, Nagapattinam, students hostel & Administrative block in Fisheries college, Thalainayeru, Nagapattinam and compound wall work in Thoothukudi are created under NABARD for a total budget of Rs.26.09 crore.

The Hon'ble Chief Minister inaugurated building for teaching and non-teaching staff Quarters in Dr.M.G.R. FC&RI at Thalainayeru, Nagapattinam and building of first floor over the existing building of CoFE, Nagapattinam with the funding support of NABARD and State fund for Rs. 13.20 crore during the year 2022.

The Hon'ble Chief Minister inaugurated Paraprofessional Institute of Fisheries Technology at Madhavaram Campus, Chennai; Additional Infrastructure Facility of Hostel I and II Floor for Dr.M.G.R. FC&RI at Thalainayeru, Nagapattinam; Office cum Laboratory and Training Hall in Centre for Sustainable Aquaculture at Mandapam; Long liner cum Gill netter Deep Sea Training Boat; and Laboratory Complex and Training Hall at FC&RI, Thoothukudi with the funding support of State fund, NABARD and NADP for Rs.11.67 crore in the year 2023.

## **16.9 Research:**

### **16.9.1 Ongoing Projects:**

During 2022-2023, the University operated 25 projects from different funding agencies with the total amount of Rs. 37.84 crore. The following projects are operated in this University.

**Table: 17**

<b>Sl. No.</b>	<b>Funding Agency</b>	<b>Number of Projects</b>	<b>Budget (Rs. in Lakh)</b>
1.	Department of Science and Technology – Science and Engineering Research Board (DST-SERB)	2	66.68
2.	Entrepreneurship Development and Innovation Institute (EDII)	1	250.00
3.	Indian Council of Agricultural Research – National Innovations on Climate Resilient Agriculture (ICAR-NICRA)	2	68.25
4.	Pradhan Mantri Matsya Sampada Yojana through Indian Council of Agricultural Research – National Bureau of Fish Genetic Resources)(PMMSY through ICAR-NBFGR)	1	52.20
5.	Department of Biotechnology (DBT)	1	54.00
6.	Tamil Nadu Irrigated Agriculture Modernization Project (TN-IAMP)	1	250.00

<b>Sl. No.</b>	<b>Funding Agency</b>	<b>Number of Projects</b>	<b>Budget (Rs. in Lakh)</b>
7.	Tamil Nadu Innovation Initiatives (TANII)	2	577.46
8.	National Agricultural Development Programme (NADP)	6	882.30
9.	National Bank for Agriculture and Rural Development (NABARD)	1	350.00
10.	Tamil Nadu State Fund	3	917.20
11.	Tamil Nadu State Land Use Research Board (TNSLURB)	2	26.36
12.	National Centre for Coastal Research (NCCR)	1	123.91
13.	Pradhan Mantri Matsya Sampada Yojana (PMMSY)	1	116.00
14.	National Co-operative Development Corporation (NCDC)	1	50.00
	<b>Total</b>	<b>25</b>	<b>3784.36</b>

### **16.9.2 Research publications**

TNJFU has been showing an upward trend over the years with 120 research papers

(International Journals: 93 and National Journals: 27) were published in the year 2022 with NAAS rating more than 6 which is an essential criterion for national ranking.

### **16.9.3 Patents applied / granted**

During 2022-23, the University has filed 16 design patents.

1. Pedal Operated Fish De-scaling machine
2. Electric operated Semi-automatic dry fish cutter
3. Electric operated batch type pasteurization system for processing crab meat in Retort pouch
4. Electric operated dewatering machine for fish mince
5. Fish Vending machine
6. Aeration cum feeding system for nursery aquaculture system
7. Cage for freshwater Aquaculture
8. Grader for Shrimp nursery
9. Sandwich structured Halochromic Sensor for Monitoring

10. Spoilage of Packed Fish
11. Pocket – Size Calorimeter
12. Capacitive Deionization of water
13. Aquatic animal harvester
14. Aquatic Animal Habituation Tank
15. Piezoelectric shoes
16. Piezoelectric tiles

#### **16.9.4 Technology and machineries / tools developed**

Five technologies were developed in this year viz., Minimalistic circular tank prototype for Biofloc fish culture technique, Fish Bone Collagen Peptides encapsulated with Protein Carrier as Dietary Supplements, Method optimization and validation for the accurate determination of formaldehyde in fish using UPLC, PCR assay for the detection of shrimp allergen, tropomyosin using the designed primers and Edible sachet technology for packaging of fish soup powder.

Seven machineries / tools were developed in this year are Batch type fish mince dewatering system for surimi production, Batch type pasteurizer for crab meat pasteurization in retort pouch, Design and development of pedal operated fish descaling machine, Fish meat extractor or Mincer, Fish Popping Machine, Solar Powered Auto Feeder with Control System and Mobile App and High performance Sandwich structured Halochromic Sensor for Monitoring Spoilage of Packed Fish.

#### **16.9.5 Products developed**

Fifteen products were developed in this year includes Fortification of pasta using seaweed powder (*Caulerpa racemosa*), Cheese and Spice Flavoured shrimp snack, Classy salt and Chilly Shrimp snack, Green Spice Shrimp Snack, Tandoori barbecued shrimp snack, Tamil Nadu style spicy shrimp powder, Smoky

dried shrimp, Shrimp based seasoning mix, Seaweed pickle, Apple snail soup powder, Seaweed jam, Mixed Spice Shrimp Snack, Water soluble chitosan fortified health mix, Water soluble chitosan fortified vegetable soup and Water soluble chitosan fortified grape drink.

#### **16.9.6 Mobile apps**

Three E- Applications developed in this year are Smart Do – AI Based Web Application, Aquagent – Farmer friendly virtual assistant and Web application for sludge volume prediction in shrimp farms.

#### **16.9.7 MoU signed**

In 2022-23, eleven Memorandum of Understandings (MoUs) have been signed, one each with Curtin University, Australia and Bay of Bengal Programme and nine with private organizations.



### **16.9.8 Technology commercialized through research outcome**

The marine products incubation forum of Fisheries College and Research Institute, Thoothukudi commercialized sea weed incorporated cosmetic products entering MoU with a Madurai based private company, "Herbalis" and introduced in the market for consumers.

The technology on South Indian Fish curry in retort pouch and Sri Lankan Fish curry in retort pouch have been commercialized to Britto Seafood, Thoothukudi and five Ready to Eat spiced and dried shrimp products were commercialized to Vantage Nutriments, Kolkatta.

The technology on shrimp feed formulation was commercialized to M/s. CMR Feeds and Supplements, Chennai.

## **16.10 Important events organized**

### **16.10.1 Indian Fisheries and Aquaculture Forum (IFAF)**

University conducted the National Level 12<sup>th</sup> Indian Fisheries and Aquaculture Forum on 5 – 7 May, 2022 in Chennai, in which about 900 research articles were presented and more than 2000 researchers participated. Hon'ble Governor – Chancellor inaugurated the programme.

### **16.10.2 National Agriculture Scientific Tamil Conference**

University organized two-days 8<sup>th</sup> National conference on Agriculture scientific Tamil was organized on 25 – 26 February, 2023 in TNJFU, Nagapattinam jointly with Agriculture Scientific Tamil Society, New Delhi. There are 576 research papers in Tamil were presented and more than 500 students and teaching staff in fisheries, veterinary science, agriculture and allied science colleges and institutes participated.

## **16.11 Extension:**

### **16.11.1 Incubation units developed for farmers and stakeholders**

Recirculating Aquaculture System, Shrimp larval rearing unit, Marine fish nursery unit, Fish and Shrimp ponds, Feed mill, Aquatic Rainbow Mall, Aquatic Rainbow Technology Park, Inland cage culture unit, Marine cage culture unit, Raceways etc., are available in constituent units of this University to lease out for the benefit of fish and shrimp farmers, rural and urban youth and other stakeholders. In the entrepreneurship Development and Innovative Institute (EDII) funded project, 27 incubates registered and doing business using the facilities at Fisheries College, Thoothukudi.

### **16.11.2 Service through laboratory analysis**

Four laboratories of this University viz., State Referral laboratory for Aquatic Animals

Health, Madhavaram, Thiruvallur District; State Referral Laboratory for Aquatic Health, FC&RI, Thoothukudi; State Referral laboratory for Fish Quality Monitoring and Certification, FC&RI, Thoothukudi and State Referral Laboratory for Feed Quality Testing, Institute of Fisheries Post graduate Studies, Vaniyanchavadi, Chennai are catering to the need of the aquaculture farmers and sea food processors to analysis the water quality parameters, disease diagnosis and treatment, fish feed quality and also for quality of fish and fishery products.

### **16.11.3 Trainings to fishermen**

A deep sea fishing research and training vessel was recently launched by the University in Thoothukudi to train the fishermen. There are 150 fishermen benefitted from the trainings conducted on care and maintenance of marine engines, safety of fishermen at sea

and boat maneuvering skills in the year 2022-23.

#### **16.11.4 Service to fish farmers and entrepreneurs**

Quarterly magazine 'Meenvala sudar' is published by this University and circulated to fish farmers and entrepreneurs to understand the recent developments in aquaculture and fisheries in Tamil Language. Success stories of the different fish farmers are published to motivate others in fish farming. There are 78 outreach programmes including webinar and conference conducted in aquaculture and fisheries by all constituent units and 5224 beneficiaries benefitted. In Agricultural and Veterinary subjects, 71 trainings were conducted by the Krishi Vigyan Kendra(KVK), Sikkal and 3,819 beneficiaries were benefitted.

## **17. WAY FORWARD**

The future plans of the Government for the comprehensive development of the sector are:

- The State Government will ensure the welfare of the fisherfolk through social security schemes.
- The Government will continue to support the fishermen through supplying state of the art communication equipment to ensure the safety and security of fishermen while fishing.
- To reduce the pressure on marine fishery resources, alternative livelihood options like seaweed farming, mariculture activities like open sea cage culture will be promoted.
- The Government will develop exclusive infrastructure facilities for seaweed production and seaweed product development.
- Training and capacity building in handling cold chain, value addition, best farming practices etc., will be given to fishers.

- Coastal aquaculture activities like crab fattening, pond culture of marine finfishes and lobster fattening in open sea cages will be promoted.
- Research findings of Dr. J Jayalalithaa Fisheries University in fish farming, mariculture, processing etc. will be taken to the field for the benefit of the fisherfolk and fish farmers.
- For effective utilization of coastal fallow lands, land leasing policy to be developed to increase coastal aquaculture production.
- World class Fishing Harbours, shore facilities and cold chain links all along the coast of Tamil Nadu will be established to ensure hygienic handling, quality assurance and better value realization for the fish catch.
- Conservation and sustainable management of Fishery resources through effective implementation of Acts, Rules and Regulations.
- The Government is keen on enhancing the overall inland fish production of the State, for

which creation of necessary infrastructure facilities for seed production, promotion of latest technologies, effective utilization of all water resources for fish culture will be done.

- Impetus to be given to conserve the native fish species of State. Ranching programmes to be performed in rivers and other natural water bodies that will replenish the stock of the native fish varieties.
- Cluster based farming will be promoted to carry out effective marketing and to fetch better price for inland fishes.
- Conservation and fishery resource enhancement measures such as installation of artificial reefs and sea ranching programmes to be taken up on a large scale.



## **18. BUDGET ALLOCATION FOR THE YEAR 2023-24**

For the year 2023-24, a sum of Rs.1,358.26 crore has been provided in the budget estimate. Out of this, the projected revenue expenditure is Rs.618.41 crore and the capital expenditure is Rs.739.85 crore.

## **19. CONCLUSION**

The Government accords special emphasis for creating fishery resources towards ensuring sustainable fish production from marine, brackishwater and inland fisheries sectors, besides safeguarding the welfare of the fishers. Restoring the right to fish in the traditional fishing grounds of the Palk Bay is already one among the top priorities of the Government. The Government of Tamil Nadu is continuously insisting the Union Government to arrive a permanent solution to the issues of attacks and apprehension of our fishermen and their fishing assets by the Sri Lankan Government in the Palk Bay area.

In view of sustaining the growth in the fisheries sector, the Government have initiated the process of diverting the fishermen into alternative livelihood activities like seaweed culture and open sea cage culture. On the other hand, the Government have announced the installation of artificial reefs in a large scale in the inshore waters of both Palk Bay Districts and in other Districts to act as feeding and breeding ground for fishes. This would largely enhance the fishery stock in the nearshore areas and thus it will be helpful for the artisanal fishermen to get sufficient fish catch right next to their fishing villages.

The Government of Tamil Nadu have taken all initiatives to address the gap between the inland fish seed production and supply, so as to stock all the public water bodies with quality fish fingerlings to increase the inland fish production of the State. The Government also focuses on

sufficient production of fast growing fish seeds like Genetically Improved Farmed Tilapia (GIFT) to meet out the growing demands in inland culture fisheries. In order to reach the technological advancements in fisheries sector to the field, subsidy schemes on Re-circulatory Aquaculture System (RAS) and Bio-floc fish culture are being promoted for sustainable development.

The Government have a greater vision to expand the Brackishwater aquaculture in a large scale for doubling the seafood exports from the State, while optimally utilizing the coastal fallow lands for shrimp aquaculture. Development of requisite cold chain facilities and other coastal infrastructure facilities to assist fishermen in safe berthing of their fishing crafts and in the pre-processing, processing and exports are well planned and executed. Thus, the futuristic planning of the Government and perfection in

execution of the schemes will certainly lead to the visionary goals of the Government in fisheries sector in near future.

**ANITHA R. RADHAKRISHNAN**  
**Minister for Fisheries-Fishermen**  
**Welfare and Animal Husbandry**

## Annexure

### ALLOTMENT FOR THE YEAR 2023 - 2024

Scheme Description	Revenue	Capital	Loan	Total
<b>(Rs.in lakh)</b>				
Salaries	8,792.51	0.00	0.00	8,792.51
Relief Schemes (State Fund)	23,665.40	0.00	0.00	23,665.40
Other schemes (State and Centrally sponsored)	4,456.31	0.00	0.00	4,456.31
IAMWARM (World Bank Scheme)	326.19	0.00	0.00	326.19
PMMSY Schemes (Central and State shared Schemes)	19,381.81	0.00	0.00	19,381.81
NADP Schemes	0.77	0.00	0.00	0.77
Tamil Nadu Fisheries University	5,218.05	0.00	0.00	5,218.05
Infrastructure (State Fund)	0.00	800.03	0.00	800.03
Infrastructure - FIDF (Central and State shared Scheme)	0.00	36,185.01	0.00	36,185.01
Infrastructure - NABARD	0.00	37,000.01	0.00	37,000.01
<b>TOTAL</b>	<b>61,841.04</b>	<b>73,985.05</b>	<b>0.00</b>	<b>1,35,826.09</b>