





Annual Report

2024-25

Department of Fisheries Ministry of Fisheries, Animal Husbandry & Dairying Government of India





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Chapter 1

Department of Fisheries- An Overview

1.1 Organizational Structure

Ministry of Fisheries, Animal Husbandry & Dairying comprises of two Departments namely, Department of Fisheries and Department of Animal Husbandry & Dairying. Department of Fisheries was carved out of Fishery Division from the erstwhile Department of Animal Husbandry, Dairying & Fisheries vide Cabinet Secretariat's Notification No.1/21/21/2018-Cab dated 5th February, 2019.

The Department is under the charge of Hon'ble Union Minister of Fisheries, Animal Husbandry & Dairying. He is assisted by two Ministers of State for Fisheries, Animal Husbandry & Dairying. The administrative head of the Department is the Secretary, Fisheries.

Secretary (Fisheries) is assisted by two Joint Secretaries with divisions namely Inland and Marine Fisheries. The organizational structure of the Department is given in **Annexure-1**.

1.1.1 Functions

The Department is responsible for matters relating to formulation of policies and schemes pertaining to development of Inland, Marine and Coastal Fisheries and Fishery Institutes including its four subordinate institutions and one autonomous body and one regulatory authority. The Department advises the State Governments /Union Territories (UTs) in formulation of policies and programmes in the field of fisheries. The main focus of the activities is on the following:

- Expansion of Aquaculture in fresh and Brackish water
- b. Conservation and sustainability of Marine Fisheries Resources
- c. Inland Fisheries Development
- d. Promotion of Mariculture, Seaweed

- Cultivation, Cage Culture, RAS, Ornamental Fisheries, Cold Water Fisheries and Fisheries Trade
- e. Social security and welfare of fishermen including fisher women
- f. Development of Fisheries Infrastructure
- g. Establishment of Aquatic quarantine network
- h. Mapping of water bodies through GIS etc.

The Department also undertakes the formulation of policies, strategies, programs and plans on fisheries, to draft related laws, regulations and provisions, and organize their supervision and implementation across the States/UTs.

1.1.2 List of Subjects allocated is as follows:

- a. Industries, the control of which by the Union is declared by Parliament by law to be expedient in Public interest as far as these relate to Development of fish feed and fish products with the limitation that in regard to the development of industries, the functions of the Department of Fisheries do not go further than the formulation of the demand and fixation of targets
- b. Promotion and development of Fishing and Fisheries (inland, marine and beyond territorial waters) and its associated activities, including infrastructure development, marketing, exports and institutional arrangements etc.
- c. Welfare of fishermen and other fisher-folk and strengthening of their livelihoods
- d. Liaison and co-operation with international organizations in matters



relating to Fisheries development

- e. Fisheries Statistics
- f. Matters relating to loss of fish stock due to natural calamities
- g. Regulation of fish stock importation, Quarantine and Certification
- h. Fishery Survey of India, Mumbai
- i. Legislation with regard to the Prevention of the extension of infectious or contagious diseases or pests affecting fish from one State to another
- j. Legislation with regard to the Pattern of financial assistance to various State Undertakings, Fisheries Development Scheme through State agencies/Cooperative Unions
- k. Preservation, protection and improvement of fish stocks and prevention of diseases thereof, Veterinary training and practice
- I. Insurance of fish stock

1.2 Subordinate offices /Fishery Institutions functioning under the Department

Department of Fisheries has four institutions / sub-ordinate offices under its fold. These institutions are (i)Fishery Survey of India (FSI), Mumbai (ii) Central Institute for Fisheries Nautical and Engineering Training (CIFNET), Kochi (iii) National Institute of Fisheries Post Harvest Technology and Training (NIFPHATT), Kochi and (iv) Central Institute of Coastal Engineering for Fisheries (CICEF), Bengaluru. The Department has two autonomous bodies namely the National Fisheries Development Board (NFDB), Hyderabad and the Coastal Aquaculture Authority (CAA), Chennai. A brief on the institutes are follows:

1.2.1 Fishery Survey of India, Mumbai

Fishery Survey of India (FSI) was established in the year 1946 by Government of India, as a pilot

project known as Deep Sea Fishing Station (DSFS) with the objective of augmenting food supply through development of deep-sea fishing. As a humble beginning, the institute started its activities with one vessel named as' S.T. Meena'-a mine sweeper converted into a trawler. The main objectives of DSFS were charting of fishing grounds and training of deep sea fishing personnel.

Realizing the gigantic task of DSFS, Government of India established a number of such stations on both the east and west coast of India. FSI has thus emerged as the nodal fishery institute in India with the primary responsibility of survey and assessment of fishery resources in the Indian Exclusive Economic Zone (EEZ) and adjoining areas for promoting sustainable exploitation and management of the Marine Fishery resources.

FSI currently undertakes survey of deep-sea demersal resources, coastal pelagic resources, oceanic tuna resources, habitat management and assessment of risk to habitats, investigations and research in coral reef ecosystems among other activities.

1.2.2 Central Institute of Fisheries, Nautical and Engineering Training (CIFNET), Kochi

Central Institute of Fisheries Nautical and Engineering Training (CIFNET) is the only national institute of its kind in the country to impart training to technical and certified personnel such as Skippers, Mates, Engineers, Engine Drivers of power fishing vessels as stipulated in the Merchant Shipping (Amendment) Act, 1987.

CIFNET is also responsible for developing the required technical manpower for supporting the shore establishments and for effective operation of fishing vessels. The various short-term courses conducted by the Institute cover an integrated multi-disciplinary area of Fishing Technology, Nautical Science and Marine Engineering and has benefited personnel working in international institutions and various organizations under the



Central/State Government departments, colleges and other Public/Private sector establishments. The institute is currently focusing on the skill development trainings of fishermen in deep sea fishing for oceanic tuna, responsible fishing practices and teaches about the devastating effects of marine pollution through their course curriculum.

1.2.3 National Institute of Fisheries Post-Harvest Technology & Training, Kochi

The National Institute of Fisheries Post Harvest Technology and Training (NIFPHATT), erstwhile known as 'Integrated Fisheries Project', was established in 1972 to oversee all-round development of Post-Harvest Technologies. NIFPHATT envisages delivery of the best quality fish and fish products through minimal postharvest losses and maximized post-harvest fish utilization. Post-harvest technology up gradation is achieved through adaptive research to suit the ever increasing and fast changing consumer needs by developing new processes, products and packaging. Dissemination of the upgraded technology is achieved through consultancy, training, popularization of products and consumer response surveys etc.

1.2.4 Central Institute of Coastal Engineering for Fisheries, Bengaluru

Central Institute of Coastal Engineering for Fisheries (CICEF), Bengaluru was established in January, 1968 as Pre-investment Survey of Fishing Harbours (PISFH) by the Ministry of Agriculture, Government of India in collaboration with Food and Agriculture Organization of the United Nations (FAO/UN). The primary objective of establishing the Institute was to carry out engineering and economic investigations and prepare techno-economic feasibility reports for the development of fishery harbours at suitable sites along the Indian coast and to provide fishery harbour facilities to Mechanized Fishing Vessels (MFVs).

After the cessation of the FAO/UN assistance, the

Institute received technical assistance in the form of equipment and expert consultancy services from Swedish International Development Agency (SIDA) for a period of 2 years from January 1974. In August 1983, it was renamed as Central Institute of Coastal Engineering for Fishery (CICEF). Technical expertise of the institute was further developed in the subsequent years from August 1983.

The Institute is also catering to the requirements of Aquaculture Engineering for development of Coastal Aquaculture Farms along the Indian coast. The Institute received United Nations Development Plan (UNDP)/ Food and Agriculture Organization (FAO) assistance in the form of equipment and consultants from 1986 to 1991 for the development of coastal aquaculture farms. The Institute has thus been playing a pivotal role in assisting the maritime States/UTs by extending the necessary technical support in conducting engineering and economic investigations.

1.3 Autonomous and Regulatory Bodies

The details of the Autonomous and Regulatory Bodies of the Department are given below:

1.3.1 National Fisheries Development Board, Hyderabad

National Fisheries Development Board (NFDB) was set up in September 2006, with its headquarters at Hyderabad. NFDB is recognized for promotion and development of Fisheries and Aquaculture in India and has been dedicatedly driving the stakeholders through various needbased projects for technology up gradation, species diversification in aquaculture, dissemination of new and improved fish varieties, promoting seaweed cultivation & ornamental fisheries, training & capacity building etc.

NFDB act as a catalyst for State/UT fisheries departments and Stakeholders for promotion and implementation of various Gol schemes, identification of value chain gaps, acts as an advisory/technical body and provides outreach extension services in implementing the



fisheries activities. NFDB has played a crucial and exemplary role in promoting infrastructure facilities for bringing in significant improvement in handling, preservation, and marketing of fish, increasing production and productivity, improving the livelihoods of fishers and fish farmers, promoting entrepreneurship opportunities in fisheries, providing insurance support, establishing e-trading platforms for the market price regularization, organizing outreach activities such as fish festivals, outdoor & digital campaigns to increase consumption of fish and also providing financial assistance.

1.3.2 Coastal Aquaculture Authority, Chennai

The Coastal Aquaculture Authority (CAA) was established under the Coastal Aquaculture Authority Act, 2005 vide Gazette Notification dated 22nd December, 2005. The aims and objectives of the Authority are to regulate 'Coastal Aquaculture 'activities in the areas notified by the Central Government as 'coastal areas' and for matters connected therewith or incidental thereto. The Authority is empowered to make regulations for the construction and operation of aquaculture farms in coastal areas, to register aquaculture farms and hatcheries, inspect them to ascertain their environmental impact, remove or demolish coastal aquaculture farms which cause pollution, fixing standards for coastal aquaculture inputs. Through these controls and measures, CAA focuses on facilitation of environmentally responsible and socially acceptable coastal aquaculture.

In addition to the above organizations, there is a National Level registered society, viz., National Federation of Fishers' Cooperatives Ltd. (FISHCOPFED), New Delhi.

1.3.3 National Federation of Fishers Cooperatives Ltd.

National Federation of Fishers Cooperatives Ltd. (FISHCOPFED) is a national level federation of

fisheries cooperatives and the apex institution of Indian Fisheries Cooperative Movement. It was established in 1980 as All India Federation of Fishermen Cooperatives and was rechristened as National Federation of Fishers Cooperatives Ltd. in 1982.

FISHCOPFED is governed by its own approved bye-laws and through the provisions of Multi-States Cooperative Society (MSCS Act 2002).

FISHCOPFED aims to serve, develop and uplift the socio-economic condition of fishers in the country. It facilitates coordinates and promotes fishing industry in India through cooperative efforts

1.4 Major Initiatives taken towards Enhanced & Sustainable Fish production

Recognizing the potential of the sector, to consolidate the achievements of Blue Revolution and to provide focused attention to the sector, the Department of Fisheries is implementing Pradhan Mantri Matsya Sampada Yojana (PMMSY).

Government of India in May 2020 approved PMMSY with an estimated investment of Rs. 20,050 Crores comprising of Central share of Rs. 9,407 Crores, State share of Rs. 4,880 Crores and beneficiary contribution of Rs.5,763 Crores for a period of five years from FY 2020-21 to FY 2024-25. During the current financial year, under PMMSY, proposals with a total cost of Rs. 2,310.18 Crores with central share of Rs. 1,200.85 Crores were approved.

In the Budget Estimates 2024-25, the Department has been allocated total budgetary support of Rs. 2,616.44 Crores that was revised to a total budgetary support of Rs. 1,666.47 Crores including allocations for scheme and non-scheme components. The Component wise, Budget Estimates (BE), Revised Estimates (RE) and Expenditure for 2024-25 are indicated in **Annexure-II.**



The scheme intends to address critical gaps in fish production and productivity, infusion of innovation and modern technology, post-harvest infrastructure & management, modernization and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare. Due focus is also being given to creating awareness for harnessing of fisheries potential in a sustainable, responsible, inclusive and equitable manner. Also in order to enhance competitiveness of fisheries sector, facilitate economies of scale, generate higher incomes, and accelerate growth and expansion of the sector in an organized manner, "Cluster or Area based approach" is being adopted while approving and implementing the beneficiaryoriented components/activities.

PMMSY intends to double the income of fishers, fish farmers and fish workers by 2024- 25, enhance fish production to 22 Million Metric Tonnes (MMT) by 2024-25 (up from 13.75 MMT in 2018-19) at an average annual growth of about 9 percent (up from 7 percent during 2018-19). PMMSY further intends to increase Aquaculture productivity to 5 tonnes per ha (up from national average of 3 tonnes per ha), create critical fisheries infrastructure, reduce post-harvest losses, modernize and strengthen value chain, double export earnings to Rs. 1,00,000 Crores, enhance domestic fish consumption with corresponding health benefits, attract investments in Fisheries sector from other sources (State, private etc.) and generate direct and indirect employment opportunities of about 55 Lakhs in the fisheries sector from other sources. Some of the 'thrust' areas addressed under the PMMSY are as below:

- a. Mariculture including seaweed cultivation
- b. Ornamental and recreational fisheries
- c. Quality Seed and feed.
- d. Sustainable harnessing of fisheries from Indian Exclusive Economic Zone and High

- Seas, with special focus on the islands development,
- e. Cold water fisheries
- f. Development of aquaculture by productive utilization of saline/ alkaline areas
- g. Integrated development of reservoirs
- h. Species Diversification through new candidate etc
- I. Livelihood & nutrition support and welfare.

With the aim to increase productivity and reduce post- harvest losses, a number of subactivities/components are envisaged under the scheme. To this effect, adoption of modern technologies in production and post-harvest management including High-density aquaculture in ponds, Recirculatory Aquaculture System (RAS), biofloc, cage culture, nano-feed live feed technology, block chain, value addition, quality preservations and marketing etc. will aim for "more crop per drop". Provisions are made under the Scheme for giving assistance for expansion of culture area, focus on diversification of species, catering demand and supply of quality brood and seed of cultivable species and speciesspecific feeds.

These provisions are directed towards establishment of adequate number of brood banks, hatcheries, seed rearing units, specific pathogen free or resistant seed, genetically improved brood stock and feed mills.

In order to address the infrastructural requirements for the fisheries sector, a dedicated fund namely Fisheries and Aquaculture Infrastructure Development Fund (FIDF) was created in 2018-19 with a fund size of Rs 7,522.48 Crores. Concessional finance is provided for development of fisheries infrastructure through interest subvention to the Eligible Entities (EEs), including State Governments/UTs and State entities for development of identified fisheries infrastructure facilities. During the period from



2018-19 to 2022-23, a total of 136 fisheries infrastructure projects with an investment cost of Rs. 5,801.06 Crores have been approved for creation of various fisheries infrastructures.

In the year 2023-24, Government of India approved the extension of Fisheries Infrastructure Development Fund (FIDF) for another three years up to 2025-26 within the already approved fund size of Rs. 7,522.48 Crores and budgetary support of Rs. 939.48 Crores.

In the year 2018-19, Government of India extended the facility of Kisan Credit Card (KCC) to Fisheries and Animal Husbandry farmers to help them meet their working capital needs. It will help Fisheries and Animal Husbandry farmers to meet their short-term credit requirements of rearing of animals, poultry birds, fish, shrimp, other aquatic organisms and capture of fish. The fisheries related working capital components covered under KCC include recurring costs towards seed, feed, organic and inorganic fertilizers, lime/other soil conditioners, harvesting and marketing charges, fuel/electricity charges, labour, lease rent etc.

1.5 Public Grievances Cell

A Public Grievances (PG) Cell has been set up in the Department to look into grievances of the public. A comprehensive review has been undertaken to upgrade the Centralised Public Grievance Redress and Monitoring System (CPGRAM) to make it more responsive to the needs of the citizen. Nodal officer for dealing with the PGs is Director (Administration) and Appellate Authority is Joint Secretary (Administration). As per the guidelines of DARPG, steps have been taken for deeper analysis of grievances, universalization of CPGRAM version 7.0 for auto routing of grievance to last mile etc., appointment of schemes officers as Public Grievance Officers. Public Grievance Officers have been sensitized to resolve grievances within the prescribed timelines of 21 days. The details of public grievance in the Department from 1st April, 2024 to 31st December, 2024 are as below:

Brought forward	Receipt during said period	Total receipts	Case disposed during said period	Closing balance
28	365	393	377	16

1.6 Liaison Officer for Scheduled Castes (SCs)/ Scheduled Tribes (STs) /Other Backward Classes (OBCs)/ Persons with Disabilities (PWD)

The Department endeavors for strict implementation of the orders issued by the Government of India from time to time regarding reservation in services for SCs, STs, OBCs, minorities, Ex-Servicemen and differently-abled persons. Presently, there is no dedicated cell in the Department for implementation of Government policy on reservation. However, Liaison Officer for Scheduled Castes (Scs)/Scheduled Tribes (STs) /Other Backward Castes (OBCs)/Economically Weaker Section (EWS)/Persons with Disabilities (PwD) and Ex-Servicemen has been appointed in the Department to look after the reservation matters related to recruitment as per reservation policy.

1.7 Vigilance Division

Vigilance Division processes vigilance cases/disciplinary cases pertaining to the Department and its subordinate offices. Various preventive vigilance measures have been undertaken to sensitize the officials like orientation interaction with heads and vigilance officers of subordinate officers. During 2025, the Department of Fisheries organized workshops on preventive vigilance at Chennai for the Coastal Aquaculture Authority, Base Office of FSI and CIFNET Unit and Chennai and Vishakhapatnam for the Base office of FSI, CIFNET and NIFPHATT units, in which all the local units of the organization of the Department participated The Chief Vigilance Officer enthusiastically. monitors the vigilance cases on a regular basis. 'Vigilance Awareness Week' was celebrated in the Department from 28th October to 3rd November,



2024 on the theme "Culture of Integrity for the Nation's Prosperity". Various activities have been undertaken during the vigilance awareness week. No vigilance case was pending in the Department upto 31st December, 2024.

1.8 Progressive use of Official Language - Hindi

Official Language Section has been established in the Department in May 2022 and this Section has proactively initiated various activities towards implementation of Official Language policy of the Government. Official Language Implementation Committee (OLIC) has been constituted in the Department under the Chairmanship of Joint Secretary (Administration). The progress in use of Hindi in the Department is being reviewed in meetings and suggestions received are being implemented to promote the use of Hindi in official work. As a result, the percentage of correspondence in Hindi as well as notings on files in Hindi has considerably increased. Parliamentary Committee on Official Language (second Sub- Committee) has inspected CAA, Chennai at Puducherry on 07.01.2025 and NIFPHATT, Kochi at Thiruvanthpuram on 9th January 2025 and they expressed satisfaction over the performance of the organisations.'OL Hindi fortnightly' was organized in the Department from 14th to 28th September 2024. During the fortnight, various events/ competitions like essay writing, Noting & drafting in Hindi, Tasveer kyaa bolti hai, Drawing competition with appropriate slogan in Hindi etc were conducted and the officials of the Department participated enthusiastically in these activities. An award ceremony was organized wherein Secretary, DoF awarded the winners of the OL fortnightly competitions. Glossary of Administrative Terms (English-Hindi) from Commission for Scientific and Technical Terminology was procured and handed over to each and every Officer/employee of the department. Workshops were organized wherein officials were given information on Official Language Policy, Act, rules and other instructions of the Government for compliance. In addition, workshops were also organized wherein officers and officials were given training and hands on exercises on various Hindi E-tools enabling them to work on Computer in Hindi Language. Message from Hon'ble Minister, MoFAHD and State Minister, MoFAHD on the occasion of 'Hindi Diwas' was circulated among all officers and employees.

1.9 Prevention of Harassment of Women Employees

A Committee for prevention of sexual harassment of women at workplace exists in the Department to look into the complaints of sexual harassment. There are two complaints of sexual harassment at workplace at the Department during 2024, which is being enquired into. As per instructions of Ministry of Women & Child Development, [SHE-Box] has been provided on the website of the Department for online complaints against sexual harassment at workplace, if any.

1.10 Implementation of Right to Information (RTI) Act, 2005

Under the Right to Information Act, 2005, Department has designated Central Public Information Officers (CPIOs) and Appellate Authorities. Similarly, separate CPIOs and Appellate Authorities under RTI Act have been designated for various subordinate offices and autonomous organizations under administrative control of the Department. RTI applications received through online RTI Portal or otherwise were forwarded online to the concerned CPIOs for speedy disposal. The details of RTI applications and appeals received during the year 2024- 25 (1st April 2024 to 31st December, 2024) is furnished in tabular form below:



Details		Information provided		Transferred to other PA	3
RTI Application	178	117	9	35	17
RTI Appeal	33	24	0	0	9

1.11 Minimum Government, Maximum Governance

Efficient decision making is fundamental to responsive and accountable governance. Accelerating the pace and efficiency of decision making is crucial for economic growth and enhancing the ease of living of citizens/ease of doing business. Accordingly, various actions have been initiated with an aim of Minimum Government, Maximum Governance that include reduction in channels of submission, delegation of powers at appropriate levels, use of Desk Officer System, digitization of Central Registry Units and leveraging technology to the extent possible. E-office has been upgraded to version 7.0 for seamless inter transfer of files and receipts among Ministries/Departments and with organizations. Several services to employees of the Department like reimbursement claims, IPR, leave, advances have been made available through online e-hrms portal.

Pendency is being monitored and reviewed at the level of Secretary, DoF regularly. Monthly Report on significant development and monitoring of various issues viz., presentation made before Prime Minister, Central State Cooperation, and decisions of cabinet and cabinet Committee through e-Samiksha portal are being done regularly.

1.12 Capacity Building Measures

Employees of the Department were onboarded on iGOT platform of the Capacity Building Commission and most of the employees have undergone 4 hours of training on courses available on iGOT during National Learning Week conducted from 19th October to 25th October, 2024. The Annual Capacity Building Plan for the Department has been prepared and approved in consultation with the Capacity Building Commission and is being implemented.

JUDF Tallery 2024-25

"Official Language Hindi Fortnight and Award ceremony"



























Ek Ped MAA ke Naam Abhiyan At Asola Bhati Wildlife Sanctuary, New Delhi on 28-09-2024









Constitution Day 2024





Swacchata Abhiyan in Krishi Bhawan and Chanderlok Building















Republic Day





Yoga Day











Chapter 2

Saga of the Fisheries Sector

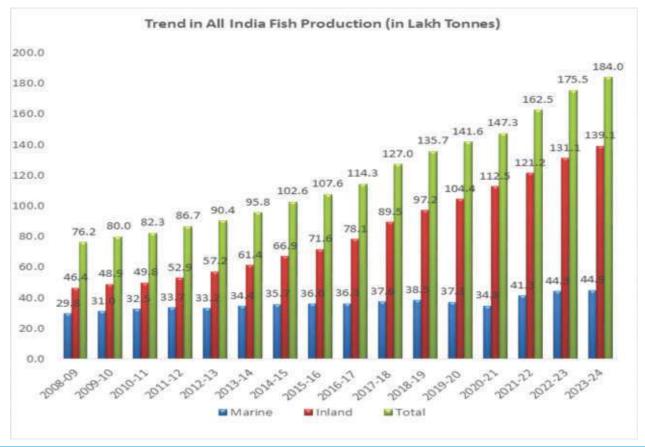
2.1 Indian Fisheries Sector-Current Scenario

India is the second largest fish producing country in the world and accounts for 8 percent of the global production. The total fish production during FY 2023-24 is estimated at 18.40 MMT with a contribution of 13.91 MMT from Inland sector and 4.49 MMT from Marine sector. The annual average growth rate in the Fisheries sector has been 6.30% over the last five years. The Fisheries sector plays an important role in the national economy and the share of Fisheries sector in the total Gross Value Added (GVA), at Constant prices, in 2022-23 is estimated at Rs. 1,65,075 Crores that constitutes about 1.12 percent of the total national GVA and 7.26 percent of agricultural GVA. Fisheries and aquaculture continue to be an important source of food, nutrition, income and livelihood for

millions of people. The fisheries sector of India has shown an impressive growth rate of 7.58% (Constant Price: 2011-12) during the year 2021-22 to 2022-23.

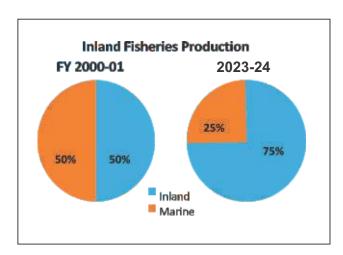
During FY 2023-24, export of marine products stood at 1.78 MMT and valued at Rs. 60,523.89 Crores (USD: 7.38 billion) with an annual growth rate of about 2.67% (in Quantity).

India is also a major producer of fish through Aquaculture and ranks second in the world after China. Inland fish production constitutes about 75 percent of the total fish production of the country and annual growth rate of production has also been high. The fish production has increased from 5.66 MMT in 2000-01 to 8.67 MMT in 2011-12 and further to 18.40 MMT in 2023-24.



Fish being an affordable and rich source of animal protein, is one of the healthiest options to mitigate hunger and nutrient deficiency. The sector has immense potential to double its exports. Thus sustained and focused attention is given to the fisheries sector by the Union Government through policy and financial support to accelerate its development in a sustainable, responsible, inclusive and equitable manner.

A shift from capture fisheries to aquaculture has been observed in Inland Fisheries during the last two and a half decades. Freshwater aquaculture with a share of 34 percent in Inland Fisheries in mid 1980 has increased to about 75 percent in recent years.



2.2 Fisheries Sector in India

The history of fisheries in India dates back to the days of the Harappan civilization. Reference to fish, its trade and fisher community are found in the Songs of the Sangam Age (1st to 4th Century A.D.) The importance and the role of Fisheries sector was officially recognized in India, through the enactment of the "Indian Fisheries Act" in 1897. This Act laid the foundation of the development of the Fisheries sector in India and delineated the responsibility of the provinces, towards the development and conservation of fisheries in the country. Through this Act, the provinces were empowered to formulate Rules/Laws for the

conservation of the fish and fisheries resources.

The First Five Year Plan (1951–1956) of Government of India, with its telescopic outlook drew the canvas of the Fisheries Plan earmarking the priorities for the development of both the Marine Fisheries and the Inland Fisheries sectors through:

- a. Mechanization of country craft or introduction of new mechanized boats
- b. Development of fishing harbor facilities
- c. Supply of requisites to fishermen
- d. Development of marketing activities
- e. Provision of ice and cold storage and transport facilities
- f. Introduction of mothership operations
- Provision for off-shore fishing with larger powered vessels such as purse-se iners and trawlers
- h. Survey and stocking of new culturable waters
- i. Collection of fry

Recognizing the importance of the sector, Department of Fisheries was created in February, 2019 to provide sustained and focused attention towards the development of the sector. This was followed by the creation of an independent Ministry of Fisheries, Animal Husbandry & Dairying in June, 2019.

The main objectives of the Department are to enhance fish production and productivity in an environmentally sustainable and socially equitable basis, harness the untapped potential of Indian fisheries, conservation of aquatic resources and genetic diversity, preservation of health of ecosystems, strengthening of infrastructure in harvest, post-harvest, value- addition & marketing and upliftment of fishers and aquafarmers communities with gainful employment opportunities and capacity strengthening.

As Fisheries is a State Subject, so historically



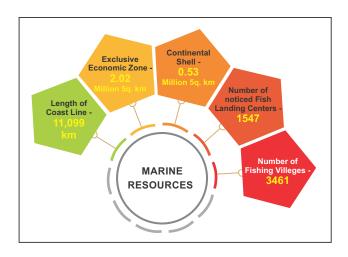
investments in the sector, particularly in the fishing villages/coastal fishing villages, fishing harbours and ports have been made by the states' for the welfare and support of the fishermen community'. However, with the growing requirements for resources, technological transfer/advice and policy orientation, the efforts of State Governments/UT Administrations are supplemented by the Government of India towards the development of the Fisheries sector. Through the combined efforts, Fisheries has emerged as a sunrise sector and have been an important sector that provides food, nutrition, employment, income and livelihood in India. Transformation of the Fisheries sector from traditional to commercial scale has led to anincrease in fish production from 0.75 MMT in1950-51 to 18.40 MMT during 2023-24. The sector also provides livelihood to about 28 million fishers and fish farmers at the primary level and several lakhs along the value chain.

2.3 Fisheries Resources

India has rich and diverse fisheries resources ranging from deep seas to lakes, ponds, rivers and more than 10 percent to the global biodiversity in terms of fish and shellfish species. The Marine Fisheries resources are spread along the country's vast coastline and Exclusive Eco- nomic Zone (EEZ) and large continental shelf area. The Inland Fisheries resources are in the form of rivers and canals, flood plain lakes, ponds and tanks, reservoirs, brackish water, saline/alkaline affected areas etc.

2.3.1 Marine and inland fisheries resources:

The Marine resources of the country comprise an EEZ of 2.02 million sq.km, a continental shelf area of 0.53 million sq. km and coastline of 11,099 km. The Marine Fisheries potential in the Indian waters has been estimated at 5.31 MMT constituting about 43.3 percent demersal, 49.5 percent pelagic and 4.3 percent oceanic groups, 1.1 percent is land resources and 1.8 percent others.



Over the years, mariculture in the country has been confined largely to bivalve mollusks namely, mussels, edible oysters and pearl oysters, and to some extent to seaweeds. With a thrust on development of technologies pertaining to sea cage farming during the last decade, development plans with both forward and backward linkages have been envisaged to allow these activities to become significant contributors to production of sea food in the country.

Subject matter of Fisheries is listed in the State List (entry 21 under seventh schedule of Article 246) of the constitution of India; however, the Union Government supplements the efforts of the States/UTs for development of the sector. Inland sector is by and large, fully in the domain of State Governments while Marine sector is a shared responsibility between the Central and Coastal State Governments. Coastal States/UTs are responsible for development, management and regulation of fisheries in the sea waters within the 12 nautical miles (22 km) from the base line. Government of India is responsible for the development and management of fisheries in the Exclusive Economic Zone (EEZ) waters between 12 nautical miles and 200 nautical mines.

2.3.2 Brackish water estuaries or river mouth is set of water body of fluctuating salinity because of tidal effects. Brackish water bodies have huge potential for both fin fish and shell fish culture.

Valuable fish species like sea bass, pearl spot and shrimp could be cultured in large quantities.

India has 1.24 million ha of brackish water area spread overall maritime States/UTs. Currently, shrimps, oysters, mussels, crabs, lobsters, sea bass, grouper, mullets, milk fish, cobia, silver pompano, pearl spot, ornamental fishes and sea weeds are being farmed.

The Coastal Aquaculture Authority (CAA) is regulating these fisheries activities in brackish water systems within 2 km of the High Tide Line for sustainable development of Coastal Aquaculture sector.

2.3.3 Special activities undertaken in marine fisheries

Seaweed Cultivation is one of the potential area that is expected to open new avenues for mariculture especially for women in coastal areas. It is expected to provide alternate source of income for economically weaker sections of society among rural areas and promote entrepreneurship. With the long coastline and the Exclusive Economic zone (EEZ), India has enormous scope for seaweed cultivation and promotion of seaweed-based industries. About 844 species of seaweeds have been reported, out of which about 60 species are commercially important ones.

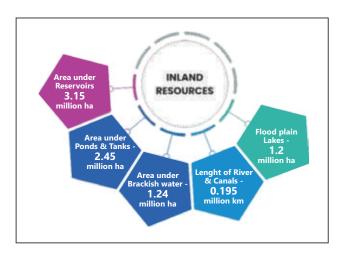
The Department and NFDB have been focusing on bringing in policy and infrastructural changes to push the sector through joint interventions with States/UTs, research institutes and private entrepreneurs. Focused interventions such as establishment of Seaweed Park in Tamil Nadu, conducting feasibility study for identifying conducive locations for cultivation, knowledge transfer on suitable cultivation technologies, germplasm import, establishment of easily accessible seaweed seed banks etc. are being prioritized by the Department.

Artificial reefs (ARs) is technique that provides a firm substrate for marine life to inhabit, attract

fish that can consume the algae and other organisms that populate the artificial substrate. ARs are used all over the world to increase the production and fishing potential of underutilized areas. Their prime objectives are mitigation of habitat loss, enhancing aquatic creature populations by providing shelter for juvenile and mature animals, providing new substrates for algae and mollusks culture, establishing possible marine protected area (MPA) networks to regulate fish life cycles and connectivity, enhancing professional and recreational fisheries, creating suitable areas for diving and providing a mean to manage coastal activities and reduce conflicts and research and educational activities. The Department is taking up establishment of ARs across the coastal belt in suitable places.

2.3.4 Inland fisheries resources

Inland Fisheries has grown in absolute terms, however the rate of growth in terms of its potential has not been fully realized yet. The vast inland resources comprise of 0.195 million km of rivers and canals, 1.2 million ha flood plain lakes, 2.45 million ha of ponds and tanks and 3.15 million ha of reservoirs.



Adoption of eco-friendly and intensive aquaculture techniques, Research on disease-resistant and fast-growing fish varieties, strengthening e-commerce and fishery cooperatives for better price realization & increased investment by



private sectors is expected to further enhance in inland fisheries & aquaculture sector of the country.

2.3.5 Freshwater aquaculture: India has rich and diverse inland fisheries and aquaculture resources in the form of rivers, canals, ponds, lakes, reservoirs, upland lakes, and floodplain wetlands that cover more than 5.8 percent of India's geographical area and support livelihoods, income, and nutrition of people from time immemorial. These water bodies harbour one of the richest and diversified fish fauna of the world comprising 1035 fish species belonging to 326 genera, out of the 30,700 total fish species recorded world-wide. Inland fisheries and aquaculture are imperative for poverty alleviation, food security, gender empowerment, cultural services, ecosystem function, and biodiversity. Inland fisheries and aquaculture also have social, economic, cultural, and environmental importance. The equity goals of the inland fisheries and aquaculture are to produce sustainable economic, biological and social benefits from the inland resources. Inland fisheries and aquaculture also contribute considerably to the national economy and overall, towards Sustainable Development Goals.

India's inland fish production has increased due to scientific breeding and improved aquaculture techniques. Major species include Indian Major Carps (Catla, Rohu, Mrigal), exotic carps (Silver Carp, Grass Carp, Common Carp), catfishes (Pangasius, Magur) and shellfish (shrimp & scampi). Hatchery-based seed production and genetically improved fish varieties have boosted aquaculture yield. Biofloc and Recirculatory Aquaculture Systems (RAS) are emerging as promising technologies for sustainable fish farming. The sector provides direct and indirect employment to millions of people, particularly in rural areas. India earns foreign exchange from fish and seafood exports, with aquaculture contributing significantly.

Inland Open water bodies such as reservoir, lakes, rivers, beels etc are the untapped potential in the fisheries & aquaculture sector. The Department of Fisheries, Government of India through various Schemes & Programmes has taken up various activities such as introduction of cage culture in reservoir, river ranching, extending financial support to river & reservoir fishermen for replacement of boats & nets, extending livelihood & nutritional support during fishing ban period, stocking of fingerlings in reservoirs & Wetlands, integrated development of reservoirs for harnessing the untapped potential of Inland open water resources.

2.3.6 Reservoirs: India has over 3.15 million hectares of reservoirs, making them a vast resource for inland fisheries development hence is an important resource for significantly contributing to India's total inland fish production, supporting food security and nutritional needs. Millions of small-scale fishers depend on reservoirs for their livelihood whilst community-based fisheries in reservoirs provide employment and income generation opportunities.

Reservoirs, unlike rivers, offer a controlled and stable environment for fish stocking and management. Large reservoirs support cage culture, allow rearing of high-density fish farming of species like Tilapia, Pangasius, and Indian Major Carps.

Reservoirs serve as habitats for diverse indigenous fish species, including those important for conservation. They help in sustaining fisheries without overexploiting natural riverine systems. They act as buffer systems against climate change by regulating water temperature and availability for fish culture. Integrated approaches like reservoir fisheries with agriculture (e.g., rice-fish culture) enhance sustainability and food security.

While many states have policies for reservoir leasing, stocking, and cooperative management



to boost fisheries output, they are often referred to as 'sleeping giants' because of their untapped potential. Hence this production technology can be made to use by leveraging advanced technology, enhancing monitoring, control & surveillance and continued community participation. Proper scientific management shall increase fish productivity from its current low. By adoption and compliance to best aquaculture practice and integrated development of reservoirs, enhanced use of reservoirs for fisheries is expected to boost fish production without compromising the ecosystem.

2.3.7 Wetland & Beels: Wetlands and beels are critical ecosystems for India's fisheries sector. They play a key role in enhancing fish production, supporting livelihoods, and maintaining ecological balance.

Wetlands vastly include beels, oxbow lakes, and floodplain wetlands spread across the country. These water bodies support diverse indigenous fish species, including commercially important ones like IMC, hilsa, and magur. Many beels are self-recruiting systems where fish naturally breed, ensuring continuous fish availability.

Fisheries in wetlands and beels provide employment to thousands of traditional fishers, particularly in states like Assam, Bihar, West Bengal, and Uttar Pradesh. Wetlands have natural nutrient cycles, supporting high fish productivity compared to artificial water bodies. Wetlands and beels act as natural flood control systems, absorbing excess monsoon water and reducing flood damage. They provide drought resilience by retaining water during dry seasons, ensuring year-round fish availability.

Wetlands can be used for integrated farming models, such as Rice-fish culture (fish farming in flooded paddy fields), Duck-fish farming, where ducks help control pests and fertilize the water and Agro-fishery systems, combining aquaculture with vegetable or livestock farming.

The potential can thus be leveraged by encouraging Stock enhancement programs to increase productivity, Cage and pen culture initiatives to boost sustainable aquaculture and Community-based leasing policies to empower local fishers.

2.3.8 Cold water resources are distributed mainly in the form of upland streams, rivers, lakes and reservoirs that are located at medium to high altitudes of Himalayan corridor such as Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal and all North-Eastern States. Commercial farming of high value cold water species like exotic rain bow trout has been taken up successfully in cold water fisheries and has made estimable progress.

2.3.9 Soil salinization is an ecological threat adversely affecting agricultural output and farming com- munity. About 40 percent of inland saline areas (92.33 lakh ha) lies within the states of Haryana, Punjab, Rajasthan and Uttar Pradesh and is not utilized for any agriculture activities. Thus, productive utilization of these soils through aquaculture has been initiated to *convert waste land into wealth land*.

Fish and shrimp farming have already been introduced in saline-affected areas of the four states and offers a new sphere for employment generation in the sector. Shrimp farmers of the four states are thus propagated shrimp culture showcasing good productivity.

Efforts are also being made for diversification of traditional carp culture to high valued shrimp culture and value addition to carp culture by introducing new species like *L. vannamei*, Sea bass and other candidate fish species for saline Soil/water etc. Hatchery and seed production techniques have so far been standardized for few commercial cultures of shrimps, crabs and fin fishes.

2.3.10 Special activities undertaken in inland



fisheries

Ornamental fisheries are the 2nd most popular hobby with approximately 100 million hobbyists in the world. As India's share of global ornamental fish export is negligible (0.53% with an import share of 0.42%) hence keeping in view the enormous potential and the conducive environment ornamental fisheries is being promoted by the Department. Project on evaluation and analysis of Ornamental value chain has been undertaken to focus on further development of ornamental fisheries in potential states based on potential sources, fish production, marketing etc. The potential states identified for development of Ornamental Fisheries is West Bengal, Tamil Nadu, Maharashtra, Kerala, Odisha, Gujarat, Karnataka, Assam and Manipur.

River ranching scheme has been taken up as a priority activity to replenish depleted fish stock in rivers. Production of native species in the rivers by seed ranching of native stock, upgradation of riverine landing centers and instruments to provide financial assistance for fishermen wellbeing are being targeted. India is bestowed with 14 major, 44 medium, and numerous minor rivers that run through 2.52 lakh Kms, contribute to current production of 1 lakh ton.

For optimally harnessing the potential of riverine fisheries, the Department is focusing on conservation of indigenous fisheries resources and restoration of natural productivity by practice of river ranching and 41 Conservation and Awareness in Riverine Fisheries programme sanctioned under Blue Revolution in 9 States/UTs. River ranching is being implemented in Ganges and tributaries of Mahanadi river system and Godavari, Cauvery, Narmada and Indus river.

2.4 Thrust areas and way forward

In order to enhance fish production, there is a need for enhancing availability of good quality seed and diversification into other fish production areas like integrated fish farming, coldwater fisheries, riverine fisheries, capture fisheries, brackish water fisheries etc. The recent measures therefore have targeted Intensive aquaculture in ponds and tanks through Integrated Fish Farming, Carp Polyculture, Freshwater Prawn Culture, Running water Fish culture and development of riverine fisheries.

Expansion of area under Aquaculture in a sustainable way is an important option to boost fish production. In this context, derelict water bodies are expected be immensely useful and be an important resource to boost fish production for meeting the future fish demands of the country. There are about 1.3 million ha of beels and other derelict water bodies in the country. Bringing these water bodies into the ambit of fisheries will tremen- dously boost fish production and expand fisheries in these water bodies, therefore this is one of the focus areas of the Department for increasing fish production.

The Department recognizes the need for availability of quality seed and feed for sustained growth and enhancing productivity in both marine and inland fish production in the long run. The seed production has increased from 39,348.7 million in 2014-15 to 78,024.8 in 2023-24. For enhancing the production of the seed in the sector, the Department has sanctioned establishment of 1408 hatcheries during the last decade (under Blue Revolution and PMMSY) to transform aquaculture value chain. Thus, setting up of brood banks and hatcheries across the country is, therefore, a priority area for the Department.

Responsible Aquaculture, prevention and management of aquatic diseases, organic farming, and induced breeding are some of the other challenges being addressed in this sector for improving productivity.

Modernization of fishing harbor is another thrust area mainly to improve hygienic conditions of the harbour facilities with the objective of enhancing



export. The modernization project envisages improvement of auction halls, construction of a fish packing hall-cum-truck parking area, improvement of the sanitation and water supply facilities, improvement of electrifications and drainage, resurfacing of wharf backup areas, modernization of the existing buildings, construction of a finger jetty, renovation of existing

RCC jetties, re-flooring of wharf frontage area, renovation of tower lightening structures, construction of rainwater harvesting system, construction of chilled fish storage facilities and construction of ice plants & cold storage, processing plants, floating dock/sleep way/sleep lift/dry-dock, agri-export management etc.



Chapter 3

Major Schemes and Programmes of Department of Fisheries

3.1 Pradhan Mantri Matsya Sampada Yojana

To consolidate the achievements of Blue Revolution and provide focused attention to the sector, the Government of India in its Union Budget FY 2019-20 announced a new scheme, the Pradhan Mantri Matsya Sampada Yojana (PMMSY). As the flagship scheme, PMMSY aims to address critical gaps in fish production and productivity, infuse innovation and modern technology, improve post-harvest infrastructure and management, modernize and strengthen value chain and traceability, establish framework for a robust fisheries management and fishers' welfare. Emphasis has been laid towards creating awareness for harnessing of fisheries potential in a sustainable, responsible, inclusive and equitable manner.

PMMSY is being implemented with active cooperation of State Governments/ UT Administrations. To make it an implementable plan and a measure of building confidence among the implementing agencies, State Governments/UT Administrations have been involved from the initial stage. The implementation plan has been formulated after the assessment of status of fisheries activities in all States/UTs. In- depth discussions have been held to arrive at workable mechanisms, streamline processes and adopt the quantum of targets to ensure smooth operations at the time of execution.

3.1.1 Objectives of PMMSY

- Harnessing of fisheries potential in a sustainable, responsible, inclusive and equitable manner
- b. Enhancing fish production and productivity





through expansion, intensification, diversification and productive utilization of land and water

- Modernizing and strengthening of value chain, post - harvest management and quality improvement
- d. Doubling fisher's and fish farmer's incomes and generation of employment



- e. Enhancing contribution to national & agriculture Gross Value Added (GVA) and national exports
- f. Social, physical and economic security for fishers and fish farmers
- g. Robust fisheries management and regulatory framework

3.1.2 Component of PMMSY

PMMSY is an umbrella scheme with two separate Components namely (a) Central Sector Scheme (CS) and (b) Centrally Sponsored Scheme (CSS). The CSS component is further segregated into Non-beneficiary oriented and beneficiary orientated sub- components/activities under the following three broad heads:

- a. Enhancement of production and productivity
- b. Infrastructure and post-harvest management
- c. Fisheries management and Regulatory framework

PMMSY has been approved at a total estimated investment of Rs. 20,050 Crores comprising of Central share of Rs. 9,407 Crores, State share of Rs 4,880 Crores and Beneficiaries contribution of Rs.5,763Crores.

3.1.2.1 Central Sector Scheme

The entire project/unit cost under Central Sector Scheme of PMMSY are being borne by the Central Government (i.e. 100 percent central funding) and wherever direct beneficiary oriented i.e. individual/group activities are undertaken by the entities of Central Government including National Fisheries Development Board (NFDB), the Central assistance will be up to 40 percent of the unit/project cost for General category and 60 percent for SC/ST/Women category. It envisages investment of Rs. 1,720 Crores for a period of 5 (five) years from FY 2020-21 to FY 2024-25.The different components/activities included under Central Sector Scheme are:

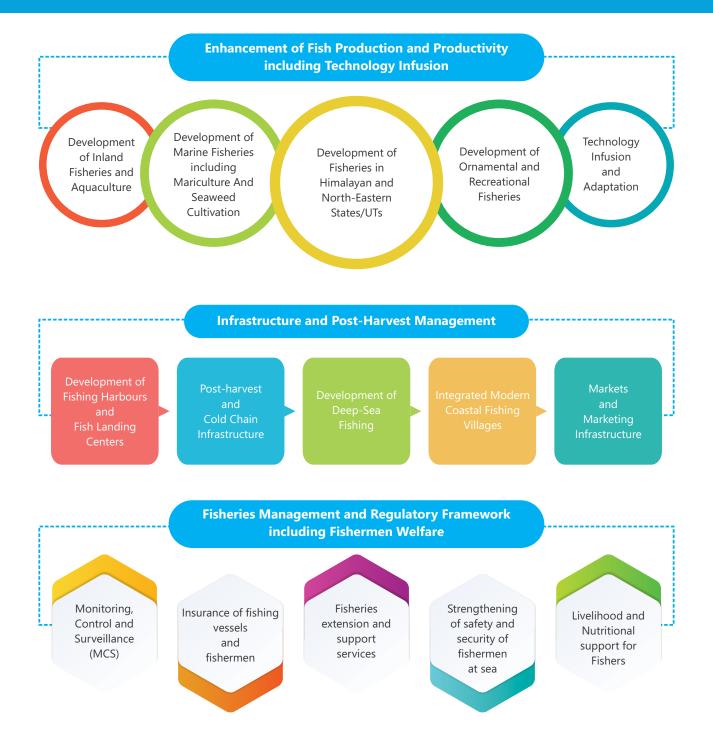
- a. Genetic improvement programmes and Nucleus Breeding Centers (NBCs)
- Innovations and innovative projects /activities, technology demonstration including startups, incubators and pilot projects
- c. Training, awareness, exposure and capacity building
- d. Aquatic quarantine facilities
- e. Modernization of fishing harbors of central government and its entities
- f. Support to NFDB, Fisheries Institutions and Regulatory Authorities of Department of Fisheries, Government of India and need based assistance to State Fisheries Development Boards
- g. Support for survey and training vessels for fisheries institutes including dredger TSD Sindhuraj owned by the Government
- h. Disease monitoring and surveillance network
- i. Fish data collection, fishers' survey and strengthening of fisheries database
- j. Support to security agencies to ensure safety and security of marine fishermen at sea
- k. Formation and strengthening of FishFarmers Producer Organizations/ Companies (FFPOs/Cs), Cooperatives, SHGs etc.
- I. Certification, accreditation, traceability and labeling
- m. Administrative expenses for implementation of PMMSY (to meet expenses of both CSS and components

3.1.2.2 Centrally Sponsored Scheme

The Centrally Sponsored Scheme (CSS) Component of PMMSY is further segregated into non-beneficiary oriented and beneficiary orientated sub-components. It envisages investment of Rs.18,990.27 Crores for a period of 5 (five) years from FY 2020-21to FY 2024-25. The different broad components/activities included under Centrally Sponsored Scheme are as below:



Activities proposed as Centrally Sponsored Scheme Components



3.1.3 Funding Patterns of Centrally Sponsored Component

For the beneficiary orientated i.e. individual/group activities sub-components /activities under CSS component to be

implemented by the States/UTs, the Government financial assistance for both Centre and States/UTs together will be limited to 40 percent of the project/unit cost for General category and 60 percent of the project/unit cost for



SC/ST/Women. The Government financial assistance will in turn be shared between Centre and States/UTs in the following ratio:

- North Eastern & the Himalayan States: 90 percent Central share and 10 percent State share
- b. Other States: 60 percent Central share and 40 percent State share
- C. Union Territories (with legislature and without legislature): 100 percent Central share

For the Non-beneficiary orientated sub-components/activities under CSS component to be implemented by the States/UTs, the entire project/unit cost will be shared between Centre and State/UTs as detailed below:

- a. North Eastern & Himalayan States: 90 percent Central share and 10 percent State share
- b. Other States: 60 percent Central share and 40 percent State share
- Union Territories (with legislature and without legislature): 100 percent Central share

The sharing funding pattern regarding "Livelihood and nutritional support for socio- economically backward, active traditional fisher's families for conservation of fisheries resources during fish ban/lean period" under PMMSY is summarized as below:

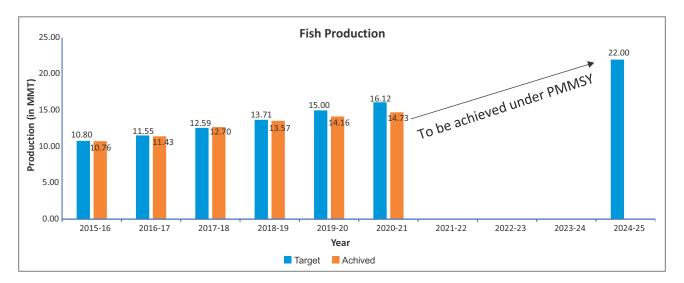
States/UTs	Funding pattern	Contribution
(i)	(ii)	(iii)
General States	50:50 Centre and General States	Centre share Rs. 1500 +State share Rs.1500 + Beneficiary share Rs.1500 = Rs. 4500/-year
North East and Himalayan States	80:20 Centre and NE & Himalayan States	Centre share Rs.2400 +States share Rs.600 + Beneficiary shareRs.1500 = Rs. 4500/- year
Union Territories	100% as Centre share for UTs (with legislature and without legislature)	Centre share Rs. 3000 + Beneficiary share Rs.1500 = Rs. 4500/- year

3.1.4 Outcomes of PMMSY

PMMSY targeted a growth rate of about 9 percent annually on a sustainable basis over a period of five years (2020-25). It is possible to achieve the target if production is targeted at 22MMT by end of 2024-25. The ambitious scheme will result in doubling export earnings to Rs. 1, 00,000 Crores and generate direct and indirect employment opportunities of about 55 Lakhs in the Fisheries

sector over a period of five years. PMMSY further intends to increase aquaculture productivity to 5 tonnes per ha, enhance domestic fish consumption and attract investments in fisheries sector from other sources. Insurance coverage for fishing vessels has been introduced for the first time under PMMSY. The fish production (actual and target) from 2015-2019 and as per PMMSY target are given in the graph below:





3.1.5 Strategies to unlock prospects

The programs and strategies for fisheries and aquaculture development in the country under PMMSY have been developed keeping in view the objectives identified for the sector. Greater emphasis is on 'Cluster Based Approach' wherever feasible, with suitable backward and forward linkages with an equally strong focus on management and conservation of the resource as envisaged under the scheme.

3.1.6 Integrated approach for fisheries development

Integration of various production-oriented activities such as: (i) Production of quality fish seeds by establishing hatchery (ii) Production of cost effective feed from locally available ingredients (iii) Availability of feasible aquaculture technology (iv) Creation of post-harvest facilities (v) Marketing facilities in close vicinity where commercial aquaculture is undertaken would enhance fish production and cluster based approach by forming groups among entrepreneurs and progressive fish farmers are being encouraged to adopt Good Aquaculture Practice (GAP).

a. Pond Aquaculture: It is the most common method of aquaculture and major source of fish production in the country. Effective utilization of the existing ponds and tanks resources through

semi-intensive to intensive aquaculture is one of the priority activities of the Department.

- b. Culture based fisheries in wetlands and reservoirs: When the fish harvest in an open water system depends solely or mainly on artificial recruitment (stocking) it is referred to as a culture - based fisheries. Reservoir fisheries management through different approaches such as Culture - Based Fisheries (CBF) and enclosure culture techniques like cage farming in reservoirs are gaining momentum these days as they have proven to create employment for the growing human resource of the country. Wetlands are amongst the most productive aquatic ecosystems support rich biodiversity and are important feeding and breeding grounds of freshwater fishes. Besides, flood plain wetlands are an important resource for production and livelihood. Supplementary stocking of fingerlings of native species in wetland and reservoir, developing adequate rearing space for ex-situ fingerling production and in-situ seed production in floating cages and pens will be instrumental in enhancing fish production from reservoir rand wetland.
- **c. Fish seed production:** Quality fish seed is a prime requirement for aquaculture and culture based fisheries. A National Freshwater Fish Brood Bank (NFFBB) is established by National Fisheries Development Board (NFDB) for production of



good quality brooders of commercially important species with the technical support of ICAR-Central Institute for Freshwater Aquaculture (CIFA) and ICAR-National Bureau of Fish Genetic Resources (NBFGR). Other issues to be considered for strengthening seed production sector are establishment of brood banks in each State and up-gradation of hatcheries for maintaining and holding the quality brood as well as nursery rearing. Transfer of breeding and seed production technology from laboratory to farmers' field needs to be addressed.

- **d. Promotion of feed-based aquaculture:** Development of fish feed mills and scaling up of feed production from the existing feed mills is envisaged besides popularization of extruded feed based aquaculture to achieve targeted production and productivity.
- **e. Diversification of culture species:** Freshwater aquaculture in India is carp- centric hence introduction of exotic and other diversified species that can contribute to increase in fish production, without any adverse impact on the native species and the ecosystem shall be promoted.
- **f. Additional infrastructure for Specific Pathogen Free (SPF) shrimp seed:** Shrimp Brood Multiplication Centres (BMCs) are the facilities which receive the Specific Pathogen Free (SPF) Post Larvae (PL) from Nucleus Breeding Centre (NMB) and rear PL up to adult brood stock for supply to hatcheries under strict bio security and close disease surveillance. It is proposed to establish more BMCs and hatcheries to fill the gap of shrimp seed requirements.

Areas which require policy level interventions for enhancing fish production and productivity for convergence with related schemes such as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Rashtriya Krishi Vikas Yojana (RKVY), Sagarmala etc.

3.1.7 National Surveillance Programme for Aquatic Animal Diseases (NSPAAD)

Fisheries and aquaculture remain important sources of food, nutrition, income and livelihood for millions of people around the world. Per capita fish supply reached a new record due to vigorous growth in aquaculture. The Aquaculture sector is witnessing an impressive growth over the years, however, the diseases are the major constraint to the growth in aquaculture. Surveillance for aquatic animal diseases is essential for early detection of diseases, thereby minimizing their impacts.

Disease outbreak as well as spreading of pathogens to new areas is a significant threat to growth of aquaculture due to intensification and diversification of aquaculture practices. National level disease surveillance provides information on the disease situation in the country. In case of aquatic animals, it allows better targeting of efforts to control and reduce the risk of spread of aquatic animal diseases, provides early warning of disease emergencies, facilitates more specific contingency planning and strengthening international confidence in country's aquatic animal health status.

The National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) was initiated in April, 2013 for the purpose of monitoring of aquatic animal diseases of national and international concern and control of their spread. It has become a primary requirement for effective health management and ultimately for sustainable aquaculture. This programme is also aimed at providing scientifically accurate and cost-effective information for assessing and managing risks of pathogen transfer associated with trade in aquatic animals and improve production efficiency. The other objective of the Programme is rapid detection of new and exotic infectious diseases through advanced diagnostic techniques. It also helps in certifying freedom



from diseases of concern within a defined geographical area or a specific population and gives boost to our aquatic animal exports. The Programme is being implemented to cover 19 selected States and 3 Union Territories of aquaculture importance through the involvement of 31 identified collaborating centres in the country in a network mode involving ICAR Fisheries Institutes, Colleges of Fisheries, State Fisheries Departments and other relevant collaborating partners in the Phase-I till March, 2022.

The National Surveillance Programme on Aquatic Animal Diseases (NSPAAD) is being supported under PMMSY with active involvement of stakeholders. The programme in its second phase is being implemented through 59 centres including all the State Fisheries Departments and all the NSPAAD collaborating centres comprising 10 ICAR research institutes, 15 Colleges of Fisheries (CoFs) under State/Central Fisheries /Agricultural/Veterinary universities. Implementation of NSPAAD in Phase-II for a period of three years from 1st April, 2022 to 31st March, 2025 has been approved. Quarterly Aquatic Animal Disease Reports for all the four quarters during the year under report were compiled based on the inputs generated from NSPAAD and submitted to World Organisation for Animal Health (WOAH) Regional Representative for Asia and the pacific and Network of Aquaculture Centre in Asia Pacific.

Early detection of diseases is important for eradication and containment. Many cases of diseases in aquaculture that may go unreported due to unavailability of the field-level disease reporting mechanism. Therefore, there is a necessity of a mechanism that can connect farmers, field-level officers, and fish health experts. With a view to strengthen the farmer-based disease reporting system and for improving the reporting of aquatic animal diseases in the country, the Department launched the Report Fish Disease (RFD) App which is one of

the key initiatives under the Surveillance Programme. The App is used for supporting farmers in improving farmer-based reporting, getting scientific advice, and reducing losses due to diseases, thereby increasing farmers' income. Also, Fish Disease Reporting App shall have a massive impact on fish disease management, promoting early detection, rapid response, collaboration, and knowledge sharing. It will contribute to the sustainability and resilience of aquaculture systems by minimizing the negative impacts of fish diseases on fish population, industry, and ecosystems.

It is envisaged that the programme would increase the capacity to detect and control diseases at national level, and will have a major impact on reducing losses due to aquatic animal diseases and thereby, sustainable growth of aquaculture in the country.

3.1.8 Directorate of Aquatic Animal Health and Quarantine (DAAHQ)

Quarantine is the confinement of aquatic animals of unknown or questionable health status in secure facilities such that neither they nor any pathogens they may be carrying can escape into the external environment. In order to adhere to the principle, the Directorate of Aquatic Animal Health & Quarantine (DAAHQ) was set up in the Department of Fisheries for establishing Aquatic Animal Quarantine Unit (AAQU) and Disease Diagnostic Laboratory (DDL) one each on East Coast in Chennai and West Coast near Mumbai with a Coordinating Unit at Head Quarter in New Delhi. For the AAQU & DDL in Chennai, the land was acquired at Padappai, Kanchipuram District of Chennai, Tamil Nadu. The building work of the aquatic animal quarantine unit and disease diagnostic laboratory has been completed by the CPWD. The consultancy services have been appointed and CPWD has submitted the layout of the internal facility includes detailed drawing for water supply, aeration system, drainage system with ETP, and water treatment plant to AAQU



along with the bio-security arrangements for the facility. For setting up of the AAQU and DDL around Mumbai for the West Coast, the Department has undertaken preliminary inspection of the alternative sites offered by Government of Maharashtra. The transfer of the land for the said facilities is under active consideration.

Besides, special focus is being given for establishment of aquatic quarantine facilities in the country for aquatic animals and their products under PMMSY. Approximately 5 Aquatic Quarantine Facilities will be established in the country based on the requirement under PMMSY. The unit cost for each AQF will be as per DPR with an upper ceiling of Rs. 20 crores for the project.

3.1.9 Achievements of Pradhan Mantri Matsya Sampada Yojana (PMMSY)

PMMSY with diverse interventions and activities along the fisheries value chain in terms of production and productivity, quality, technology, infrastructure and management has aimed to transform the fisheries sector and usher economic prosperity for fishers and fish farmers. The inland fish production dominates the total fish production in India contributing around 75% of the total production in the country.

To harness its full potential PMMSY is expanding, intensifying and diversifying inland fisheries through technology infusion, establishing new fresh water hatcheries and brood banks, constructing new rearing and grow-out ponds, constructing cages and pens in reservoirs, developing cold-water fisheries. The projects sanctioned are being implemented across 35 States/UTs in the country under centrally supported and centrally sponsored components of PMMSY.

PMMSY is driving-in technology based fish farming for increasing the production and productivity of the land and water. The Department is fostering advanced modern fish

farming technologies like Biofloc Technology and Re circulatory Aquaculture System (RAS) by investing Rs. 1,236 crores (2020-21 to 2024-25). Installation of sea cages and pen culture in the reservoirs are being implemented through an investment of Rs 636.00 Crores.

There are about 5,701 large dams in the country and many medium and small reservoirs with coverage of over 32 lakh hectares. These reservoirs are the 'sleeping giants' and PMMSY is targeting to harness their potential by development of integrated reservoirs. The Department has successfully installed more than the targeted 20,000 cages in the reservoirs and water bodies which in turn would produce additional 60,000 MT of fishes by 2025.

India's aquaculture export growth is predominantly due to the success of brackish water aquaculture of shrimp. India has 11.86 lakh ha of land suitable for brackish water aquaculture. However, only 1.84 lakh ha (15.5%) area is used for brackish water aquaculture. Additionally, India has 2.73 lakh ha of Saline/Alkaline soil of which only 726 ha (0.27%) is put to use. The Department is thus promoting technologies to harness the potential of unutilized saline-alkaline culture and brackish water body for commercial fish farming.

Under PMMSY, area expansions of inland regions having alkaline and saline soils in a cluster-based approach by converting the 'waste lands into wealth lands' are of prime focus. Accordingly, Rs. 526 Crores has been earmarked under PMMSY for bringing in additional 4,000 Ha of saline area under shrimp aquaculture in the States of Haryana, Punjab, Rajasthan and Uttar Pradesh.

The Himalayan region of India is bestowed with extensive hill ranges and forests with diverse aquatic resources in the form of large rivers, tributaries, hill streams, lakes, and reservoirs. With such immense and varied cold-water resources, the Himalayan States/UTs have treasured indigenous fish germplasm and species endemic



to the region. At the higher altitudes there is a tremendous scope for the development of "low-volume, high-value species" such as Trout, especially Rainbow species, Snow Trout, Brown Trout as well as Mahseer, and Exotic Carps. With the aim of development of cold-water fishery, we are investing Rs 852 Crores for the cold-water fishery. We are constantly exploring ways to further strengthen the entire cold water fishery value chain to unleash its true potential.

Ornamental fish keeping is the second most common hobby in the world, second to photography. It forms an important commercial component of aquaculture, providing for aesthetic requirements and upkeep of the environment. To provide stimulus to ornamental and recreational fishery PMMSY has been developing this sector with targeted investment of Rs 576.00 Crore for creating employment and lively opportunity for 1 lakh rural youth. PMMSY is supporting ornamental fish cultivation by establishing production units, introducing commercially important exotic species, importing breeding technology, extending technological marketing and logistical support to the entrepreneurs. Seaweed farming has emerged as a sector with the potential to transform the lives of coastal communities, providing large scale employment and diversifying incomes. Under PMMSY, it is envisaged to revolutionize the Seaweed farming sector with an increase in the seaweed production in the country from the current levels to 11.2 lakh tonnes weight in 5 years. An investment of Rs. 640 Crores has been earmarked for development of seaweed farming, wherein Seaweed seed banks, nurseries, tissue culture units, processing, and marketing units, etc. will be established in all coastal States and UTs. For promoting seaweed cultivation grounding of the Multipurpose Seaweed Park in Tamil Nadu with an investment of Rs 127 Crores, notification for development of seaweed cluster in Lakshadweep, approval of 1.12 lakh rafts & monoline tube nets

for cultivation at suitable locations and a pilot project with fisheries institute and private entrepreneur at Kutch, Gujarat for cultivating seaweed on commercial scale

For the purpose of minimizing the post-harvest losses, DoF is strengthening the supply chain gaps by providing efficient logistic solutions, modernization of fishing harbour, fish landing centre with state-of-the-art infrastructure and amenities for fish transportation facility with ancillary units, ice plants and cold storages. PMMSY have earmarked Rs 3,340 Cores for modernization and development of Fishing harbors and fish landing centres. Entrepreneurship model for value addition and better price realization to the farmers is being promoted.

The Department has adopted a holistic approach for the overall development of the sector with focus on raising overall fish production as well as consumption. For creating a retail network of organized fish sales, PMMSY has earmarked Rs 1000 Crores for establishing a retail network by setting up ultra-modern fish kiosks and other market infrastructure in the urban, peri-urban and semi urban locations.

PMMSY inter-alia, provides financial assistance for setting up of Fish Farmers Producer Organizations (FFPOs) to economically empower the fishers and fish farmers and enhance their bargaining power. The Department of Fisheries has so far accorded approval for setting up of a total of 2195 FFPOs at a total project cost of Rs. 544.85 crore comprising formation of existing 2000 fisheries cooperative as FFPOs and 195 new FFPOs. The Department has conferred approval to National Co-operative for Disease Control (NCDC) for setting up of 1070 FFPOs at a total cost of Rs. 225.50 Crores, Small Farmers' Agri-Business Consortium (SFAC) for 550 FFPOs at a total cost of Rs. 100.70 Crores, National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) for setting up of 550 FFPOs at a



total cost of Rs. 100.70 Crores and Rs. 13 Crores to National Fisheries Development Board (NFDB) for setting up of 25 FFPOs under PMMSY.

The marine fishery potential in the Indian waters have has been estimated at 5.31 MMT and PMMSY is promoting sustainable fishing by modernizing and upgrading the fishing vessels, purchase of deep- sea fishing vessels, replacement of boat, open sea cage culture and creation of infrastructure such as fishing harbour, fish landing centre, development of integrated modern coastal villages.

The scheme also extends livelihood support to fishermen fisher folk annually during lean and ban period and provides social safety and security net to the fishermen and fisher folk. Under PMMSY, financial assistance of Rs 4,500 per family is provided as a financial support during the fishing ban and lean period. Group Accidental Insurance Scheme (GAIS) has also been launched for fishermen with a total coverage of Rs 5.00 Lakh against death and permanent disability, Rs 2.5 Lakh against partial disability and Rs. 25,000 against accidental hospitalization.

With the outset adoption of the proposed interventions, the PMMSY scheme is poised to realize 9% of average annual growth rate and accomplish its production target of 22 MMT by year 2025, from its current production of 18.40 MMT. This will be realized by gradually stepping up from subsistence to scientific methods of fish farming by skilling and capacity building of the fishermen and fisher folk.

Major achievements from FY 2020-21 to FY 2024-25 (as on 31st January, 2025) are as follows:

- a. 23,285.06 ha area for Inland aquaculture
- b. 12,081 nos of Recirculatory Aquaculture Systems (RAS) and 4,205 nos of Biofloc approved.
- c. Approved installation of 55,118 nos cages and 560.7 ha pens in reservoirs and other open water bodies

- d. Approved establishment of 895 nos of fish and scampi hatcheries and 10 marine hatcheries
- e. Approved 3,159.39 ha of pond area approved under saline-alkaline culture, 3,882 ha of freshwater biofloc pond area and 1,580.86 hectares of pond area for brackishwater
- f. Approved 2,465 nos of Ornamental fish rearing units and 207 nos of Integrated Ornamental fish units (breeding and rearing)
- g. 3617.99 hectares area of new pond, 5711 new raceway units, 61 Trout hatcheries and 60 nos of RAS for coldwater fisheries
- h. 2307 Bivalve cultivation (including mussels, clams, pearl etc.) units
- I. 47,245 nos rafts and 65,480 nos monoline tube net for seaweed cultivation
- j. Approved 480 Deep Sea Fishing Vessels and 1,338 up gradation of existing fishing vessels
- k. 1,525 nos of sea cages
- 19 Disease diagnostic centre and quality testing labs, 31 Mobile centres and testing labs and 6 Aquatic referral labs for Aquatic Health management
- m. 11 Integrated Modern Coastal Villages and 937 units of artificial reefs
- n. 6706 nos replacement boats and nets for fishermen
- o. Approved 634 cold storages and 1091 feed mill units, 21 Wholesale fish markets, 202 Fish retail markets and 6697 fish kiosks including ornamental kiosks
- p. 27,189 units of fish transportation facilities refrigerated and insulated trucks, Live Fish Vending Centres, auto rickshaws, motorcycles and bicycles with ice box
- q. 27 Integrated Development of Reservoirs,



- Livelihood and nutritional support for 5,94,538 fishers' families for conservation of fisheries resources during fishing ban/lean period
- s. 2494 Sagar Mitras and 102 nos Matsya Seva Kendra for extension and support services

With the immense support from all States Governments, UT administrations, apex research and Government organizations and other stake holders, the Department is determined to take the fisheries sector to newer heights and contribute towards making a 'Atma Nirbhar Bharat'.

3.1.10 Promotion of Tilapia culture

Tilapia holds vast promise to become an important species for aquaculture in India, considering the demand for more fish, Genetically Improved Farmed Tilapia (GIFT) is one of the important candidate species for aquaculture in India. It has become a fish of choice because it is fast growing and an affordable source of animal protein. Per hectare productivity of this species is more than Indian Major Carps (IMC) and other carps. Tilapia has huge export potential in USA, Europe, Japan and Middle East. The primary focus of increasing tilapia production in India is to increase rural livelihoods and job opportunities to women and youth. In order to leverage the potential of tilapia, Department has taken various steps under PMMSY such as establishment of Tilapia hatchery, culture of Tilapia in Reservoir Cage culture, RAS and Biofloc, Brood Bank for Genetically Improved Farmed Tilapia (GIFT), establishment of hatchery for GIFT seed production. Government of India has permitted only culture of Genetically Improved Farmed Tilapia in closed or confined water resources. Tilapia culture is not allowed in open water bodies in India. This GIFT species is an ideal species for culture in RAS and cages in reservoir. Further, existing ponds are also utilized for GIFT culture. Chhattisgarh, Jharkhand, Tamil Nadu,

Odisha, Uttar Pradesh, West Bengal, Maharashtra, Madhya Pradesh, Bihar and Kerala are potential states that will be instrumental in achieving the target production of Tilapia.

3.1.11 Promotion of Scampi Culture

Scampi is one of the most important cultivable native species in freshwater aquaculture systems due to its high price, large size, faster growth, good taste and high demand in domestic and export market. Further, this species can be cultured either in freshwater or slightly brackish water (<7 ppt) and both in monoculture or polyculture system. However, the major problem was the lack of availability of quality seeds for stocking. Farmers had to depend on the seed of unknown quality, probably inbred seeds which lead to slow growth and poor survival thereby decreasing production. Frequent outbreak of diseases also caused huge loss to farmers. Therefore, the Department has funded a project under PMMSY by ICAR-Central Institute of Freshwater Aquaculture (ICAR-CIFA), Bhubaneswar at a total cost of Rs. 4 Crores to scaling up of the existing Genetic Improvement Programme of Freshwater Prawn Macrobrachium rosenbergii (Scampi) and to cater to the brooder seed demand in the country for production of quality and disease free scampi seed. The scaling up of the existing programme will produce 120 to 150 families of improved breed every year and will provide the quality and disease free brooder seed to private scampi hatcheries for acting as multiplier unit and further supply to scampi seed to agua farmers. At present ICAR-CIFA has produced 113 families and signed MoUs with eight multiplier hatcheries and supplying breeder seed to these hatcheries for production of quality seed. National Freshwater Fish Brood Bank (NFFBB) at Bhubaneswar established by the Department also has provision for brood bank facility of Scampi in addition to freshwater fish. The Department has conducted many training programmes for promotion of polyculture of Scampi in land locked states.



3.2 Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY)

The fisheries sector is a key driver of food security, employment, and economic growth, supporting over 3 crore fishers and farmers across the fisheries value chain. Initiatives like the Blue Revolution (2015-20), the Fisheries and Aquaculture Infrastructure Development Fund (FIDF), and the Pradhan Mantri Matsya Sampada Yojana (PMMSY), launched in 2020 with Rs 20,050 Crores under Aatmanirbhar Bharat, have enhanced infrastructure, productivity, and value chains. However, challenges such as fragmentation, limited finance access, inefficient value chains, and climate vulnerability must be addressed. To address these issues, the Gol approved Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY) in February 2024, as a Central Sector Sub-scheme under the ongoing PMMSY for a period of four years from FY 2023-24 to FY 2026-27. The estimated outlay of PM-MKSSY is Rs 6,000 Crores with Rs 3,000 Crores coming from the GoI (Rs1,125 Crores loan from the World Bank, Rs. 375 Crores loan from the AFD and Rs. 1,500 Crores as counterpart funding from PMMSY) and the remaining Rs 3,000 Crores is expected to come in form of investment from the beneficiaries/private sector.

PM-MKSSY is a Central Sector Sub-scheme under the Pradhan Mantri Matsya Sampada Yojana (PMMSY). The objectives of PM-MKSSY are as follows:

- Gradual formalisation of the unorganized fisheries sector including creation of work based digital identities of fish workers for improved service delivery.
- Facilitating greater access to institutional finance including working capital in order to enable the fish farmers, fishers and micro and small enterprises to reduce their cost of capital and to expand their operations.
- Providing one-time incentive to those fish farmers willing to buy aquaculture insurance.

- Incentivizing fisheries and aquaculture microenterprises to improve value-chain efficiencies and to create and maintain jobs through performance grants.
- Incentivizing micro and small enterprises in the fisheries sector to establish supply chains of safe fish and fishery products including creation and maintenance of jobs through performance grants.
- Integration and consolidation of fisheries value chains.

3.2.1 Components of PM-MKSSY

- Component 1-A: Formalisation of fisheries sector and facilitating access of fisheries microenterprises to Government of India programs for working capital financing
- Component 1-B: Facilitating adoption of aquaculture insurance
- Component 2: Supporting microenterprises to improve fisheries sector value chains efficiencies
- Component 3: Adoption and expansion of fish and fishery product safety and quality assurance systems
- Component 4: Project management, monitoring and reporting

3.2.2 Targeted Beneficiaries:

PM-MKSSY will be implemented in all the States/UTs for the targeted beneficiaries indicated below:

- Fishers, Fish (Aquaculture) Farmers, Fish workers, Fish Vendors or such other person directly engaged in fisheries value chain.
- Micro and Small enterprises in the form of Proprietary Firms, Partnership Firms and Companies registered in India, Societies, Limited Liability Partnerships (LLPs), Cooperatives, Federations, Village Level Organisations like Self Help Groups (SHGs), Fish Farmers Producer Organisations (FFPOs)



- and Startups engaged in fisheries and aquaculture value chains.
- FFPOs also include Farmers Producer Organisations (FPOs).
- Any other beneficiaries that may be included by the Department of Fisheries, Gol as targeted beneficiaries.

Under PM-MKSSY, the National Fisheries Digital Platform (NFDP) was launched on 11th September, 2024 by the Honorable Minister of Fisheries, Animal Husbandry, and Dairying.

In a short span, the portal has achieved a significant milestone of over 17.36 lakh registrations, encompassing fishers, fish farmers, Fish Farmer Producer Organizations (FFPOs), and other key stakeholders in the fisheries value chains.

Specific modules under the NFDP have been developed for Institutional Credit, Strengthening of Cooperatives, Aquaculture Insurance, Performance Grant, Traceability and Training & Capacity Building.

3.3 Fisheries and Aquaculture Infrastructure Development Fund

In order to address the infrastructure requirement for fisheries sector, the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying during 2018-19 has created a dedicated fund namely Fisheries and Aquaculture Infrastructure Development Fund (FIDF) with a total funds size of Rs 7522.48 crore which consist of Rs. 5266.40 crore to be raised by the Nodal Loaning Entities (NLEs); Rs. 1316.60 crore beneficiaries' contribution; Rs 939.48 crore Gol budgetary support. Further, the Union Cabinet chaired by Hon'ble Prime Minister approved extension of Fisheries Infrastructure Development Fund (FIDF) for another 3 years upto 2025-26.

FIDF will continue to provide concessional finance to the Eligible Entities (Ees), including State

Governments/Union Territories for development of identified fisheries infrastructure facilities through Nodal Loaning Entities (NLEs) namely National Bank for Agriculture and Rural Development (NABARD), National Cooperatives Development Corporation (NCDC) and All scheduled Banks.

Under FIDF, NABARD has been providing loan to the State Government implemented projects, NCDC for Fisheries Cooperatives and for private entrepreneurs/individual beneficiaries, loan has been provided by the schedule banks.

Government of India provides interest subvention up to 3% per annum for the repayment period of 12 years inclusive of moratorium of 2 years for providing the concessional finance by the NLEs at the interest rate not lower than 5% per annum.

3.3.1 Broad investment activities under FIDF are:

- 1. Establishment of Fishing Harbours
- 2. Establishment of Fish Landing Centers,
- 3. Construction of Ice Plants (both Marine and Inland Fisheries Sectors),
- 4. Construction of Cold storage (both Marine and Inland Fisheries Sectors),
- 5. Fish Transport Facilities (Marine & Inland Fisheries Sector),
- 6. Integrated Cold Chain (Marine & Inland Sector),
- 7. Development of Modern Fish Markets,
- 8. Setting up of Brood Banks,
- 9. Development of Hatcheries,
- 10. Development of Aquaculture,
- 11. Modernization State Fish Seed Farms,
- 12. Establishment of state of art of Fisheries Training Centres,
- 13. Fish Processing Units,



- 14. Fish Feed Mills/Plants,
- 15. Establishment of Cage culture in Reservoir,
- 16. Introduction Deep Sea Fishing Vessels,
- 17. Establishment of Disease Diagnostic Laboratories,
- 18. Development of Mariculture,
- 19. Establishment of Aquatic Quarantine Facilities,
- 20. Any other innovative projects/activities designed to enhance fish production /productivity/value.

The Department of Fisheries, during the implementation period of FIDF from 2018-19, has approved a total 136 project proposals/project at a total cost of Rs. 5801.06 crore with project cost restricted for interest subvention at Rs. 3858.19 crore to various States/UTs including the proposals of private beneficiaries of Rs. 380.98 crore restricting the project cost for interest subvention at Rs. 228.32 crore.

3.4 Kisan Credit Card (KCC) to Animal Husbandry farmers and Fisheries

In the Budget Announcement FY 2018-19, Government announced extension of facilities of Kisan Credit Card (KCC) to the Animal Husbandry and Fisheries farmers with a purpose to help them for meeting their working capital requirements. The guidelines for extension of KCC facility to the Animal Husbandry farmers and Fisheries was issued by the Reserve Bank of India (RBI) vide their letter dated 4th February, 2019. Fishers, Fish Farmers (Individual & groups/ partners/sharecroppers/tenant farmers), Self Help Groups, Joint Liability Groups and Woman groups are eligible for availing the KCC facilities.

For Inland Fisheries and Aquaculture Fishers, Fish Farmers (individual & groups/partners/share croppers/ tenant farmers), Self Help Groups, Joint Liability Groups and women groups are eligible for availing the KCC facilities. The beneficiaries

must own or lease any fisheries related assets such as pond, tank, open water bodies, raceway, hatchery, rearing units, boats, nets and such other fishing gear as the case may be and possess necessary authorization/certification as may be applicable in respective states for fish farming and fishing related activities and for any other State specific fisheries and allied activities.

For Marine Fisheries, beneficiaries listed above, who own or lease registered fishing vessel /boat, possess necessary fishing license/permission for fishing in estuary and sea, fish fanning/mariculture activities in estuaries and open sea and any other State specific fisheries and allied activities are eligible.

The Fisheries related working capital components covered under KCC include recurring costs towards seed, feed, organic and inorganic fertilizers, lime/others oil conditioners, harvesting and marketing charges, fuel/electricity charges, labour, lease rent (if leased water area) etc. For capture fisheries, the working capital may include cost of fuel, ice, laboring charges, mooring/landing charges etc.

The benefits of Interest Subvention (IS) and Prompt Repayment Incentives (PRI) under KCC for Fisheries Ioan are limited to Rs. 2 lakh. In the 2025-26 Budget Announcement, the KCC Ioan limit has been increased up to Rs 5.00 lakh under the Modified Interest Subvention Scheme.

To provide KCC facilities to all eligible Animal Husbandry & Dairy Farmers and Fish Farmers (AHDF), the Ministry of Fisheries, Animal Husbandry and Dairying in association with the Department of Financial Services, organized a "Nationwide AHDF KCC Campaign from 15th November 2021 to 31st July 2022 and subsequently again started from 15th Sept 2022 & continued to 15th Mar 2023. During the said campaign, district-level KCC camps were organized weekly by the KCC Coordination Committee coordinated by the Lead District



Manager (LDM) for on-the-spot scrutiny of applications sourced.

Further, as part of the Sagar Parikrama programmes I-XII, the Department has conducted awareness programmes on KCC in all the coastal States/UTs, which have been very successful in mobilizing the fish farmers and fishermen of coastal regions to get the KCC cards. A revised KCC Saturation Drive, namely, 'Ghar Ghar KCC Abhiyan' has been launched with a special focus on saturating the maximum number of farmers' beneficiaries during the period from 1st October to 31st 2023 December 2023. Thereafter, the Government of India has also conducted a nationwide awareness campaign called "Viksit Bharat Sankalp Yatra" from 15th Nov 2023 to 26th Jan 2024, wherein, a customised mobile "Rath/Van" was deployed for disseminating information, raising awareness, extending services, etc. at each Gram Panchayat in all the States and UTs, to create awareness amongst the fishermen on a 100% saturation basis.

The KCC manual applications received during the Yatra from the Gram Panchayat are being digitised by the bankers onto the Kisan Rin Portal which is developed and monitored by the Ministry of Agriculture and Farmers Welfare, Gol. All the KCC applications received during the Yatra have to be entered, monitored, and sanctioned

only through the Kisan Rin Portal. The Department has also held a virtual conference with all SLBCs, National Coordinators of Scheduled Commercial Banks, Regional Rural Banks, Commissioners / Directors of all States / UTs, and Heads / Officers of the Six Fisheries Institutes under the Department and directed to ensure KCC manual applications are converted to a 100% digital format and to sanction loans to all eligible applicants.

In order to extend the actual benefit of the KCC to all the eligible fishers and fish farmers, the Department has been pursuing the metter with the Department of Financial Services (DFS), M/o Finance the necessary inclusion of the Fisheries Sector in the 'JanSamarth' portal (www.jansamarth.in), which was successfully onboarded on 15th March 2024. Till date eight nos banks (SBI, PNB, BoB, HDFC, Canara Bank, Bol, Indian Bank and Bank of Maharashtra) have been on-boarded into this portal for KCC Fisheries. A total of 176 applications have been received, 53 applications have been sanctioned and only one KCC loan has been disbursed through this portal.

In order to ensure increased credit flow, a target of Rs.35,000 Crores is fixed for the fisheries sector during the FY 2024-25 by the DFS, M/o Finance, Gol.

3.4.1 Current Status:

The total progress of issuance of KCCs as on 17.01.2025 (Source-DFS)

Total No. of Fisheries KCC Applications				Sanctioned Amount
Received	Sanctioned	Overall Pending	Rejected	
6,44,529	4,50,799	18,337	1,75,393	Rs. 2898.00 Crores

3.5 Key initiatives undertaken

3.5.1 The Department signed an MoU with the with ISRO and NewSpace India Limited (NSIL), the commercial arm of ISRO, for commercialization of transponders for a project to deploy transponder

technology on marine fishing vessels for improving Monitoring, Control, and Surveillance operations.

Hon'ble Prime Minister launched the **National Rollout Plan for Vessel Communication and**



Support System (VCSS) entailing an investment of **Rs 364 crore** at Palghar, Maharashtra on 30th August 2024.

The **National Rollout Plan for VCSS** has a comprehensive network plan for establishing a safe a secure framework, this includes:

- 1,00,000 transponders to be installed on mechanized and motorized fishing vessels across the 9 coastal States and 4 Union Territories.
- ii) A state-of-the-art earth station and data center at INCOIS, Hyderabad, ensures seamless operation and data processing.
- iii) **73 monitoring stations** strategically located across coastal states and UTs for localized vessel monitoring and support.
- iv) Centralized Command and Control Centers in FSI, Mumbai and New Delhi for overarching operational management.
- v) **National Fisheries Application** integrated with **ReALCRaft** in regional languages.

Benefits offered by VCSS:

VCSS offers two-way communication system enabling the fishermen to send short messages/SOS using their android mobile phone while fishing up to 200 NM from the coast providing real-time updates and facilitating vital communication between control rooms, families, boat owners etc.

Useful during natural calamities as it comprehensively tracks vessel movements including essential boat information that can help the coastal authorities with vital information on vessel where-abouts

Valuable source of weather related data, through the Integration of Indian Meteorological Department's (IMD), the fishers are provided important weather updates on sea conditions, wind speed and direction, visibility, cyclone information such as category, specific location etc. Utilizes Oceansat observation satellites to provide advisories 3 days in advance on Potential Fishing Zones (PFZ) to fishermen

Sends warnings and alerts well in advance to inform the fishers for avoiding any unintentional transgression of International Maritime Boarder Line (IMBL) for avoiding international disputes

Helps Maritime Security Agencies in identifying the fishermen at sea essential for strengthening the National Coastal Security and ensuring safety through efficient search and rescue operations.

Data received can help coastal States and UTs in setting up state jurisdictions and identifying Illegal, Unreported and Unregulated (IUU) Fishing. Fishing activities in specific regions can be controlled in 'No Fishing' or 'Restricted Fishing Zones' such as naval bases, ports, marine protected areas etc. States and UTs can establish length of routes and provide diesel subsidy (If any) through automatic route storage feature.

Features efficient harbour management tools like token system for Entry and Exit of fishing vessels for voyage, details of fishing crew onboard fishing vessel going for voyage, establishing traceability of fish catch which is essential for compliance to international guidelines of IUU fishing etc.

VCSS has been designed to provide access of all features in the **regional languages** to the fishermen.

As of **January 2025**, the project has achieved significant milestones:

- 32,542 transponders delivered to coastal regions.
- **14,589 transponders** successfully installed on fishing vessels.

This marks a substantial step toward creating a comprehensive **maritime safety net** across India.

3.5.2 To strengthen value chains, production and processing clusters are being promoted under the **Fisheries Cluster Development Program**, notified fisheries clusters are being



developed in hub-spoke model for pearl culture in Hazaribagh District (Jharkhand), ornamental fisheries in Madurai District (Tamil Nadu), seaweed cultivation in UT of Lakshadweep, tuna fisheries in Andaman & Nicobar Islands and organic fisheries in Soreng District (Sikkim).

3.5.3 Sustainable development of marine fisheries: For giving fillip to Marine Fisheries and development of the sector in an inclusive and sustainable manner, 5th Marine Fisheries Census for data-driven policymaking and New Single Window System (NSWS) by the Coastal Aquaculture Authority have been launched. Conservation of marine species and ecosystem is being prioritized under national action plan for sustainable and effective management of the shark populations.

Rebuilding of fish stocks is being undertaken by installation of 937 artificial reefs and sea ranching. The crucial 'GloLitter' partnership project with International Maritime Organization and the Food and Agriculture Organization of the United Nations has been launched to reduce marine litter. In addition, use of energy efficient and low-cost fuels in marine fishing vessels by using retrofitted Liquefied Petroleum Gas kits is being undertaken. A MoU has also been signed to implement a framework for the Voluntary Carbon Market (VCM), harnessing carbon-sequestering practices in the sector.

- **3.5.4** Mandapam Regional Centre of the Central Marine Fisheries Research Institute (ICAR-CMFRI) has been notified as the Centre of Excellence for promoting seaweed farming and research. It aims to benefit 20,000 seaweed farmers, improve yields, and create approximately 5,000 jobs, enhancing India's global seaweed industry presence.
- **3.5.5** ICAR-Central Institute of Freshwater Aquaculture (ICAR-CIFA), Bhubaneswar, Odisha, designated as the Nodal Institute for establishing Nucleus Breeding Centres for freshwater species and Regional Centre of ICAR-Central Marine

Fisheries Research Institute (ICAR-CMFRI) in Mandapam, Tamil Nadu, designated as the Nodal Institute for NBCs focused on marine fish species.

3.5.6 Establishment of 5 Incubation Centres has been approved for promoting fisheries start-ups, cooperatives, FPOs, and SHGs. LINAC-NCDC Fisheries Business Incubation Centre (LIFIC) is the country's first-of-its kind, dedicated business incubator approved under PMMSY while four centres namely National Institute of Agricultural Extension Management (MANAGE) in Hyderabad, ICAR-Central Institute of Fisheries Education (CIFE) in Mumbai, and ICAR-Central Institute of Fisheries Technology (CIFT) in Kochi and Guwahati Biotech Park in Assam have been notified as incubation centers.

3.6 Important Programmes Organized

3.6.1 Fisheries Summer Meet 2024

Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, Government of India, organized the 'Fisheries Summer Meet 2024' on 12th July 2024 at Madurai, Tamil Nadu. The 'Fisheries Summer Meet 2024' aimed at recognizing the contributions made by fish farmers, aquapreneurs, and fishermen for the development of the fisheries sector, showcase the achievements of the Department and raise awareness about the sector.

312 Fisheries Projects covering 19 States/UTs across the country with an investment of Rs. 114 Crores, supported PMMSY were inaugurated by Hon'ble Union Minister Shri Rajiv Ranjan Singh alias Lalan Singh in the presence of Prof. S P Singh Baghel, Hon'ble MoS, MoFAH&D and Ministry of Panchayati Raj and Shri George Kurian, Hon'ble MoS, MoFAH&D and Ministry of Minority Affairs.

Beneficiaries from different States/UTs interacted with the Hon'ble Union Minister Shri Rajiv Ranjan Singh. The beneficiaries discussed their experiences, highlighted their issues and appreciated the efforts of the Department. They also highlighted that support received in form of



Kisan Credit Card (KCC) and financial assistance under PMMSY helped and supported them in making their initiatives and businesses successful.

3.6.2 National Space Day 2024

The Government of India declared August 23rd as "National Space Day" in recognition of the historic achievement made by Chandrayaan-3 Mission, which accomplished a safe and soft landing of the Vikram Lander and deployed the Pragyaan rover on the lunar surface near the south pole. To commemorate this monumental achievement, the Department is organized a series of seminars and demonstrations for creating awareness about Application of Space Technologies in Fisheries Sector in collaboration with various coastal States and Union Territories, ISRO, ICAR Fisheries Research Institutions, Fisheries Universities, and Fishermen Associations from 31st July to 17th August 2024.

As a part of these events, the Department organized an event for "Celebration of National Space Day" at Krishi Bhawan, New Delhi, on August 13, 2024. The event was chaired by the Shri Rajiv Ranjan Singh, Hon'ble Union Minister, Ministry of Fisheries Animal Husbandry & Dairying and Ministry of Panchayati Raj in gracious presence of Prof. S. P Singh Baghel, Hon'ble Minister of State, Ministry of Fisheries Animal Husbandry & Dairying and Ministry of Panchayati Raj and Shri George Kurian, Hon'ble Minister of State, Ministry of Fisheries Animal Husbandry & Dairying and Ministry of Minority Affairs along with other dignitaries.

Officials from the Department of Fisheries, Indian Coast Guard, Indian Navy, National Security Council Secretariat (NSCS), Department of Space, ISRO, New Space India Ltd., and Border Security Management, along with representatives from subordinate offices, ICAR Fisheries Research Institutes, State/UT Fisheries Departments, and Students from Fisheries Universities also participated in this event.

3.6.3 Foundation stone laying and inauguration of Fisheries projects 2024, Palghar, Maharashtra

Hon'ble Prime Minister, Shri Narendra Modi inaugurated and laid the foundation stone of multiple development projects in Palghar, Maharashtra. The projects include inauguration and laying the foundation stone of **218 fisheries projects** worth around Rs **1,560 Crores**.

Hon'ble PM launched the **national rollout of Vessel Communication and Support system at a cost of around Rs 360 Crores** and also laid the foundation stone for important fishery infrastructure projects including development, upgradation and modernization of fishing harbours, fish landing centers and construction of fish markets. Transponder sets and Kisan Credit Cards were also distributed to fishermen beneficiaries. These initiatives are expected to generate more than **5 lakh employment opportunities** in the fisheries sector.

The event witnessed a **footfall of 35,000 participants. with ~600 VIPs** attending in person. Additionally, officials from all State and UT Fisheries Departments, fisherfolk, Sagar Mitras, and Fisheries Cooperatives also participated in the event virtually from across the country.

3.6.4 Stakeholder consultation for export promotion 2024, Vishakhapatnam

Hon'ble Union Minister for Fisheries, Animal Husbandry & Dairying and Panchayati Raj Shri Rajiv Ranjan Singh alias Lalan Singh chaired the 'Stakeholder Consultation' on Fisheries Export Promotion with focus on strengthening shrimp farming & value chain in Visakhapatnam, Andhra Pradesh. Hon'ble Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs Shri George Kurian was also present in the event.

Participants engaged in discussions on best practices, sustainable aquaculture technologies,



and infrastructure development to enhance productivity, ensure food safety, and improve traceability in the seafood export and value chain. The consultation also focused on formulating actionable strategies to expand India's footprint in global seafood markets, thereby maximizing the export potential of diverse fish, seaweed, and seafood products and supporting the livelihoods of millions of fishers, coastal communities, and fish farmers across the country.

3.6.5 PMMSY 4th Anniversary

On the occasion of PMMSY 4th Anniversary on 12th September 2024 the following projects were launched by Shri Rajiv Ranjan Singh, Hon'ble Union Minister, Department of Fisheries, MoFAH&D and Ministry of Panchayati Raj:

- The Department launched the NFDP (National Fisheries Development Program) Portal, which will serve as a central hub for registry of fisheries' stakeholders, information, services, and support related to fisheries, and the released the PM-MKSSY Operational Guidelines. NFDP has been created under the Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY), a sub scheme under Pradhan Mantri Matsya Sampada Yojana (PMMSY) and will provide digital identities to various stakeholders by creating a registry of fish workers and enterprises engaged in the fisheries value chain across the country. Various benefits such as institutional credit, performance grants, aquaculture insurance etc. can be availed through NFDP.
- Priority projects with an outlay of Rs. 721.63
 Crores were announced by the Department that included development of five Integrated Aqua parks in states of Assam, Chhattisgarh, Madhya Pradesh, Tripura and Nagaland to support holistic aquaculture growth, establishment of two World-Class Fish Markets in states of Arunachal Pradesh and

Assam for enhancing market access, development of three Smart and Integrated Fishing Harbors in States/UTs of Gujarat, Puducherry and Daman & Diu for improving post-harvest management, and 800 hectares of saline area and Integrated Fish Farming in States Uttar Pradesh, Rajasthan, Arunachal Pradesh, Manipur, Punjab for promoting aquaculture and integrated fish farming.

- Booklet on 'Promotion of Indigenous Species' and 'Conservation of State Fish' was released by the Department on the occasion of PMMSY 4th Anniversary. Out of the 36 States/UTs, 22 have either adopted or declared their state fish, 3 have declared State aquatic animal and UTs of Lakshadweep and Andaman and Nicobar Islands have declared their state animal, which are marine species.
- In a strategic move to propel the fisheries and aquaculture sector towards accelerated growth and modernization, the Department has approved the establishment of five Integrated Aqua Parks (IAPs) under PMMSY. Recognizing the need for comprehensive interventions to address existing gaps in the fisheries value chain, these Aqua Parks are set to revolutionize the sector by offering integrated solutions that enhance operational efficiency, reduce wastage, and improve income for fish farmers and other stakeholders. The Government is investing Rs.179.81 Crores in five integrated aqua parks to enhance the fisheries value chain, aiming to optimize production, create 1,400 direct and 2,400 indirect jobs, and minimize waste.
- The guidelines for developing 100 coastal villages across coastal States and Union Territories into Climate Resilient Coastal Fishermen Villages (CRCFVs) was released. With an allocation of Rs. 200 Crores, this



initiative will focus on sustainable fishing, infrastructure improvement, and climatesmart livelihoods to ensure food security and socio-economic stability for fishing communities amid changing environmental conditions. Detailed surveys and gap analyses by the Central Committee of Climate Resilient Coastal Fishermen Village (CCCRCFV) guided the selection of needbased facilities, including common facilities like fish drying yards, processing centers, fish markets, and emergency rescue facilities. The program also promotes climate-resilient fisheries through initiatives such as seaweed cultivation farms, artificial reefs, and the promotion of green fuel

3.6.6 World Food India 2024

Prof. S P Singh Baghel, Hon'ble Minister of State for Ministry of Fisheries, Animal Husbandry and Dairying and Panchayati Raj visited the stalls and interacted with the cooperatives, Fisheries Institutions and Startups. The exhibition hosted stalls by Sultan Singh, "FISH BITE", Universal schedule cast fish farmers producer cooperative society limited, Tharuni Fish Value Added Producers Cooperative Society Ltd., Uttara Fish, Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED), CIFT Cochin, CMFRI Cochin, VetriPaavai Fisher Women Producer Company (FFPO)- Sirkazhi Block, Mayiladuthurai, NIPHATT- Cochin and Jeelani Marine Products. The major products exhibited included various processed Fish product such as Fish Head Curry, Dried fish, Fish Fry, Fish Fingers, Fish Cutlets, Fish Wafers, Fish Patties, Fish Momos, Fish Tacos, Fish Putto, Fish Pickle, Fish Biryani, Fish Kabab, Yoghrut Fish, Tandoori Fish, Shahi Fish, Pomfret Fry, Fish Souffle, Grilled Fish, coated products, and ready to eat & cook products. Different value-added products from seafood and aquaculture materials such as Squid, Cuttlefish, Indian Mackerel, sea-caught shrimps, and Vannamei and Black Tiger Shrimp were also exhibited.

3.6.7 Drone demonstrations

In a step towards integrating technology in fisheries, a Pilot Study on usage of drones worth Rs 1.16 Crores for transportation of Fish and Fish Products with payload up to 100Kg app to a range of 10Km was released on 11th September 2024. This study aims to explore the potential of drones in monitoring and managing inland fisheries, improving efficiency and sustainability. In line with these initiatives the department in collaboration with NFDB, has organized drone demonstrations at key locations, including the Central Inland Fisheries Research Institute (CIFRI) in Barrackpore, Kolkata, Gyan Bhawan in Patna, Bihar and Kochi, Kerala.

3.6.8 Investors meet 2024

The Department organized the Investors Meet 2024: Investment Opportunities in Fisheries and Aquaculture sector of Andaman & Nicobar Islands on 14th November 2024 at Swaraj Dweep, Andaman & Nicobar Islands in the gracious presence of Hon'ble Union Minister of Fisheries, Animal Husbandry & Dairying (MoFAH&D) and Ministry of Panchayati Raj Shri Rajiv Ranjan Singh, Lieutenant Governor of Andaman & Nicobar Islands, Admiral D K Joshi, Minister of State for MoFAH&D and Ministry of Panchayati Raj, Prof. S.P. Singh Baghel, Minister of State for MoFAH&D and Ministry of Minority Affairs Shri George Kurian, Department of Fisheries, MoFAH&D Secretary, and Chief Secretary of Andaman & Nicobar Islands.

Investors from various parts of the country specializing in technologies related to Tuna Fishing and Seaweed also participated in the event namely such as Merchant Ventures Pvt. Ltd, Mumbai, Uday Aqua Connects Pvt. Ltd., Hyderabad, Sams Discus India, Mumbai, Aqualine Exports, Kerela, ANEMCO Pvt. Ltd., Sri Vijaya Puram, Sea6 Energy Pvt. Ltd., Bangalore, S Raja Rao Sea Foods, Sri Vijaya Puram, Joecons Marine Exports Pvt. Ltd., Goa, Nila Marine Export, Sri



Vijaya Puram, Low Now Cargo Import Limited, Thailand, Babla Pearls, Mumbai, Continental Marines, Visakhapatnam, Garware Technical Fibres Ltd., Pune, Arbee Biomarine Extracts Pvt. Ltd., Mysore, Motherhood Foods, Banglaore, Jeelani Marine Products, Ratnagiri, Z A Food Products, Kolkata, Canares aquaculture LLP., Karnataka and Blue Catch, Mumbai

The global tuna industry, valued at over \$40 billion annually, plays a major role in the blue economy. The Andaman & Nicobar Islands represent a prime opportunity for this sector, with a vast 6 lakh square km Exclusive Economic Zone rich in high-value tuna species and an untapped oceanic potential of 60,000 metric tons. This includes 24,000 metric tons for Yellowfin and 2,000 metric tons for Skipjack, while current harvests stand at just 4,420 metric tons, leaving ample room for expansion. Strategically located near Southeast Asia, the islands offer efficient trade routes by sea and air, ideally positioning India to expand its tuna export capabilities.

In this context, The Department of Fisheries, Gol, under PMMSY, launched the developing of a Tuna Cluster in the Andaman & Nicobar Islands, focusing on investment in infrastructure, investor partnerships, training, and capacity-building to strengthen operations and boost global competitiveness in tuna fisheries.

3.6.9 World Fisheries Day 2024

The Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying (MoFAH&D) celebrated the **World Fisheries Day 2024** with the theme **India's Blue Transformation: Strengthening Small-Scale and Sustainable Fisheries,** on **21st November 2024,** at Sushma Swaraj Bhawan, New Delhi. Ms. Vani Rao, Indian Ambassador to Italy, Rome, **Mr. Manuel Barange**, ADG and Director Fisheries Division FAO also graced the event. **54 embassy representatives** and high commissions participated in the event. On the occasion of world fisheries Day 2024 the Department of

Fisheries Launched series of landmark initiatives and projects as below:

- Launch of 5th Marine Fisheries Census for data-driven policymaking,
- The National Plan of Action on Sharks for sustainable shark management and India's endorsement to the Regional Plan of Action on IUU (Illegal, Unreported and Unregulated) Fishing to prevent illegal, unreported and unregulated fishing in the Bay of Bengal Region jointly in cooperation with Sri Lanka, Bangladesh and Maldives,
- The International Maritime Organisation-Food and Agricultural Organisation (IMO-FAO) GloLitter Partnership Project to combat marine plastic litter, and Standard Operating Procedures (SOP) for retrofitted LPG kits to promote energyefficient, low-cost marine fishing fuels.
- The New Single Window System (NSWS) by the Coastal Aquaculture Authority was launched to enable online registration of coastal aquaculture farms.
- A signed MoU was also exchanged to implement a framework for the Voluntary Carbon Market (VCM), harnessing carbonsequestering practices in the sector.

3.6.10 Northeast Region Meet 2025

The Department organized a 'Northeast Region States Meet 2025' on 6th January, 2025 in Guwahati, Assam, under the chairmanship of the Hon'ble Union Minister, Shri Rajiv Ranjan Singh, Ministry of Fisheries, Animal Husbandry & Dairying (MoFAH&D) and Ministry of Panchayati Raj, in the gracious presence of Shri George Kurian, Hon'ble Minister of State, MoFAH&D and Ministry of Minority Affairs, and Prof. S.P. Singh Baghel, Hon'ble Minister of State, MoFAH&D and Ministry of Panchayati Raj. In a major boost to the fisheries sector in the Northeastern Region (NER), the Union Minister inaugurated and laid the foundation for 50 impactful projects with a total



outlay of Rs 50 crore, including a **central share of Rs 38.63 crore**. These initiatives are designed to enhance the region's fisheries infrastructure, productivity, and employment opportunities. To continue and sustain the sectoral growth momentum, the Department of Fisheries notified **Organic Fisheries Cluster in Soreng District of Sikkim** for development of organic fisheries and aquaculture in the State of Sikkim.

Notable among these projects:

- Establishment of an Integrated Aqua Park in Darrang District, Assam which is expected to produce 150 MT of fish annually, generating Rs 10-15 crore in revenue and creating up to 2,000 employment opportunities. A Large Fish Feed Plant in Kamrup District will produce 20,000 MT feed annually, while hatchery projects in various districts aim to produce 50 million spawn per year, significantly boosting local aquaculture.
- Manipur will see the establishment of ice plants and cold storage units in Thoubal and Imphal districts to preserve fish produce and reduce post-harvest losses. Additionally, hatcheries focusing on locally important fish species will contribute to conserving biodiversity and enhancing fish production in the state.
- Meghalaya's projects will focus on promoting recreational fisheries in the East Khasi Hills District. This initiative, strategically located in a popular tourist area, is expected to attract visitors, generating local employment and enhancing the region's tourism appeal.
- Nagaland's three projects will include the construction of freshwater finfish hatcheries in Mokokchung and Kiphire districts. These hatcheries will collectively produce 21 million fry annually, supporting the region's aquaculture and providing economic opportunities for tribal communities.
- In **Tripura**, the projects included the

- establishment of ornamental fish rearing units and finfish hatcheries. These initiatives are aimed at popularizing ornamental fish farming, harnessing indigenous fish resources, and generating local employment opportunities.
- Sikkim will implement 24 projects which includes the establishment of Recirculatory Aquaculture Systems (RAS) to promote sustainable fish farming, the construction of fish kiosks in Gangtok and other towns, and the development of ornamental fish rearing units. These projects are expected to enhance income generation and livelihood opportunities for local communities.

3.6.11 Republic Day Celebration 2025

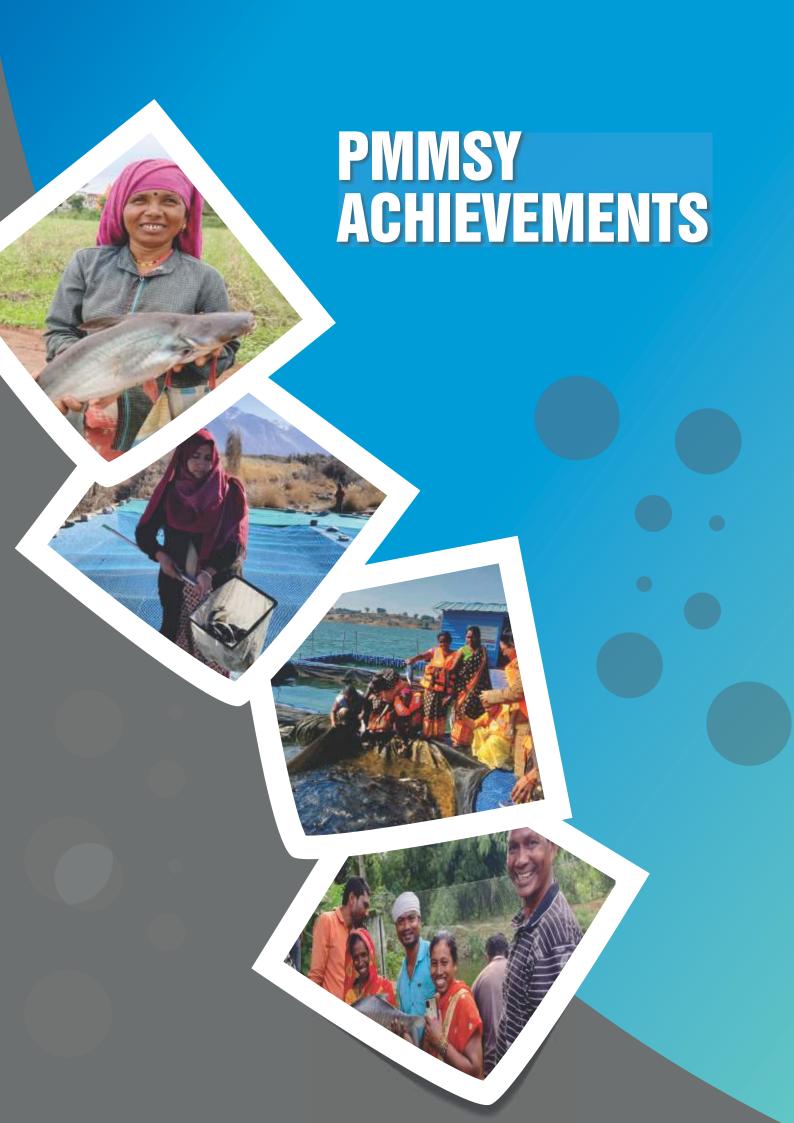
The 76th Republic Day was celebrated on 26th January 2025, highlighting the diversity and strength of our great nation. The Indian fisheries sector, encompassing both traditional practices and modern advancements such as drone and Al interventions, resonated deeply with the spirit and theme of 'Swarnim Bharat – Virasat aur Vikas.' As part of the celebrations, the Government of India extended invitations to 106 fishermen and their spouses from across the country to witness the Republic Day Parade at Kartavya Path, New Delhi.

Following their participation in the spectacular Republic Day parade ceremony, the fishermen including Mrs. Babita Rajesh, Uttarakhand, Shri Digbijoy Das Bhowmik, Tripura and Mrs. Sangini Sitaram Ghayal, Maharashtra had the opportunity to interact with Shri Rajiv Ranjan Singh, Hon'ble Union Minister, Ministry of Fisheries, Animal Husbandry & Dairying (MoFAH&D) and Ministry of Panchayati Raj, along with Prof. S.P. Singh Baghel, Hon'ble Minister of State, MoFAH&D and Ministry of Panchayati Raj, and Shri George Kurian, Hon'ble Minister of State, MoFAH&D and Ministry of Minority Affairs. Furthermore, Mr. Chandrashekar Prasad, Bihar, Mrs. Fatima Suhara, Kerala, Mr. Rajnish Kumar, Uttar Pradesh, Mrs.



Fatima Bano, Ladak and Mr. Dhurubajyoti Brahma, Assam were felicitated by the Hon'ble Union Minister for their contribution to the growth of fisheries sector.

Some of the special guests, including Ms. P. Hema Lathan from Karnool, Andhra Pradesh, Mr. Gyan Swaroop Sahoo from Puri, Odisha, Mr. Yohan Arvind Gavit from Nandurbar, Maharashtra, Ms. Shabnamben Sajidbhai Vhora from Anand, Gujarat, Mr. Samdup Bhutia from Soreng, Sikkim, and C. Arjun from South Andaman, Andaman and Nicobar Islands, had the privilege of interacting with the Hon'ble President at the Rashtrapati Bhavan. During this interaction, the Hon'ble President acknowledged their invaluable contributions to the fisheries sector and encouraged them to continue their efforts in adopting sustainable practices, enhancing productivity, and inspiring their communities.

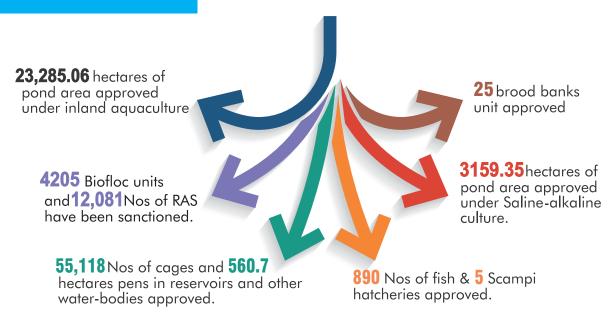




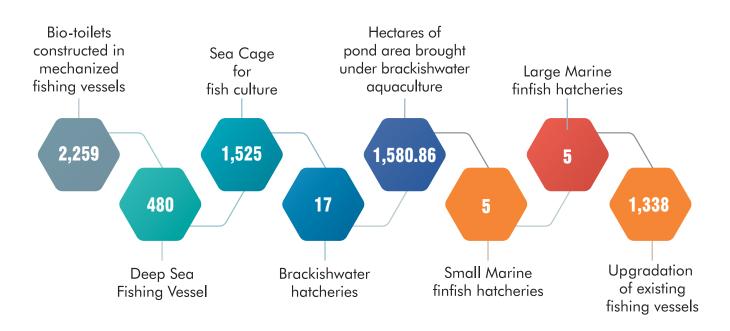
PMMSY Physical Achievements

Details of sector-wise Achievements under PMMSY till 31st December, 2024

INLAND FISHERIES



MARINE FISHERIES



FISHERMEN WELFARE

6,706Replacement boats and nets for

fishermen

Livelihood and nutritional support for

5,94,358

fishers' families for conservation of fisheries resources during fishing ban/lean period 102

Extension and support services (Matsya Seva Kendras)

FISHERIES INFRASTRUCTURE

634

Nos. ice plant/cold storages sanctioned.

1,091

Nos fish feed mill/plants.

27,189

units of fish transportation facilities viz.,

1,243 ive Fish Vending Centres,

10,924 Motor Cycles,

9,412 Bicycles with Ice Box,

3,860 Auto Rickshaws,

1,377 Insulated Trucks,

373 Refrigerated

have been sanctioned.

6,896

Units of fish retail markets **202** and fish kiosks including ornamental kiosks **6,694**

128

Value added enterprise units have been sanctioned so far.



Fishing Harbours and Fish Landing Centres



AQUATIC HEALTH MANAGEMENT



ORNAMENTAL FISHERIES



Ornamental fish rearing units have been approved.

207

Integrated Ornamental fish units (breeding and rearing) have been approved.

SEAWEED CULTIVATION

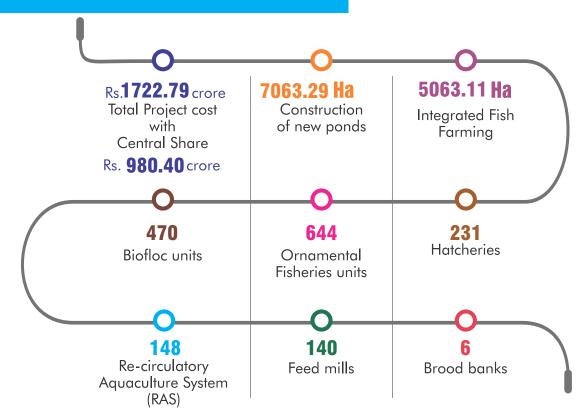


Monoline tubenet approved for seaweed culture.

47,245

Rafts approved for seaweed cultivation.

DEVELOPMENT IN NORTH EAST REGIONS





COLDWATER FISHERIES



RIVER RANCHING

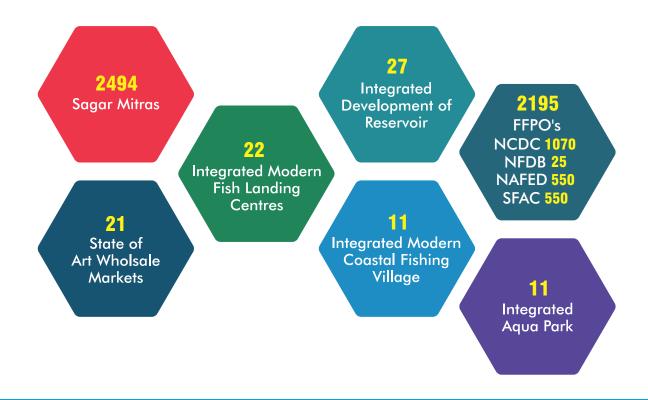




ARTIFICIAL REEF



OTHER IMPORTANT ACTIVITIES





PMMSY Gallery 4th PMMSSY Anniversary













National Space Day





Northeast Region Meet









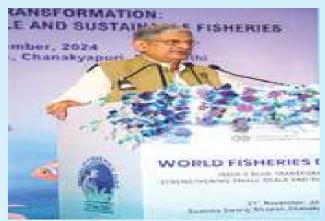
JOF Tallery 2024-25

World Fisheries Day















World Fisheries Day









Veraval fishing Harbour Visit







World Food India 2024













Fisheries Summer Meet









Investors Meet









KCC Abhiyan



DOF Tallery 2024-25

Outreach campaign on Schemes in Mizoram



VADHVAN PORT

Inauguration and Foundation Stone Laying for isheries Projects across the Country

ects worth more than ₹ 77,000 Crore











Drone Demonstration Kochi











Drone Demonstration Kolkata











Drone Demonstration Patna









FAO Regional Workshop







Stakeholders Consultation on Fisheries Export Promotion held on 6th September, 2024 at Visakhapatnam













Chapter 4

Autonomous and Subordinate organizations of Department of Fisheries

Introduction

The Department of Fisheries (DoF) Ministry of Fisheries, Animal Husbandry & Dairying, Government of India has two organizations/institutions namely the National Fisheries Development Board (NFDB), Hyderabad and the regulatory body Coastal Aquaculture Authority (CAA), Chennai that have autonomous/ authority status with respect to their functioning. Along with these, DoF has four sub-ordinate institutions namely (i) Central Institute of Coastal Engineering for Fisheries (CICEF), Bengaluru (ii) Central Institute for Fisheries Nautical and Engineering Training (CIFNET), Kochi (iii) Fishery Survey of India (FSI), Mumbai and (iv) National Institute for Fisheries Post-Harvest Technology & Training (NIFPHATT), Kochi. A brief on the six organizations is as follows:

4.1 National Fisheries Development Board

4.1.1 History of the Institution

The National Fisheries Development Board (NFDB) was established in 2006 as an autonomous organization under the administrative control of Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India to realize the untapped potential of fisheries sector. NFDB has taken up numerous developmental activities that have improved the sector's fish production, productivity, and post-harvest & marketing facilities. A National Freshwater Fish Brood Bank (NFFBB) was established in 2013 in Kausalyaganga, Odisha under the aegis of NFDB

which also serves as NFDB-Eastern Regional Centre (NFDB-ERC). NFDB-North Eastern Regional Centre (NFDB-NERC) was established at Guwahati in 2014.

4.1.2 Mandate

- To bring major activities relating to fisheries and aquaculture for focused attention and professional management
- To coordinate fisheries activities undertaken by Central Government and also coordinate with the State/Union Territory
- c) To improve production, processing, storage, transport and marketing of the products
- d) To achieve sustainable management and conservation of natural aquatic resources
- e) To apply modern research tools for optimizing production and productivity
- f) To generate substantial employment
- g) To enhance contribution of fish towards food and nutritional security

4.1.3. Organizational Structure

NFDB is headed by the Chief Executive (CE). A Governing Body oversees the activities of NFDB under the Chairmanship of the Cabinet Minister. The Governing Body and the Executive Committee consider and decide upon the activities of NFDB and provide NFDB the required guidance. The Executive committee, with the Secretary in charge of DoF (GOI) as its Chairman, provides the general superintendence, direction and control of the affairs and functions of NFDB.



ORGANISATIONAL STRUCTURE

Governing Body

Chairman
Union Minister for Fisheries,
Animal Husbandry & Dairying, GOI

Vice Chairman Union Minister of State for Fisheries, Animal Husbandry & Dairying, GOI

> Member (Agriculture), NITI Ayog

31 Ministers in charge of Fisheries of the States and UTs

Secretary (Fisheries), DoF, GOI

Secretary, DA & FW, GOI

Secretary, DARE, GOI

Secretary
Department of Commerce, GOI

Secretary, Ministry of Food Processing Industries, GOI

Secretary, Ministry of Panchayati Raj, GOI

Chief Executive, NFDB

Joint Secretary (Fisheries), DoF, GOI

Chairman, Coastal Aquaculture Authority

Chairman, NABARD

15 Representatives of Groups and Associations of Fish Farmers, Fishing Craft Operators and Exporters

Executive Committee

Secretary Fisheries, GOI

Financial Advisor & Additional Secretary,
DOF GOI

Advisor (Agriculture), NITI Ayog

Joint Secretary (Inland Fisheries),

Joint Secretary Ministry of Food Processing Industries, GOI

> Managing Director NABARD

Dy. Director General (Fisheries), ICAR

Chairman MPEDA

Member Secretary Coastal Aquaculture Authority

4 Secretaries in charge of Fisheries of State
Governments

Chief Executive NFDB

Organisational Structure of NFDB

NFDB Officials

Chief Executive

Senior Executive
Director

Executive Director

Senior Executive

Executive

Executive Assistant



4.1.4. Activities of NFDB

As per the Annual Action Plan for FY 2023-24, NFDB is undertaking various need-based activities under the Central Sector (CS) component of PMMSY and those activities entrusted by DoF (GOI). There are 12 project components proposed to be implemented at a total cost of Rs 187.06 Crores under the NFDB Action Plan for FY 2023-24. These were approved in the 46th Executive Committee of NFDB and subsequently the orders were issued by DoF (GOI) in January 2023. NFDB is implementing these projects along with the existing projects and the activities entrusted by DoF (GOI) time to time.

The activities undertaken by NFDB are summarized below and are detailed subsequently.

- A. Activities of NFDB under Pradhan Mantri Matsya Sampada Yojana (PMMSY)
- Appraisal of project proposals received under PMMSY and make necessary recommendations based on the viability of the projects/activities
- b. Monitoring the implementation of the projects sanctioned under PMMSY
- Necessary handholding to States and UTs to prepare project proposals under PMMSY State Action Plans and updating the Management Information System (MIS) of PMMSY
- d. Implementation agency for Entrepreneur Model, Insurance Schemes, Fish Farmer Producer Organizations/ Companies etc.
- e. Nodal agency for implementation of River Ranching, Innovation and Innovative Projects, Pilot Projects on Technology Demonstration, Start-ups, etc., Training and Capacity Building programs, Certification, Accreditation, Traceability and Labelling
- f. Promotion and development of inland fisheries and aquaculture in North Eastern (NE) States
- g. Infrastructure Development Projects
- h. Awareness and Publicity Campaign on

- PMMSY and other Fisheries and Aquaculture events
- B. Implementing agency for Fisheries and Aquaculture Infrastructure Development Fund (FIDF)
- C. Implementing Fish Market Price Information System (FMPIS)

4.1.5. PMMSY-Project Appraisal Committee

As per the guidelines of PMMSY, a Project Appraisal Committee (PAC) has been constituted in NFDB for the appraisal of the project proposals received under the Centrally Sponsored Scheme (CSS) component of PMMSY from States and UTs with the prior approval of the respective State/UT Level Approval and Monitoring Committee (SLAMC/ UTLAMC). The Committee is headed by the CE, NFDB. After appraisal by PAC, the viable projects/ proposals under the CSS will be recommended to DoF (GOI) for the approval and the release of admissible central financial assistance. Apart from this, activities/ project proposals received from the DoF (GOI) under the CS Scheme Component of PMMSY are also appraised through PAC to be placed before the Central Apex Committee (CAC) of PMMSY for making necessary recommendations.

NFDB extends technical support and guidance to States and UTs in preparing their Action Plans implementing various activities under PMMSY, in preparation of non-beneficiary-oriented projects such as Integrated Aqua Parks, Integrated Modern Coastal villages, Aquatic Referral Labs, Wholesale Fish Markets, Harbours, Brood Banks, Artificial Reefs and Activities for the Promotion of Domestic Fish Consumption etc.

As on 31st December 2024, NFDB received and scrutinized 919 Self Contained Proposals (SCPs)/Detailed Project Reports (DPRs) under PMMSY from 35 States/UTs, held 18 meetings of PAC under the Chairmanship of the CE, NFDB and recommended 745 projects under CSS component of PMMSY to DoF (GOI) at a total outlay of Rs 4679 Croress with Central share of Rs 1998 Croress.







Glimpses of Project Appraisal Committee (PAC) meeting

Major projects recommended by PAC as on 31st December 2024 are as follows:

- a) Brood banks in Maharashtra, Jharkhand and Sikkim- 10 Nos in total
- b) Integrated Aqua Parks in Hub and Scope model with end-to-end solution in Haryana, Tripura, Nagaland and Madhya Pradesh- 4 Nos in total
- c) Referral Laboratories in Gujarat and Meghalaya
- d) Wholesale fish markets in Andaman & Nicobar Islands, Arunachal Pradesh, Kerala, Odisha, Maharashtra West Bengal and Sikkim- 13 Nos in total
- e) Modernisation/ expansion of fishing harbours in Karnataka, Puducherry and Daman & Diu- 8 Nos in total
- f) Promotion of domestic fish consumption through Mobile Ecofriendly Kiosks "Matsya Vaahini"- 660 Nos in total
- g) Establishment of Integrated Modern Coastal Villages in Kerala- 9 Nos in total
- h) Installation of artificial reefs in Andhra Pradesh, Gujarat and Lakshadweep- 49 Nos in total

4.1.6. PMMSY-Project Monitoring Unit

The PMMSY-Project Monitoring Unit (PMU) under the Chairmanship of CE, NFDB regularly monitor the implementation of the projects/ activities sanctioned under the CS and CSS components of PMMSY. The PMU cell, NFDB has developed project monitoring formats for data collection as per the guidelines of PMMSY and checklists for field visits. To ease the procedures, NFDB has formed PMU-State Monitoring Teams comprising of NFDB officials. Each such team is assigned with the task of monitoring the sanctioned projects in 6 to 8 States and UTs. The periodic monitoring of the projects by PMU-State Monitoring Teams is done through field visits, virtual review meetings with the respective nodal officers of the States and UTs and by the assessment of the physical and financial data submitted by the States and UTs in the specified formats. Based on field visits and quarterly review meetings conducted, NFDB sends advisories to the States and UTs and salient observations to DoF (GOI) periodically.

As on 31st December 2024, PMU at NFDB conducted 9 quarterly review meetings to monitor the projects under PMMSY.







Glimpses of PMMSY-Project Monitoring Unit (PMU) meeting

4.1.7. Entrepreneur Models in Fisheries and Aquaculture

NFDB is the end implementing agency for Entrepreneur Models in Fisheries and Aquaculture under the CS component of PMMSY, which aims to attract and encourage private investment in fisheries and aquaculture sector. Various individual sub-components/ activities of PMMSY would be integrated and packaged to provide end-to-end solutions wherever feasible for maximizing the output and outcomes. These are primarily need based beneficiary-oriented fisheries development activities in an integrated manner to address the needs and priorities of the

fisheries sector which are either un-met or suboptimally/ partially met under PMMSY within the broad framework of PMMSY scheme. The activities supported under this model are integrated business model targeting production, marketing with backward and forward linkages etc. Examples for the model include development of recreational fisheries, promotion of domestic fish consumption, integrated fish aquaponics system, e-platform for advisory and marketing, hub and spoke models, integrated RAS and biofloc culture of shrimp with a processing facility, modernization of fish farms, IQF and preprocessing units etc.



Glimpse of projects supported under Entrepreneur Model

As on 31st December 2024, 39 proposals have been sanctioned in 16 states with a total outlay of Rs 117.62 Croress having an eligible subsidy of Rs 31.44 Croress. Of these, 13 projects are

sanctioned to women entrepreneurs, 6 to entrepreneurs under SC category and 6 to entrepreneurs under ST category.



Details of the Projects sanctioned under Entrepreneur Model during FY 2023-24

No. of Entrepreneur Model Projects sanctioned	Total Outlay (Rs)	NFDB Subsidy Amount (Rs)
10	40.18 Crores	10.47 Crores

4.1.8. Group Accident Insurance Scheme

Group Accident Insurance Scheme (GAIS) Insurance of fishers is one of the sub-components of PMMSY scheme under the beneficiary-oriented activities. Under the scheme, fish workers, fish farmers and other stakeholders who are directly involved in fishing and fisheries related activities in the age group of 18 to 70 years are eligible for insurance coverage of;

a) Rs 5 Lakh against the accidental death or permanent total disability,

b) Rs 2.5 Lakh against the permanent partial disability and Rs 25000 against the accidental hospitalisation.

The scheme is implemented through M/s Oriental Insurance Company Limited (OICL) with an insurance premium of Rs 72.44 per fisher per annum for first two years and Rs 95 per fisher per annum during third year.





Distributing GAIS claim settlement amount

Details of the Insurance Policy Disbursement and Claim Settlement under Group Accident Insurance Scheme

Year	Coverag	e Period	fishers enrolled (in Lakh)	UTs w enro fishers l	No. of States/ UTs where enrolled fishers belong to		Premium amount (Rs Crores)		of claim proposals received	o. of claims provided	*Equivalent amount (Rs Crores) of claims provided
	From	То	No. of	State	UT	Central share	State share	Total premium (Rs Crore	*No. of	, No.	*Equi
1	26.07.21	25.07.22	29.12	18	7	10.41	6.32	16.73	410	341	16.72
2	26.07.22	25.07.23	33.21	24	7	14.74	8.78	23.52	598	358	17.70
3	26.07.23	31.05.24	34.54	23	7	20.33	12.03	32.36	126	28	1.35
	Total						27.13	72.61	1134	727	35.77

^{*}As on 31st December 2024



4.1.9. Training, Awareness, Exposure and capacity Building

NFDB is the designated nodal agency for executing training, awareness, exposure, and capacity building activities including skill development/ upgradation programmes under PMMSY. Keeping in view of the broad spectrum of training needs, a range of Institutions within and outside the fisheries discipline are required to meet the growing skill demand of the sector.

The Institutional partners of NFDB for conducting skill training include ICAR- Central Marine Fisheries Research Institute (ICAR-CMFRI), ICAR-Central Institute of Fisheries Education (ICAR-CIFE), National Bureau of Fish Genetic Resources (ICAR-NBFGR), Central Institute of Fisheries Technology (ICAR-CIFT), Directorate of Cold

Water Fisheries Research (ICAR-DCFR), Central Institute of Freshwater Aquaculture (ICAR-CIFA), Central Inland Fisheries Research Institute (ICAR-CIFRI), Central Institute of Fisheries, Nautical and Engineering Training (CIFNET), Central Salt and Marine Chemical Research Institute (CSMCRI), State and UT Fisheries Departments, Krishi Vigyan Kendras (KVKs), Cochin University of Science and Technology (CUSAT), National Institute of Agricultural Extension Management (MANAGE), Agriculture Skill Council of India (ASCI), Marine Products Exports Development Authority (MPEDA-NETFISH), National Federation of Fishermen's Cooperatives Ltd (FISHCOPFED), National Institute of Fisheries Post Harvest Technology and Training (NIFPHATT), Fishery Survey of India (FSI), State Agricultural Universities, State Fisheries Universities etc.





These training programmes cover the subject area such as intensive freshwater aquaculture, brackish water aquaculture, cold water fisheries, ornamental fisheries, fish processing and marketing, species-specific (Pangasius, Murrel, Magur, Singhi, Pearl Spot, Tilapia, Scampi, Shrimp, Seabass, Cobia and Pompano) hatchery/breeding technologies and integrated fish farming. The fish festivals supported by NFDB played an important role in creating awareness and enhancing the fish and fishery products' consumption in the country.

4.1.9.1 Glimpses of training programms conducted

In the year 2024, as on 31st December, NFDB sanctioned an amount of Rs 228.93 Lakh and released the financial assistance of Rs 188.47 Lakh to 34 implementing agencies covering 19 States/UTs for conducting 269 training and capacity building program to benefit 12275 beneficiaries. Apart from this, NFDB sanctioned 53 awareness/ training programs to 5 Empaneled Training Partners under SCSP amounting to Rs 71.79 lakhs during this period for the benefit of 1650 Scheduled Caste participants. To create awareness and enhance the fish consumption of Fish/ Shrimp and fish-related products, NFDB sponsored 6 Fish Festivals in 2024 (till 31st December 2024) in Andhra Pradesh, Sikkim, Mizoram and Tamil Nadu, Goa and Tripura. Likewise, NFDB sponsored 59 events, which includes workshops, conferences, summits, exhibitions, and seafood shows across 24 States/UTs reaching out to 35000 lay people creating awareness on PMMSY, Start-up opportunities in the fisheries industry etc.

4.1.10. Outreach Activities: Publicity of PMMSY and Promotion of Domestic Fish Consumption

NFDB being the nodal agency for implementing outreach activities has organised various activities such as webinars, outdoor campaigns, digital campaigns, mass media campaigns, publicity through electronic media,

dissemination of innovative technologies by documentation of success stories, development of mobile app. etc. Important activities done in this regard by NFDB cumulatively till 31st March 2024 are given below.

- a) Collaborated with ICAR- Central Institute of Freshwater Aquaculture (ICAR-CIFA) in developing Virtual learning Mobile App "Matsya Setu" (July 2021)
- As on 31st December 2024, 57729 stakeholders have been virtually trained through this App.
- b) Collaborated with ICAR-CIFA in developing an Online Marketplace feature "Aqua Bazar" in "Matsya Setu" app to provide a platform to list and sell products/ services (August 2022)
 - As on 31st December 2024, 214 vendors listed their products in this App.
- c) Created <u>28 jingles</u> and broadcasted it in 16 States in 9 vernacular languages to promote domestic fish consumption.
- d) Supported to organise *Swatch Sagar, Surakshit Sagar Campaign* in Tamil Nadu, Gujarat, Andhra Pradesh and Goa (2022 to 2023)
- e) Developed *songs on Sagar Parikrama* (2 in Hindi and 1 in Tamil)
- f) Created and released videos on
 - 9 years achievements along with the message of the Honourable Prime Minister of India in Hindi, English, Tamil, Telugu and Gujarati
 - Success stories of beneficiaries under PMMSY and KCC in 9 vernacular languages
 - Seaweed culture
 - Ornamental fisheries
 - Insurance in fisheries and aquaculture sector



In 2024, as on 31st December 2024, NFDB extended technical and financial support to organise various outreach events such as;

- a) National Conference on Fisheries and Aquaculture Insurance. 17th January 2024, Pusa, New Delhi.
- b) National Conference on Promotion of Seaweed Cultivation. 27th January 2024, Kutch, Gujarat
- c) Sagar Parikrama Yatra
 - A massive outreach program "Sagar Parikrama Yatra" was undertaken along the Indian Coast to meet the coastal fishers and fish farmers at their doorstep, to understand the challenges faced by them, to promote sustainable fishing and to publicise the schemes and programs of the Government of India. Being led by the Honourable Union Minister of Fisheries, Animal Husbandry and Dairying the programme covered nearly 114 locations in 12 coastal States/UTs (Gujarat, Daman & Diu, Maharashtra, Goa, Karnataka, Kerala, Puducherry, Andaman & Nicobar, Tamil Nadu, Andhra Pradesh, Odisha and West Bengal) along the Indian coast. The Yatra began on 5th March 2022 at Mandvi, Gujarat and concluded on 11th January 2024 at Kakdwip, West Bengal.
- The following phases of Sagar Parikrama were conducted during FY 2023-2024;
 - Phase V from 17th to 18th May 2023 along the coast of Maharashtra and Goa
 - ► Phase VI on 29th May 2023 along the coast of Andaman & Nicobar Islands
 - Phase VII from 7th to 8th May 2023 along the coast of Kerala
 - Phase VII from 30th August 2023 to 2nd September 2023 along the coast of Kerala and Tamil Nadu
 - ► Phase IX from 7th to 9th October 2023

- along the coast of Tamil Nadu and Puducherry
- ► Phase X from 1st to 6th January 2024 along the coast of Andhra Pradesh
- Phase XI from 7th to 9th January 2024 along the coast of Odisha
- Phase XII from 10th to 11th January 2024 along the coast of West Bengal
- Releasing ceremony of the Coffee Table Book and the Video on Sagar Parikrama. 15th March 2024, Rajkot, Gujarat.
 - NFDB in collaboration with the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying and the Department of Fisheries, Gujarat hosted a ceremony at the Rajkot, Gujarat for the release of the Coffee Table Book titled "Sagar Parikrama" and a Video titled "Sagar Parikrama: Ek Anuthe Itihas ki Rachna". Shri. Parshottam Rupala, Union Minister of Fisheries, Animal Husbandry and Dairying released both the Coffee Table Book and the Video. The book and the video depict the overview of the 12 phases of the 'Sagar Parikrama Yatra' along the coast of 12 States/ UTs to understand the on-ground reality of the challenges faced by the fishers and the achievements gained so far in the coastal fisheries sector.

Through these various activities, approximately 51.52 Lakh fishers, fish farmers, and other stakeholders were effectively reached out, as on 31st December 2024.

4.1.11. Innovations and Innovative Projects/ Activities, Technology Demonstrations including Start-Ups, Incubators and Pilot Projects

NFDB has taken up various initiatives to popularize new and innovative technologies emerging in the field so as to improve fish



production and productivity in the country. The following projects have been sanctioned at a total project cost of Rs 430.21 Lakh in 2024, as on 31st December 2024. Popularization of CIFT Fuel-Efficient V-Form Double Slotted Otter Board (Rs 109.16 Lakh)

- a) Integrated Multi-Tropic Aquaculture for the alternate livelihood of fishers and augmenting fish production in coastal waters in Karnataka (Rs 52.28 Lakh)
- b) Preference, consumption pattern and future demand for fish and fishery products in India (Rs 15.22 Lakh)
- c) Establishment of a Bio-resource Facility of Zebrafish (*Danio rario*): A National Genetic Repository for Wild Type and Inbred Zebrafish Strains (Rs 70 Lakh)
- d) Pilot scale evaluation of seaweed farming sites for entrepreneurship development along northern Gujarat coast (Rs.34 Lakh).
- e) Undertaking to testing of technologies/ kits for operating marine engines with various alternate fuels i.e. LPG, CNG, LNG and biodiesel at the facilities of ICAT and certification of their safety and efficiency by ICAT (Rs. 137.90 Lakh).
- f) Vertical Crab Culture by Regal Pesca Tech, Cuncolim, Salcete, Goa (Rs. 11.312 Lakh)

4.1.12. Cage Culture Demonstration of Indian pompano in Bahabalpur coast, Odisha

After witnessing the success of the project 'Cage Culture Demonstration of Indian pompano in Chandipur coast', NFDB extended financial support for the expansion of the project with a project cost of Rs 75 Lakh. The central share sanctioned for this project is Rs 45 Lakh (60%) as one-time subsidy assistance towards operational cost by involving fishermen society/ societies and the beneficiary share is Rs 30 Lakh (40%), as per

the sharing pattern as fixed under PMMSY. A MoU was signed with 36 beneficiaries (18 fishermen and 18 fisherwomen) for the distribution of 30 cages and for undertaking cage culture demonstration at Bahabalpur, Balasore.

In its 1st phase, the fishers group stocked 31000 Sea bass fingerlings in 7 cages moored at the mouth of River Jalaka, Bahabalpur, Balasore. After about eight-month culture period, they harvested a total catch of 3 metric tonne Sea bass with a price realization of Rs 10 Lakh. It is proposed to expand the project by installing the remaining 23 cages to culture Sea bass and Mullet.

4.1.13. River ranching

River ranching component has been incorporated under PMMSY with the objective of addressing the pressure on native fish stock in rivers, replenishing the indigenous species and in turn improving the livelihood of fishers. It is a continuous program. Aiming to achieve sustainable fisheries management, conservation of biodiversity and improving the socioeconomic benefits, the scheme is being implemented in the river basins viz. Ganges and the tributaries of Ganges River system, Brahmaputra and Barak River tributaries and adjoining rivers, Mahanadi and tributaries of Mahanadi River system, Wainganga and Wardha Rivers, Cauvery River and adjoining rivers, Godavari, Narmada and Indus River systems. In FY 2022-23, the scheme got extended to North Eastern region States. Rs 30.43 Crores has been sanctioned towards total cost to ranch 1080.94 Lakh in 17 states viz., Uttar Pradesh, Odisha, Chhattisgarh, Bihar, Tripura, Uttarakhand, Assam, Himachal Pradesh, Karnataka, Tamil Nadu, Gujarat, Maharashtra, Sikkim, West Bengal, Nagaland, Manipur and Arunachal Pradesh. As on 31st December 2024, 1080.94 Lakh fingerlings ranched for a cost of Rs 30.43 Crores.







Mrs. SS Olish, Hon'ble MLA, Chandel (ST) AC attending
River Ranching Program in Manipur's Chakpi River in Chandel District

4.1.14. Establishment of Breeding Units of Indigenous Fish Species in North Eastern States

In North Eastern States, fish species like Magur, Singhi, Pabda and Koi have special consumer preferences and fetch high market prices. However, the commercial breeding and propagation, and culture expansion of these species still remains low due to the lack of adequate number of hatcheries for fish seed production, lack of dissemination of breeding

technique among the farmers and lack of other necessary support.

To fill this gap, NFDB launched the project 'Establishment of breeding units for locally important fish species of North East India' in the FY 2020-21.

Details of the Breeding Units of Indigenous Fish Species sanctioned in North Eastern States as on 31st December 2024

No. of North Eastern States to which the breeding units sanctioned	No. of breeding units sanctioned	Total Outlay (Rs)	NFDB Subsidy Amount (Rs)	No. of breeding units completed under the project and in operation	No. of breeding units on various stages of establishment
8	65	4.25 Crores	2.33 Crores	44	21

4.1.15. Formation of Fish Farmer Producer Organisations

NFDB being one of the Implementing Agency for the formation and promotion of Fish Farmer Producer Organisations (FFPOs) under PMMSY, shortlisted 6 agencies as Cluster Based Business Organizations (CBBOs) after the scrutiny and evaluation of 53 applications. These 6 CBBOs were awarded for formation and promotion of FFPOs in different States/ UTs. Out of the 20 registered FFPOs, 9 FFPOs have appointed CEOs and accountants and are in the process of implementing their business plans. Mobilization and formation of the remaining 5 FFPOs are in progress.



Details of the FFPOs sanctioned as on 31st December 2024

No. of agencies selected as CBBOs	No. of FFPOs sanctioned to CBBOs	No. of States to which FFPOs sanctioned	No. of FFPOs registered	No. of members enrolled in registered FFPOs
6	25	13*	20	2700

^{*}Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Gujarat, Karnataka, Maharashtra, Manipur, Odisha, Puducherry, Tamil Nadu, Tripura and Uttar Pradesh

4.1.16 Formation of Fisheries Cooperatives

As per the directions of the Ministry of Cooperation, Government of India, NFDB prepared a detailed Action Plan for formation of 12000 new Fisheries Cooperative Societies (FCS) from FY 2023-24 to FY 2032-33 in gram

panchayats & villages which are uncovered. The Action Plan envisages forming these new FCS in two phases, targeting 6000 in each phase. For FY 2024-25, NFDB was given a target of forming 1000 new FCS, of which 582 are formed covering 27 States and UTs as on 31st December 2024.



National Level Review Meeting organized by the Ministry of Cooperation in Bhubaneswar





4.1.17. Certification, Accreditation, Traceability and Labelling in Aquaculture Sector

NFDB is implementing the certification of fish hatchery/ fish farm/ brood banks/ feed mill under PMMSY on pilot scale in 6 States viz. Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Karnataka and Tamil Nadu covering about 3,040 beneficiaries including individuals and groups and targeting 1,711 units of hatcheries, feed mills and fish farms with the total budget outlay of Rs 4.52 Crores.

Accordingly, NFDB empanelled 8 certifying bodies viz. Bureau Veritas (India) Pvt Ltd, CU Inspections and Certifications India Pvt Ltd, Cotecna Inspection Pvt Ltd, Intertek India Pvt Ltd, Quest Certification Pvt Limited, SGS India Pvt Ltd, Tata Projects Ltd and TUV India Pvt Ltd for implementing the certification of fish hatchery/fish farm/ brood banks/ feed mill under PMMSY. Currently, the selected States are implementing the scheme through these certifying bodies.

Subsidy assistance of Rs 18000, Rs 27000 and Rs 60000 per unit is provided to beneficiaries under (1) General, (2) SC/ST/Women, and (3) group/cluster categories respectively.

4.1.18. Fish Market and Price Information System

NFDB is implementing a project on Fish Market Price Information System (FMPIS) for collection and analysis of fish price data from selected fish markets through a web/mobile-based application. The portal provides real-time online information on the fish price entered from *65 selected retail fish markets and *46 wholesale fish markets of major cities and towns in 29 States / Union Territories of our Country through the designated enumerators. The fish price data of *138 commercially important fish species as received through the App are being analysed to know the trend. Currently there are about *111 registered enumerators entering the data from

the designated fish markets. Apart from market price data, NFDB is also obtaining the prevailing marine fish price data pertaining to Fishing Harbours and Fish Landing Centres of the Coastal States/ UTs from NETFISH-MPEDA and integrates with FMPIS online data system.

4.1.19. Aquatic Animal Health and Quality Testing Laboratory

Aquatic Animal Health & Quality Testing Laboratory (AAH & QTL) is a national level laboratory under the aegis of NFDB. It is an ISO 9001:2015 certified laboratory offering various testing services to fishers, fish farmers and other stakeholders in fisheries. AAH & QTL is fully operational with sophisticated instruments for molecular disease identification, gene sequencing, quantification of heavy metals, proximate composition analysis of feed samples, amino acids profiling etc. and offers hands on training programmes on PCR and its applications, RT-PCR and its applications, aqua feed analysis, microbiological techniques and principles and applications of HPLC.

The details of the projects and study taken up by the AAH & QTL during FY 2023-24 are given as follows.

- a) Completed project (in collaboration with Environment Protection Training and Research Institute (EPTRI)): Aquatic biodiversity studies of Kaleswaram Post Environmental Monitoring Projects (PPEM) viz. Medigadda, Annaram and Sundilla barrages of Telangana State.
- **b) Completed study:** Techno-economic feasibility study on Phase Change Material (PCM) provided by Machphy Solutions, targeting benefits for fishers, dealers, agents, and retailers.

c) Ongoing projects:

I. NSPAAD Phase II: AAH & QTL of NFDB is one of the collaborating centres under the



NSPAAD Phase II for the period of FY 2023-2025 to implement disease surveillance programme.

ii Assessment of pathogenic microorganisms along with nutrient and residual contaminant profiling in fish and aqua feeds.

4.1.20. Corporate Social Responsibility Activities

NFDB in collaboration with DoF, Government of

Telangana is implementing a project on "Skill Training and Providing Life-Saving Equipment to the Inland Fishers of Selected Districts in Telangana State" with the Corporate Social Responsibility (CSR) funds of Indian Immunologicals Limited (IIL), Hyderabad. As on 31st December 2024, 6 training programmes were conducted to 469 fishers belonging to 2 reservoir area viz. Nizamsagar and Sriram Sagar covering 3 Districts vi. Kamareddy, Nizamabad and Nirmal.





Demonstrating Fisheries Life-Saving Equipment



4.1.21. Aquatic Quarantine Facility

In 2009, NFDB funded MPEDA-RGCA, for establishing an Aquatic Quarantine Facility (AQF) at Neelankarai, Chennai for the regulated import of *Penaeus vannamei* broodstock and for the production of Specific Pathogen Free (SPF) shrimp seed. Over the period, the AQF gradually got expanded phase wise. At present, with the addition of 6 quarantine cubicles and the supporting infrastructure in Phase IV, the facility is having the annual capacity to accommodate 7,33,400 imported *P. vannamei* broodstock. The facility was commissioned on January 10, 2022.

NFDB has signed a MoU with MPEDA-RGCA to share the gross revenue generated by AQF with NFDB at the rate of 2.5% per year. Accordingly, NFDB regularly receives its share from AQF revenue. Accordingly, MPEDA-RGCA shared an amount of Rs 2063541 for the FY 2021-22 and Rs 2100404 for the FY 2022-23 towards NFDB's share from AQF.

4.1.22. Development and operation of Coastal Aquaculture Facility at Mulapolam, Srikakulam District, Andhra Pradesh

NFDB executed the Phase I civil work of the Development and operation of Coastal Aquaculture Facility, through the Central Public Works Department (CPWD). Development of infrastructure spanning 36.52 acres has been completed with following facilities in place:

 Nursery Complex (2 Units, with 16 Indoor and 16 Outdoor tanks in each unit): This consist of nursery area, reservoir, treatment cum blower cum panel room, used water treatment plant, office and staff accommodation, freshwater tank, septic tank and overhead tank.

 Grow-out Ponds (2 Blocks, with 8 ponds in each block):

This includes lined ponds, office and staff accommodation, panel cum blower room, freshwater tank platform and septic tank.

- Water Management System
 - Sea Water Intake System: This consists of Intake line, pump house and main water supply line.
 - Reservoir System: This includes reservoir ponds (4 Nos), dissipation box with filtration system, feeder canals with inlets and sump for pumping.
- External Civil Infrastructure

This consists of internal roads, water drainage system and rainwater and drainage system including culverts.

• Infrastructure for Electrification

This infrastructure includes street lights, main consumer EB yard, pipe system for HT cable, transformer yard, MV panel room, generator bed etc.



















Infrastructure facilities created at Mulapolam

4.1.23. Fisheries and Aquaculture Infrastructure Development Fund

To address the gaps in fisheries infrastructure, in FY 2018-19, Government of India created the Fisheries and Aquaculture Infrastructure Development Fund (FIDF) with a fund size of Rs 7522.48 Crores. FIDF provides concessional finance/ loan to the Eligible Entities (EEs) including State Governments/ UT Administrations and State entities for the development of identified fisheries infrastructure facilities. The initial implementation period of

FIDF was 5 years from FY 2018-19 to FY 2022-23 which is further extended for another 3 years i.e., from April 1, 2023 to March 31, 2026 within the already approved fund size of Rs 7522.48 Crores.

Cumulatively as on 31st December 2024, NFDB received 259 proposals from 26 States and UTs for the total project cost of Rs 7978.78 Crores. NFDB recommended 123 proposals to Central Approval and Monitoring Committee (CAMC). The CAMC



recommended 121 proposals and the DoF (GOI) accorded approval in-principle for projects worth Rs 5585.51 Crores as on 31st December 2024. A total of 14 new proposals were received after

scheme extension, out of which 9 are Private and 5 are govt, worth of Rs.178.97 Crores. CAMC has approved 11 new projects with a total project cost of Rs.203.45Crores.



Tuna Fishing Harbour at Thiruvotriyurkuppam, Tamil Nadu



Expansion of Shrimp Processing Unit by M/s Highland Agro, Odisha

Glimpse of projects supported under FIDF

4.1.24 Empanelment of Equipment Manufacturers/Suppliers

NFDB has empanelled 41 firms under various categories such as aquaculture, Recirculatory Aquaculture System (RAS)/ biofloc, sea cage/reservoir, cage/ pen, cold chain facility (cold storage /ice plant), fish feed mill, hatcheries, marine fisheries, refrigerated vehicles/ Insulated vehicles, bio toilet etc. as on 31st December 2024. The list is made available at NFDB website for the benefit of States/UTs and other stakeholders.

4.1.25 Empanelment of Consultants

For the benefit of fisheries and aquaculture sector, NFDB has empanelled 67 consultants (individuals and consulting firms) in the field.



4.1.26 Events Organized by NFDB

4.1.26.1 2nd Fisheries Summer Meet-2024

The 2nd Fisheries Summer Meet-2024 was organised at Madurai, Tamil Nadu on 12th July 2024. During the Meet, a total of 321 impactful projects under PMMSY covering 19 State/UTs with an outlay of Rs 114 Crores, were virtually inaugurated by the Union Minister for Fisheries, Animal Husbandry & Dairying and Panchayati Raj, Shri. Rajeev Ranjan Singh alias Lalan Singh. Ministers of state for Fisheries, Animal Husbandry & Dairying, Prof. S. P. Singh Baghel and Shri. George Kurian were also present on the occasion. During the program, live virtual interactions with fishers were held from the inaugural sites.





The Union Minister also inaugurated an exhibition that showcased various aquaculture technologies, distributed KCC to beneficiaries, presented PMMSY achievement award letters to beneficiaries and felicitated selected FFPOs onboarded on the Open Network Digital Commerce (ONDC) viz. Gorakhpur Kissan Producer Company Limited, Uttar Pradesh, Kapsi Fishery Farmer Producer Company Ltd., Chhattisgarh, Banmankhi Fish Farmer Company Limited, Bihar, Bastar Pearl Fish Farmer Producer Company Limited, Chhattisgarh, Lari Fish Producer Company Ltd., Uttar Pradesh and Kondapaka Fisheries Producer Company Limited, Telangana.

4.1.26.2 World Fisheries Day-2024

NFDB in coordination with the DoF (GOI) celebrated the World Fisheries Day 2024 with the theme *India's Blue Transformation: Strengthening Small-Scale and Sustainable Fisheries*, on 21st November 2024, at Sushma Swaraj Bhawan, New Delhi. The event was graced by the Chief Guest Shri. Rajiv Ranjan Singh alias Lalan Singh, Union



- a) 5th Marine Fisheries Census for data-driven policymaking
- b) National Plan of Action on Sharks for sustainable shark management and India's endorsement to the Regional Plan of Action on Illegal, Unreported and Unregulated (IUU) Fishing

Minister, MoFAHD and Ministry of Panchayati Raj along with Guests of Honours Shri. George Kurian, Minister of State, MoFAHD and Ministry of Minority Affairs and Prof. S. P. Singh Baghel, Minister of State, MoFAHD and Ministry of Panchayati Raj. Ms Vani Rao, Indian Ambassador to Italy, Rome, Mr Manuel Barange, ADG and Director, Fisheries Division, FAO also graced the event. The event witnessed participation of 54 embassy representatives and high commissions. The event included two technical sessions i.e. (1) "South-South and Triangular Cooperation: Food Safety and Security through Sustainable Fisheries and Aquaculture," which explored bilateral cooperation and strategies for sustainable development in fisheries, including small-scale farming, enhanced livelihoods, and food security and (2) "Climate Change: Challenges in Fisheries and Way Forward," which addressed climate impacts, resilience-building, and mitigation strategies.

On this occasion, DoF (GOI) launched series of landmark initiatives and projects such as;



to prevent IUU fishing in the Bay of Bengal Region, jointly in cooperation with Sri Lanka, Bangladesh and Maldives,

c) International Maritime Organisation-Food and Agricultural Organisation (IMO-FAO) GloLitter Partnership Project to combat marine plastic



litter, and Standard Operating Procedures for retrofitted LPG kits to promote energy-efficient, low-cost marine fishing fuels.

- d) New Single Window System (NSWS) by the Coastal Aquaculture Authority to enable online registration of coastal aquaculture farms.
- e) MoU to implement a framework for the

Voluntary Carbon Market (VCM), harnessing carbon-sequestering practices in the sector

On the occasion, progressive States, Union Territories (UTs), districts, and individuals in fisheries and aquaculture sector were honoured for their remarkable contributions to the sector's growth.





Glimpses of World Fisheries Day 2024

4.1.26.3 PMMSY 4th Anniversary celebrations:

Department of Fisheries and NFDB organized the 4th PMMSY anniversary at New Delhi. Honourable Union Minister Shri Rajeev Ranjan Singh Ji has graced the occasion and released the operational guidelines for the Pradhan Mantri

Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY). Nearly 850 participated physically and virtually about 18k States/UT officials, fishers fish farmers and other stakeholders from various parts of the Country participated in the event.







Glimpses of PMMSY 4th Anniversary celebrations

4.1.26.4 Drone Technology Demonstration

NFDB under the guidance of Department of Fisheries, Ministry of Fisheries has initiated outreach programs on nationwide drone demonstration to highlight the potential benefits of drone technology in various activities on fisheries and aquaculture sector. The first program was launched at ICAR - Central Inland Fisheries Research Institute (CIFRI), Barrackpore on 24th September 2024, and was conducted in collaboration with CIFRI and NFDB & Department of Fisheries.



Similarly, organised on 19th Oct 2024 at Patna –Bihar, in collaboration with Department of Fisheries, Bihar, the event was graced by Shri Rajiv Ranjan Singh, alias Lalan Singh Honourable Union

Minister, Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D) and Ministry of Panchayat Raj. Department of Fisheries.





Drone technology demostration programmes in CIFRI and CMFRI

The third program was organised on 8th November, 2024 in collaboration with ICAR-CMFRI, NFDB & DoF. The event took place in the gracious presence of Shri George Kurian, Hon'ble Minister of State, Department of Fisheries and Ministry of Minority Affairs. along with Dignitaries, Scientists, State Fisheries Official, Fishermen and fisherwomen. The entire three programs reached out nearly 2800 fishers & fish farmer's fishermen, fisherwomen participants physically and virtually nearly 20k participants from various States/ UTs, Fisheries Institutes, Colleges, Cooperatives, FFPOs, Startups, entrepreneurs and other stakeholders has participated.

4.1.26.5 Hon'ble PM Program at Palghar

Hon'ble Prime Minister Narendra Modi inaugurated and laid the foundation stone of

multiple development projects in Palghar, Maharashtra today. The projects include laying the foundation stone of Vadhvan Port at a cost of around Rs 76,000 Crores, and inauguration and laying the foundation stone of 218 fisheries projects worth around Rs 1,560 Crores, says an official release from the Prime Minister's Office. "Modi launched the national rollout of a vessel communication and support system at a cost of around Rs 360 Crores. The Prime Minister also laid the foundation stone for important fishery infrastructure projects including development, upgradation and modernization of fishing harbours, fish landing centers and construction of fish markets. Distributed transponder sets and Kisan credit cards to fishermen beneficiaries.



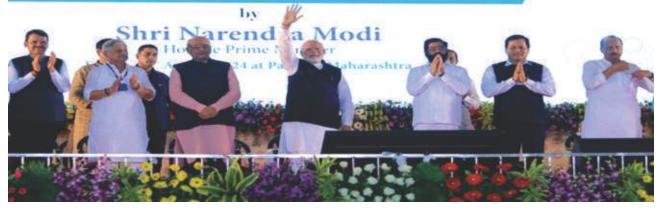
Foundation Stone Laying for

VADHVAN PORT

Inauguration and Foundation Stone Laying for

Fisheries Projects across the Country

ojects worth more than ₹ 77,000 Crore



4.1.26.6 Apart from the above NFDB in collaboration with Department of Fisheries has organized various outreach programs such as

- On 6th September 2024 Stakeholders Consultations on Fisheries Export Promotion with focus on Shrimp farming & Export Value Chain in coordination Department of Fisheries, Gol, Andhra Pradesh.
- On 8th September 2024 organized Stakeholder's meeting for development of Ornamental Fisheries Cluster at Madurai.
- NFDB participated in the World Food

- India 2024 from 19th September till 22nd September 2024.
- On September 17th to 19th 2024 participated India Water Week 2024 participated in the 8th India Water Week at Bharath Mandapam, New Delhi.
- On November 14 2024, successfully organized the Investors Meet 2024 at Andaman & Nicobar Islands.
- On 15th November 2024, NFDB organized & participated in Birsa Munda Jayanti, also known as Janjatiya Gaurav Divas or Tribal Pride Day at Daman & Manipur.









Stakeholders Consultations on Fisheries Export Promotion



Stakeholders meeting for development of Ornamental Fish Cluster







4.1.27 Publications

- a) State Fishes and Aquatic Animals of India 2024
- b) Coffee Table Book-Sagar Parikrama

4.1.28 Regional Centres of NFDB

4.1.28.1 NFDB-Eastern Regional Centre, Bhubaneswar

4.1.28.2 Genetically Improved Scampi Brood Bank

In order to meet the demand for Genetically Improved (GI) Scampi seed, a brood bank for GI Scampi was established at NFDB-ERC at a project cost of Rs 74.36 Lakh. It consists of 20 nursery tanks with a capacity to produce 60000 juveniles/annum. In FY 2023-24, NFFBB procured 25150 Nos of GI Scampi Post Larvae from ICAR-CIFA which are being reared into Broodstock. Of these, nearly 138.8 kg broodstock was supplied to 3 networked hatcheries in Odisha, as on 31st December 2024. The remaining stocks are being reared in earthen ponds for supply of the broodstock to the multiplier units in the Odisha and Andhra Pradesh

4.1.28.3 Production & Distribution of Quality Breeder Seed

National Freshwater Fish Brood Bank (NFFBB) was established to strengthen inland fisheries and aquaculture across the country as part of the activities of NFDB-ERC. The Centre aims at multiplication of genetically superior indigenous fish strains obtained from Central research institutions, developing quality breeder seed and distributing it to identified, accredited hatcheries. This enables the hatcheries to develop dependable broodstock for quality fish seed production.

In 2024, as on 31st December, NFDB-ERC distributed 25.96 Crores breeder seed (spawn-99% and fry and fingerlings- 1%) and 3.4 tonnes broodstock of Jayanti Rohu, Improved Catla, Amur Common Carp, Mrigal, Grass Carp, Java Puti including 149.9 kg of CIFA-Genetically Improved

(GI) Scampi broodstock to hatcheries, seed growers, State Govt. farms, KVKs, ICAR institutions and academic institutions. NFDB-ERC has strengthened its network of hatcheries for distribution of fish seed by registering 79 hatcheries in 16 States/ UTs and 62 seed growers in 14 States/ UTs across the country as on 31st December 2024 in order to supply quality fish seed in pan India level and to achieve higher fish production.

4.1.28.4 Empanelment of Pangasius Hatchery

NFDB-ERC has empaneled 2 Pangasius hatcheries (one in Odisha and another from Gujarat) by entering into an agreement for supply of Pangasius seed to the farmers at a price fixed by NFDB.

4.1.28.5 Infrastructure Development

NFDB- ERC undertook the following infrastructure development activities in FY 2023-24.

- a) Construction of training centre, store cum laboratory building.
- b) Establishment of GI Desi Magur Hatchery: For multiplication of genetically improved Desi Magur procured from ICAR- CIFE, Balabhadrapuram, Andhra Pradesh in order to cater to the seed demand in the states of Odisha, West Bengal and Bihar.

4.1.28.6 NFDB-North Eastern Regional Centre,

Guwahati NFDB-NERC act as an extension and outreach arm of NFDB for creating awareness and providing training and technical hand-holding to the fish farmers of the NE States. It also assists the NE States in preparing Detailed Project Reports (DPRs) in fisheries and aquaculture sector and coordinate with them for implementation of fisheries activities. NFDB-NERC plays a pivotal role in awareness creation, trainings and skill development in the region. In 2024, as on 31st December, NERC organized 12 training programmes and 2 awareness programs reaching



out to 605 people across the region including farmers, entrepreneurs, students, State Department officials etc. The centre also participated and set up its stalls in 8 Exhibitions/ Agua Fests. The Centre coordinated 6th, 7th, 8th and 9th PMMSY-PMU meeting with the 8 North Eastern States for the smooth implementation of PMMSY, GAIS, FMPIS etc. The officials and staff of the Centre has conducted several field visits to various project site to monitor and review its implementation. The officers and staffs of NFDB-NERC participated in eight Exhibitions/Aguafest with NFDB information stalls in various States of NE as well as West Bengal. A fish marketcleanliness drive was organized as a part of Swachhata Campaign 3.0, with the active participation of Women's Society, fish traders and fish workers. Extensive outreach and awareness campaign organized to promote various schemes of government of India such as PMMSY, PM-MKSSY, FIDF, Entrepreneurship Model, GAIS, Aqua Crop Insurance, KCC etc. by NFDB-NERC in coordination ICAR Institutions, Fisheries Institutes of DoF, Govt. of India - FSI, CICEF, CIFNET, NIPHAT, covering all 8 North Eastern States during 07-16 December, 2024, reached out 18968 Fishermen, fish farmers, and Stakeholders.

4.2 COASTAL AQUACULTURE AUTHORITY

The Coastal Aquaculture Authority (CAA), was established under the Coastal Aquaculture Authority Act, of 2005 (Act No. 24 of 2005) to regulate 'coastal aquaculture' activities in the areas notified by the Central Government as 'coastal areas' and for matters connected therewith or incidental thereto. The Coastal Aquaculture Authority effectively balances economic growth through coastal aquaculture activities and the protection of the coastal environment and its diverse ecosystems. By adhering to the precautionary principles of environmental law, the CAA implements scientifically based guidelines that are both environmentally sustainable and efficient, thereby fostering coastal aquaculture and

securing the livelihoods of millions of rural residents across the nation.

4.2.1 COASTAL AQUACULTURE AUTHORITY

The Coastal Aquaculture Authority was established under the Coastal Aquaculture Authority Act, 2005 (Act No. 24 of 2005) enacted by the Parliament of India, which received the assent of the Hon'ble President of India on the 23rd Day of June 2005.

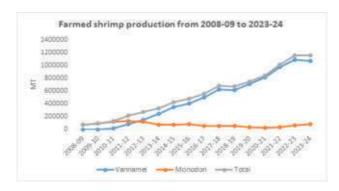
After 18 years of enactment of the Principal Act, the Coastal Aquaculture Authority (Amendment) Act, 2023 (27 of 2023) was passed in both houses of Parliament, which received the assent of the Hon'ble President on August 12, 2023, and was notified on August 14, 2023.

The Coastal Aquaculture Authority is functioning with a mandate to ensure that coastal aquaculture shall not cause any detriment to the coastal environment, to promote responsible coastal aquaculture in compliance with the provisions contained under the Act, Rules, Regulations, and Guidelines and also protect the livelihood of the various sections of the people living in the coastal areas.

Shrimp is the major commercial species in coastal aquaculture and subsequent disease outbreaks in *Penaeus monodon*, the CAA was assigned the task of regulating the commercial introduction of the exotic shrimp viz. SPF *Litopenaeus vannamei* vide Notification dated 15th October 2008, issued by the Department of Animal Husbandry, Dairying & Fisheries, under the Livestock Importation Act, 1898.

Shrimp production from coastal aquaculture has significantly increased from the level of 84,000 MT during the year 2008-09 to the level of 11.60 lakh MT during the year 2023-24. Considering the existing potential for coastal aquaculture, it is expected to expand further. It is pertinent to mention that no other food production sector in the country has achieved such a high growth rate as coastal aquaculture, in the past 16 years.





4.2.2 ACHIEVEMENTS OF COASTAL AQUACULTURE AUTHORITY DURING 2024 (January 2024 – December 2024).

4.2.2.1 REGISTRATION/RENEWAL OF REGISTRATION OF FARMS

As per the provisions contained under Section 13 of the CAA Act, 2005 (Amended in 2023), the CAA, as a Regulatory Authority, is registering coastal aquaculture farms with the support of the District Level Committees (76) and Sub-Divisional Level Committees (157) constituted in 9 coastal states and 4 UTs under sub-rule 3 of Rule 10 of CAA Rules 2024 with representatives from Departments of Revenue, Agriculture, Forests, Fisheries, MPEDA, Irrigation and Panchayat Raj

and issuing registration certificates in compliance with the provisions contained under CAA Act,2005, CAA Rules, 2024, Guidelines and CAA Regulations, 2008 with the approval of the Authority. The registration period of the coastal aquaculture farms is 5 years and shall be renewed for every subsequent 5 years.

- During the year, 2024, the CAA registered 865 new coastal aquaculture farms with a Total Farm Area (TFA) of 1055.80 ha and Water Spread Area (WSA) of 682.90 ha and renewed 3144 farms with TFA of 5847.48 ha and WSA of 4046.05 ha.
- From the inception of the CAA (2005) to December 2024, a total number of 46,976 coastal aqua farms covering a Total Farm Area (TFA) of 71051.80 ha and Water Spread Area (WSA) of 48360.20 ha was registered with the CAA in the country.
- From inception (2012) to December 2024, a total number of 15,142 coastal aqua farms covering a Total Farm Area (TFA) of 30656.81 ha and Water Spread Area (WSA) of 21447.12 ha were renewed.

	State-wise coastal aquaculture farms registered with CAA as of December 2024									
		From incepti	on till Decei	mber 2024	From January 2024 to December – 2024					
SI. No.	State/UT	No. of Farms	Total Farm Area (ha)	Water Spread Area (ha)	No. of Farms	Total Farm Area (ha)	Water Spread Area (ha)			
1.	Andaman &Nicobar Island	4	22.18	5.29	0	0	0			
2.	Andhra Pradesh	22744	33270.85	23174.03	129	152.38	108.28			
3.	Diu & Daman	12	60.00	38.40	0	0	0			
4.	Goa	48	151.11	109.82	3	3.82	2.80			
5.	Gujarat	1122	5237.32	3723.02	15	93.00	52.00			
6.	Karnataka	316	462.54	351.56	0	0	0			
7.	Kerala	1532	2945.44	2024.09	41	59.68	37.06			
8.	Maharashtra	315	2342.56	1486.24	0	0	0			
9.	Odisha	13485	15861.69	9865.23	498	489.07	306.35			
10.	Puducherry	86	126.87	95.26	0	0	0			
11.	Tamil Nadu	2374	6238.00	4544.64	90	224.72	148.53			
12.	West Bengal	4938	4333.23	2942.62	89	33.13	27.88			
	Grand Total	46976	71051.80	48360.20	865	1055.80	682.90			



	State wise coastal aquaculture farms renewed their registration with CAA from inception to December 2024							
SI. No.	State /UT	From in	ception till De	ecember 2024	From January to December – 2024			
		No. of Farms	Total Farm Area (ha)	Water Spread Area (ha)	No. of Farms	Total Farm Area (ha)	Water Spread Area (ha)	
1.	Andhra Pradesh	7569	12786.21	9118.47	1333	2492.35	1746.43	
2.	Diu & Daman	9	45.00	28.80	0	0	0	
3.	Goa	47	143.13	105.94	2	1.81	1.42	
4.	Gujarat	931	4264.12	3053.57	121	567.15	415.19	
5.	Karnataka	129	217.77	162.35	17	32.21	18.07	
6.	Kerala	318	658.34	491.70	1	1.35	1.08	
7.	Maharashtra	174	1021.20	691.78	16	70.37	52.52	
8.	Odisha	3916	5922.97	3663.19	1241	1569.54	979.35	
9.	Puducherry	46	91.52	67.96	1	2.71	1.56	
10.	Tamil Nadu	1989	5494.35	4054.91	412	1109.99	830.43	
11.	West Bengal	14	12.20	8.45	0	0	0	
	Grand Total	15142	30656.81	21447.12	3144	5847.48	4046.05	

4.2.2.2 REGISTRATION OF SEED PRODUCTION UNITS

- CAA is mandated under Section 13 of CAA
 Act, 2005 to register all seed production
 units such as Hatcheries, Nauplii Rearing
 Hatcheries (NRHs) and Live feed units
 located within the jurisdiction of the CAA.
- During the year, regarding the registration of new units, the CAA Inspection Committee inspected 14 hatcheries (*L. vannamei*-04; scampi-01, polychaete-02, *P. monodon*-6 and one unit of Research Institute) and 09 NaupliiRearing Hatcheries (NRHs) and recommended for their registration.
- During the year, regarding the renewal of the registration of existing units, the Inspection Committee inspected 15 hatcheries (*L. vannamei*-13; *P. monodon*-02), 41 NRHs for *L. vannamei* and one Live Feed Unit and recommended their renewals of registration.

- From inception (2009) to December 2024, a total number of 324 hatcheries and 214 Nauplii Rearing Hatcheries (NRH) for SPF *L. vannamei* and *P. monodon* seed production units located in the coastal states with a total production capacity of approx. 1.01 lakh million seeds (including NRH) for the seed production of *L. vannamei* and *P. monodon* were approved by the CAA.
- During the year, 1,63,377 nos. of SPF broodstock of *L. vannamei* and 8,037 nos. of SPF broodstock of *P. monodon* were imported from the empanelled overseas suppliers.
- From inception, a total no. of 27,07,328
 SPF L. vannamei and P. monodon broodstock was imported by the hatchery operators from the CAA empanelled overseas suppliers.



	Seed produ	uction units	registered with (CAA as on De	ecember 2024		
SI. No	Species/State	Hatcheries registered	Seed Production Capacity (million seeds per year)	NRH registered	Seed Production Capacity of NRHs (million seeds per year)	Total Seed Production Units (Hatchery +NRHs)	Total Seed Production Capacity (Hatchery +NRHs) (million seeds per year)
А	L. vannamei seed production units						
1	Andhra Pradesh	213	52740	170	17140	383	69880
2	Tamil Nadu	77	14980	18	2800	95	17780
3	Odisha	6	1410	12	1190	18	2600
4	Gujarat	3	780	0	0	3	780
5	West Bengal	1	300	0	0	1	300
	Total <i>L. vannamei</i>	300	70210	200	21130	500	91340
В	P.monodon seed production units						
1	Andhra Pradesh	15	4190	6	1590	21	5780
2	Tamil Nadu	7	1690	5	700	12	2390
3	Odisha	0	0	1	80	1	80
4	Gujarat	2	900	1	480	3	1380
5	Karnataka	0	0	1	60	1	60
	Total P. monodon	24	6780	14	2910	38	9690
С	Marine Finfish seed production units						
1	Andhra Pradesh	2	20	0	0	2	20
2	Karnataka	1	5	0	0	1	5
3	Gujarat	1	200	0	0	1	200
4	West Bengal	1	60	0	0	1	60
	Total marine finfish	5	285	0	0	5	285
D	Macrobrachiumrosenbergii seed production units						
1	Andhra Pradesh	1	240	0	0	1	240
2	Tamil Nadu	1	30	0	0	1	30
	Total <i>M. rosenbergii</i>	2	270	0	0	2	270
E	Research Institute (Multispecies) units						
1	Kerala	3	For research programm	0	For research programm	3	0
2	Tamil Nadu	3		0		3	0
	Total	6		0		6	0
	Grand total	337	77545	214	24040	551	101585



4.2.2.3 EMPANELMENT OF SPE BROODSTOCK/PPLSUPPLIERS

- CAA empanels the overseas suppliers for the supply of SPF shrimp broodstocks/PPL to the country based on the recommendation of the Technical Evaluation Committee which was constituted with the members from CAA, ICAR-CIBA, MPEDA, NFDB and NBFGR.
- The Technical Evaluation Committee evaluate the proposals of overseas suppliers based on the genetic base, SPF status and bio-security facilities established in the facility of the overseas suppliers and recommends to the CAA for their empanelment.
- CAA so far empanelled 14 overseas suppliers for *L. vannamei* and 02 overseas suppliers for *P. monodon* to facilitate the CAA-registered hatcheries and BMCs to import SPF shrimp broodstock/PPL from the empanelled suppliers.
- CAA is updating the details of the hatcheries/BMCs that have imported SPF shrimp broodstock/PPL on the CAA website (www.caa.gov.in) for the benefit of the farmers.

4.2.2.4 Technical monitoring of AQF operation

- The import of SPF *L. vannamei* and SPF *P. monodon* broodstock/PPL plays a crucial role in the sustainable development of coastal aquaculture in the country. The MPEDA-RGCA is operating the Aquatic Quarantine Facility (AQF) in Chennai with the Chennai Airport as a port of entry for the country. The CAA is technically monitoring the activities of AQF through a Technical Committee for quarantining of imported SPF broodstock/PPL seamlessly.
- The AQF ensures the supply of SPF shrimp broodstock/PPL to all the CAA-registered hatcheries and BMCs by the CAA empanelled overseas suppliers.
- The CAA issues annual allocation orders to the registered hatcheries based on their facilities and seed production capacities to import the SPF shrimp broodstock from the empanelled overseas suppliers.
- The details of SPF shrimp broodstock and Post Parental Larvae (PPL) imported during the year are furnished below:

S.No	Species	SPF shrimp brood stock imported Post (No's.)	Parental Larvae (PPL) imported (No's.)
1	SPF <i>L. vannamei</i>	1,63,377	4,51,009
2	SPF <i>P. monodon</i>	8,037	87,782
	Total	1,71,414	5,38,791



4.2.2.5 SURVEILLANCE AND ENVIRONMENTAL MONITORING

Environmental Monitoring is one of the key functions of the CAA and initiates action against violations to ensure that coastal aquaculture activities are not causing pollution to the environment. It will also help to ensure food safety by meeting the international standards. The CAA field staff regularly monitors coastal aquaculture farms and hatcheries and collects water and animal samples from the farms and hatcheries in the coastal districts.

- During the year 2024, the technical officers and consultants of CAA visited 7055 coastal aquaculture farms and hatcheries, collected 620 water samples and the samples were analysed in Government recognised labs.
- CAA officers and field staff have visited 443 hatcheries located in Andhra Pradesh and Tamil Nadu along with MPEDA officers and collected 95 samples under the NRCP Programme during the year 2024.

Farms/Hatcheries	s monitored	NRCP sampling		
No.of farms/	No. of samples	No.of hatcheries	No. of samples	
hatcheries monitored	collected	visited	collected	
7055	620	443	95	

4.2.2.6 NOTIFICATION OF THE CAA RULES, 2024

In tandem with the provisions and amendments made in the CAA (Amendment) Act, 2023, the Coastal Aquaculture Authority Rules, 2024, was notified on 08th January 2024 comprehensively with all provisions.

4.2.2.7 NOTIFICATION OF SEVEN NEW GUIDELINES

To regulate and promote sustainable coastal aquaculture activities in harmony with the coastal environment, the following seven Guidelines were notified by the Ministry:

- a) Guidelines for Regulating Coastal Aquaculture (S.O. 1496(E) dated 20.03.2024)
- b) Guidelines for Regulating Hatcheries and Farms for Seed Production and Culture of Specific Pathogen Free *L. vannamei*(S.O. 1457(E) dated 15.03.2024
- c) Guidelines for seed production and culture of Specific Pathogen Free *P. monodon* (S.O. 1429(E) dated 15.03.2024)

- d) Guidelines for the health monitoring, disease surveillance and specific pathogen free certification of coastal aquaculture units and stocks in India (S.O. 1479(E) dated 15.03.2024
- e) Guidelines for Certificate of Compliance for Aquaculture Inputs (S.O. 1456(E) dated 15.03.2024)
- f) Guidelines for establishment and operation of Nucleus Breeding Centre and Broodstock Multiplication Centres in India (S.O. 1459(E) dated 15.03.2024)
- g) Guidelines for Solid Waste Management in Coastal Aquaculture Units or Activities (S.O. 1458(E) dated 15.03.2024).

4.2.2.8 AMENDMENT TO THE PROVISIONS MADE IN CAA RULES, 2024

As per the provisions made in the CAA (Amendment) Act, 2023, the CAA has developed eleven new guidelines to cover all the verticals of coastal aquaculture under its ambit and submitted to the Ministry for notification. Accordingly, amendments have been made in

Rule 3 of the CAA Rules, 2024 vide G.S.R. 750(E) on 4th December 2024 duly incorporating the provisions for notification of the following eleven new guidelines:

- h) Guidelines for regulating hatcheries and farms for seed production and culture of crab;
- Guidelines for regulating hatcheries and farms for seed production and culture of marine finfishes;
- j) Guidelines for regulating hatcheries and farms for seed production and culture of indigenous shrimp species in marine and brackish water;
- Guidelines for regulating hatcheries and rearing units for marine/brackish water ornamental organisms;
- Guidelines for regulating seaweed seedling production and farming in marine and brackish water;
- m) Guidelines for regulating cage and pen culture of marine/brackish water aquaculture species;
- n) Guidelines for regulating live feed culture units and management in coastal aquaculture;
- O) Guidelines for regulating Bio-floc, Recirculatory Aquaculture Systems (RAS), and Nursery-based Aqua Farming Systems;
- p) Guidelines for notifying the aqua zones and aqua mapping;
- q) Guidelines for regulating seed production and farming of bivalves in marine and brackish water;
- r) Guidelines for assessment of cost for the damage to environment and cost of demolition and utilization of environment monitoring fund

4.2.2.9 DEVELOPMENT OF ONLINE APPLICATION FOR REGISTRATION OF COASTAL AQUACULTURE FARMS AND MARICULTURE UNITS

CAA has developed the online application for the registration of Coastal aquaculture farms and mariculture units in the public interest with the technical support of DPIIT-NSWS-Invest India, Ministry of Commerce and Industry, Govt. of India. The Hon'ble Union Minister for Fisheries, Animal Husbandry & Dairying, Government of India launched the Online Application for Registration of Coastal Aquaculture Farms on 21st November 2024 on the eve of "World Fisheries Day".

4.2.3 <u>AUTHORITY MEETINGS AND OTHER</u> TECHNICAL MEETINGS

4.2.3.1 CAA Authority meetings

Four Meetings (76th, 77th, 78th and 79th) of the Coastal Aquaculture Authority (CAA) with the members of the Authority under the chairmanship of Justice Amar Singh Chauhan, Chairperson, CAA were convened through video conferencing on 12.02.2024, 30.04.2024, 18.07.2024 and 21.10.2024 respectively.

4.2.3.2 Technical Expert Committee meeting on CAA Guideline

The Technical Expert Committee meeting was convened under the chairmanship of Joint Secretary (Marine Fisheries), Department of Fisheries, Govt. of India with technical committee members and discussed on 7 draft guidelines on 8thFebruary, 2024 through video conferencing. All the members after elaborate discussion have finalised the 7 CAA guidelines for notification by the Ministry.

4.2.3.3 Technical Expert Committee meeting on drafting of new CAA Guideline

The Technical Expert Committee meeting was convened under the chairmanship of Joint



Secretary (Marine Fisheries), Department of Fisheries, Govt. of India with technical committee members on drafting of 11 new guidelines of CAA on 7th May 2024, 3rd June 2024, 28th June 2024, 25th July 2024, 6th August 2024 through video conferencing. All the members after elaborate discussion have finalised the 11 new CAA guidelines for notification by the Ministry

4.2.3.4 Twenty fourth Meeting of Technical Committee to oversee and monitor the functioning of AQF

The twenty-fourth meeting of the Technical Committee (TC) to oversee and monitor the functioning of Aquatic Quarantine under the Chairmanship of the Secretary, CAA cum Chairperson, TC of AQF was held on 29th November 2024 through a hybrid mode with the representatives from ICAR-CIBA, MPEDA-RGCA, AQCS, NFDB, DOF, RGCA-AQF, AISHA and CAA.



4.2.3.5 Technical Expert Committee meeting on proposed amendments in CAA Guidelines

Joint Secretary (Marine Fisheries), DOF, Govt. of India convened Expert Committee meeting on proposed amendments in the guidelines of Certificate of Compliance for aquaculture inputs with all committee members on 9th December 2024 through video conferencing and gathered the technical inputs from the experts.

4.2.4 MAJOR EVENTS/PROGRAMMES

4.2.4.1 workshop on "Shrimp Crop Harvest"

The Director Technical with technical officer of CAA attended the workshop on "Shrimp Crop Harvest" convened by the Society for Aquaculture Professions (SAP) at Chennai on 6th January 2024.



During the workshop it was reviewed the region wise the shrimp production in India during the year 2023.

4.2.4.2 Aqua Goa Mega Fish Festival – 2024" organized by the Dept. of Fisheries, Govt. of Goa

The Director (Technical) participated in 7th Edition of the Aqua Goa Mega Fish Festival 2023-24 at Open Field Ground, SAG Campal, Panaji, Goa organized by the Dept. of Fisheries, Govt. of Goa and presented on "Status of Coastal Aquaculture in India and key highlight of the CAA (Amendment) Act, 2023 and CAA Rules, 2024" during the Aquaculture meet held on 4th February 2024.







Participation of the Director (Technical), CAA in Aqua Goa Mega Fish Festival, Goa

4.2.4.3 Matsya-PraneeSamavesh Odisha (MPSO)-2024 organized by the Department of Fisheries & Animal Resources Development (F&ARD), Govt. of Odisha

The Director (Technical) and staff of CAA participated in the state level fair 'Matsya-PraneeSamavash Odisha (MPSO)-2024' organized by the Department of Fisheries & Animal Resources Development (F&ARD), Govt. of Odisha at Janata Maiden, Bhubaneshwar from 16th to 18th February 2024. The Samavesh is organised with the theme of "multiplying farmer's income through fisheries and animal husbandry" and aims to create mass awareness and educate farmers of the state on scientific farming practices and adoption of modern technologies in the F&ARD sector for multiplying their income. The CAA established an exhibition stall explicating the CAA activities and achievements through posters in the venue of the event and distributed brochures to the visitors.

4.2.4.4 Visit of the US officials to CAA, AQF and shrimp farms

The US officials from USDA and APHIS visited Coastal Aquaculture Authority, Chennai from 06th

to 07th March 2024. During the visit, the US officials visited the Aquatic Quarantine Facility (AQF), Chennai for a complete understanding of the life cycle of exported larval shrimp from the USA to India

The US Team had stakeholder meetings on 6th March, 2024 in the CAA office. The delegates presented on topics such as Bio security issues, disease prevention, Animal Drug Regulation, AMR, Hatching facilities in the US and Exports from the US etc., and had a detailed discussion on the issues faced by the industry. The representatives of the Prawn Farmers Federation of India, All India Shrimp Hatcheries Association, Seafood Exporters Association and SAP, Director RGCA, Scientists from ICAR-CIBA and the Director (Technical) and staff of CAA attended the meeting.

The team visited shrimp farms located at Mudivarthi Village, VidavalurMandal, Nellore District, Andhra Pradesh on 7th March 2024 and had a detailed discussion with the farmer on the adoption of bio-security protocols and good aquaculture practices.





4.2.4.5 Workshop on Aquaculture Crop Insurance

The Director (Technical), CAA attended the workshop on Aquaculture Crop Insurance convened by CIBA with the representatives of the



Insurance Companies and Officers on 13.04.2024, 03.05.2024 and 24.10.2024 at CIBA, Chennai and presented on the status of coastal aquaculture in the country and the process of Registration and Renewals of Coastal Aquaculture farms.







4.2.4.6 Training programme for fisheries/insurance professionals

The Director (Technical), CAA attended the training programme organized with the fisheries/insurance professionals jointly by ICAR-CIBA & CIFE at Mumbai on 3rd May 2024 at ICAR-CIFE, Mumbai through video conferencing. The Director (Technical), CAA presented on CAA Activities & statutory provisions for registration and renewal of coastal aquaculture units.



4.2.4.8 Workshop on Preventive Vigilance

CAA Technical and administrative staff attended the "Workshop on Preventive Vigilance" at CIFNET, Chennai on 19th July 2024 convened by the Director (Vigilance & Administration), DOF, Govt. of India

4.2.4.9 3rd Shrimp Farmers Conclave in Kakdwip, West Bengal organised by the ICAR-CIBA with shrimp farmers

The Director (Technical), CAA participated in the 3rd Shrimp Farmers Conclave in Kakdwip, West



4.2.4.7 Fisheries Summer Meet-2023 organised on 12th July 2024 at Madurai, Tamil Nadu

The Director (Technical) and staff of CAA participated in the "Fisheries Summer Meet-2024" on 12th July 2024 at Madurai, Tamil Nadu organized by the Dept. of Fisheries, Govt. of India. The CAA established an exhibition stall explicating the CAA activities and achievements through posters in the venue of the event and



Bengal organised by the ICAR-CIBA with shrimp farmers on 10th August, 2024 and appraised on the process of registration of coastal farms, important amendments and provisions made in CAA (Amendment) Act, 2023, the CAA Rules, 2024 and Guidelines and present status of coastal aquaculture units registered with CAA in West Bengal State. Around 200 shrimp farmers, women groups, students, the scientific fraternity of ICAR-CIBA and CIFE, representatives of Insurance companies, and State Fisheries Officials attended the conclave.





4.2.4.10 Seminar on FDA Seafood Traceability by USFDA

USFDA officials and CAA jointly hosted the seminar on FDA Seafood Traceability on 26th August 2024 at CAA, Chennai through hybrid mode. FDA team made PowerPoint Presentations on Seafood Traceability, the International

Traceability Campaign, Seafood safety, etc., in the Office of CAA, Chennai. The representatives from CAA, FSSAI, MPEDA, EIC and Spices Board of India attended the meeting physically and other officers from various States/ Institutions participated through video conferencing.





4.2.4.11 Participation in Symposium on Australian Bio-security system under Canberra Fellowship Programme

Dr. P. Sankara Rao, Director (Technical), CAA participated in "Symposium on Australian National Bio-security" in Australia from 26th August to 30th August, 2024 sponsored by the Govt. of Australia under "Canberra Fellowship Programme". During the exposure visit, the delegates from India visited the Post Entry Quarantine Facility - their state-of-the-art

centralised quarantine facility in Melbourne for live animals and plants. Further participated in the Australian Bio-security Symposium at the Gold Coast, which is the apex forum for bio-security in their country and had an experience on a farm with world leading productivity levels in agriculture, dairy and aquaculture. In addition to these policy elements, the participants had an experience of the best of Australian culture and hospitality.







4.2.4.12 Stakeholder consultation on Fisheries Exports Promotion with Focus on Shrimp Farming and Export Value Addition

The Secretary, CAA and the Director (Technical) attended the "Stakeholders consultation on Fisheries Exports Promotion with Focus on Shrimp Farming and Export Value Addition" convened under the chairmanship of Hon'ble Union Minister for Fisheries, Animal Husbandry and Dairying with HODs of all coastal states and UTs and Hon'ble State Fisheries Ministers on 6th September 2024 in Visakhapatnam and the Secretary, CAA presented on "CAA Role in Regulating and Promoting Sustainable Shrimp Farming"

4.2.4.13 Inspection of Shrimp Evaluation Study Unit established by Rajiv Gandhi Centre for Aquaculture (RGCA)

The Director (Technical), CAA participated in an inspection of the Shrimp Evaluation Study Unit for Tiger shrimp of MPEDA-RGCA established under PMMSY for Research & Development Programme at Rajakkamangalarn, Kanyakumari District, Tamil Nadu along with other members of the Technical and Inspection Committee on 24th and 25th September 2024 which was led by the Director, ICAR-CIBA and submitted the inspection report to DoF.





4.2.2.15 Shrimp harvesting programme convened by ICAR-CIBA

The Director (Technical) and staff of CAA attended the shrimp harvesting programme at Mutukkadu on 8th October 2024 organised by ICAR-CIBA and attended a stakeholder meeting on Super –Intensive Precision & Natural Shrimp Farming (SIPNSF). The Hon'ble Union Minister of State Shri George Kurian, Deputy Director General, ICAR, Chairman, MPEDA, Chief Executive, NFDB, Director, ICAR-CIBA and other stakeholders attended the meeting. The Director (Technical), CAA presented the core functions of the CAA during the programme.

4.2.2.14 Workshop on Official Language

All CAA staff attended the "Workshop on Official Language" convened by Ms. Reshmi, AD (OL), DOF, Govt. of India at the CAA office, Chennai on 3rd October 2024







4.2.4.16 DG (SANTE) 2024-2027 – Audit of India for Fishery products

CAA officials participated in the technical, opening and closing meetings as a part of DG(SANTE) Mission 2024 of the European Union. CAA officials also participated in the audit of



farms located in Tamil Nadu and Gujarat states and undertaken by the Audit Team of European Union along with the officials from EIA, MPEDA and State officials from 11th to 22nd November 2024.



4.2.4.17 Celebration of World Fisheries Day 2024

The CAA staff participated in the World Fisheries Day, 2024 on 21st November 2024 at Sushma Swaraj Bhawan, Chanakyapuri, New Delhi organized by the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India. During the celebration, the NSWS-CAA online application for registration of coastal aquaculture farms was launched by the Hon'ble Union Minister for Fisheries, Animal Husbandry and Dairying, Govt. of India.

4.2.4.18 Inter Session Meeting of the Consultative Committee of the Ministry of Fisheries, Animal Husbandry and Dairying on "Value Addition in Fishery Products and Export Promotion

The Director (Technical), CAA attended the "Inter Session Meeting of the Consultative Committee of the Ministry of Fisheries, Animal Husbandry and Dairying on "Value Addition in Fishery Products and Export Promotion" chaired by the Hon'ble Union Minister for Fisheries, Animal Husbandry and Dairying, Govt. of India at Parliament House, Annexe Buildings, New Delhi on 13th December 2024



4.2.5 OUTREACH PROGRAMMES

a) The Stakeholders meeting at Vijayawada, Andhra Pradesh was organised by the Andhra Pradesh Prawn Farmers Federation and the Department of Fisheries, Govt. of Andhra Pradesh on 8th January 2024 and the Director, Technical, CAA enlightened on the registration of farms, hatcheries and certification aquaculture inputs and presented on the recent amendments of CAA Act and Rules to the participants.



b) The Shrimp Farmers Meet at Srikakulam, Andhra Pradesh was organised jointly by MPEDA, CAA and the Department of Fisheries, Govt. of Andhra Pradesh on 11th January 2024 and discussed the issues related to the Registration of farms, hatcheries and certification aquaculture inputs and the Director, Technical, CAA presented on the recent amendments of CAA Act and Rules to the participants.





c) The field-level awareness camps were conducted on the Registration and renewals of coastal aquaculture farms with farmers in Nagapattinam District, Tamil Nadu from 12.02.2024 to 14.02.2024. About 100 farmers from different districts and representatives from the MPEDA, NaCSA, and State Fisheries Department, students from Dr. J. Jayalalithaa University Tamil Nadu Fisheries University, Nagapattinam attended the program.



Awareness camp conducted with aquaculture farmers in Nagapattinam District, Tamil Nadu State



- **d)** The sensitization programme was conducted with officers of the State Fisheries Department, farmers, hatchery operators, aqua inputs manufacturers & Distributors of all coastal states and UTs on registration of coastal aquaculture farms, hatcheries and certification of aquaculture inputs on 20.02.2024 through hybrid mode. About 500 officers and stakeholders have participated in the programme.
- **e)**. The Director (Technical), CAA had participated in the training program on "Risk Management Survey and Loss Assessment in Shrimp Farming" organised by CIBA with representatives of Insurance Companies, field officers and stakeholders on 22.02.2024 and presented on "Present Status of Coastal Aquaculture Challenges and Way forward.
- f) The Director (Technical) and staff of CAA participated in the shrimp farmers and other stakeholders meeting at Ongole and Bapatla, Andhra Pradesh organized jointly by the Shrimp Farmer's Association and the Department of Fisheries on 1st March 2024. The Director CAA made a presentation on the key provisions made under the CAA (Amendment) Act, 2023 and CAA Rules, 2024 during the stakeholders meeting. About 500 stakeholders and officials from the Fisheries Department have participated in the programme.





- g) The Director (Technical) CAA along with Staff had attended a Consultative meeting convened with States/UTs under the Chairmanship of Secretary, Department of Fisheries, Govt. of India on the "Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana" (PMMKSSY): a Central Sector Subscheme under the Pradhan Mantri Matsya Sampada Yojana (PMMSY) on 11th March 2024 & 12th March 2024 through video conferencing.
- h) The Orientation programmes with SDLCs/DLCs members, State Fisheries Officers, Officials of MPEDA, Farmers and other Stakeholders of Odisha, Gujarat, Karnataka, Tamil Nadu, Andhra Pradesh, Puducherry, Goa, West Bengal and Kerala States were conducted on 02.04.2024, 21.05.2024, 22.05.2024, 06.06.2024, 18.06.2024, 20.06.2024, 24.06.2024, 05.07.2024 and 30.07.2024 respectively through Video Conferencing on recent amendments and provisions made under CAA (Amendment) Act, 2023, CAA Rules, 2024 & Guidelines and status of registration and renewal of registration of coastal aquaculture farms, hatcheries and certification of aquaculture inputs.
- i) The Director (Technical), CAA and STA attended the meeting convened with members of the Aquaculture Healthcare Products Manufacturers Association (AHMA) at Vijayawada on 13th June 2024 and sensitized on the mandatory requirement of Certification of Antibiotics free Aquaculture inputs and on recent amendments



made under CAA (Amendment) Act, 2023, CAA Rules, 2024 & Guidelines notified on the issuance of Certificate of Compliance to the Aquaculture Inputs. Officers from the Fisheries Department

and MPEDA also attended the meeting. During the meetings, the Director (Technical) presented.



j) The Director (Technical), CAA and STA attended the meeting convened with the members of the Aqua Inputs Dealers Association at Bhimavaram, Andhra Pradesh on 14th June 2024 and sensitised on the mandatory requirement of Certification of Antibiotics free Aquaculture inputs and on recent



amendments made under CAA (Amendment) Act, 2023, CAA Rules, 2024 & Guidelines notified on the issuance of Certificate of Compliance to the Aquaculture Inputs. Officers from the Fisheries Department and MPEDA, NaCSA also attended the meeting.



k) A demonstration session was conducted on the online application for registration of coastal aquaculture farms and mariculture units and given live demo on the process of application, work flows at each level to the officers of SDLCs, DLCs and other State Fisheries Officers through



hybrid mode in CAA office on 31st July 2024 and with Nodal Officers on 9th October 2024. The NSWS Team and around 120 officers from all coastal States/UTs participated in the session.







Demonstration on online application for registration of coastal aquaculture units

- **I)** CAA convened a VC meeting on "Supply of SPF *P. monodon* Broodstock to CAA registered hatcheries by the empanelled overseas suppliers and BMC operators" on 7th October 2024. The Director RGCA, Principal Scientist, ICAR-CIBA, Deputy Commissioner, DoF, representatives of Overseas suppliers, representatives of AISHA, hatchery operators, and representatives of the farmers' association attended the meeting through video conferencing.
- **m)** 2nd Demonstration Programme on Processing of online application for registration of coastal aquaculture farms to the Nodal officers of all coastal states and UTs conducted on 9th October 2024 at CAA Headquarters Chennai. Resource persons from NSWS and TCS demonstrated the online application to the participants, 13 Nodal officers from 6 coastal states and one UT, and 155 fisheries officers from all coastal States and UTs participated in the VC Programme.
- **n)** Stakeholders meeting with representatives of All India Shrimp Hatcheries Association and representatives of overseas suppliers of shrimp broodstock/PPL through video conferencing on 20th December 2024. During the meeting, the issues related to screening of emerging disease TPD in imported shrimp broodstock and PPL at AQF and country of origin by the overseas suppliers were discussed.
- o) The CAA staff with the Officers of MPEDA-NaCSA and Dept. of Fisheries participated in the Antimicrobial Resistance (AMR) Awareness week from 18th to 24th November, 2024 in Andhra Pradesh and Tamil Nadu and created awareness on the containment of Antimicrobial Resistance among shrimp aqua farmers, hatchery operators and other stakeholders.







p) The Director (Technical) and Senior Technical Assistant, CAA attended the "State Level Sensitisation Meeting on Registration and Renewals of Coastal Aquaculture Farms" in Office of the Commissioner of Fisheries, Cuttack, Odisha State convened by the Department of Fisheries, Odisha State with coastal Fisheries Officers, farmers and other stakeholders on 19.12.2024 under the chairmanship of the Director of

Fisheries, Odisha State. The Deputy Director, MPEDA, coastal fisheries officers, and farmers attended the meeting. The Director (Technical), CAA presented on the "Status of coastal aquaculture units registered with CAA and farms pending for renewals and key highlights of the CAA (Amendment) Act, 2023, CAA Rules, 2024 and notified Guidelines" during the meeting





q) The Director (Technical), CAA attended sensitisation programme convened with Aquaculture and hatchery technicians convened by MPEDA, NaCSA as a resource person and presented on key amendments of CAA (Amendment) Act, 2023, CAA Rules, 2024, CAA

Guidelines, adoption of bio-security protocols and good management practices convened in Kakinada, AP on 23.11.2024, Tamil Nadu on 25.11.2024, Bapatla, AP on 10.12.2024, Pondicherry on 16.12.2024 and Gujarat on 30.12.2024.

2.8. Details of Unspent Balances and Utilization Certificate (UC) in r/o Coastal Aquaculture Authority (Figures in Croress)

	As on 3	1 st March	n, 2024	As on 3⁴December, 2024			
Scheme Name	UC due upto 2023-24	UC not due	Unspent balance	UC due upto 2023-24	UC not due	Unspent balance	
1	2	3	4	5	6	7	
Coastal Aquaculture Authority	0	0	0	0	0	0	







Celebration of International Yoga Day in CAA





Observation of Vigilance Awareness Week in CAA









Participated in Special campaign, "Swachhata Hi Seva" in the Coastal Districts of Tamil Nadu and Andhra Pradesh



4.3 Central Institute of Coastal Engineering for Fishery (CICEF), Bengaluru

4.3.1 Introduction

Central Institute of Coastal Engineering for Fishery (CICEF), Bengaluru was established in January 1968 as Pre-investment Survey of Fishing Harbours (PISFH) by the Ministry of Agriculture, Government of India in collaboration with Food and Agriculture Organisation of the United Nations (FAO/UN). The primary objective of establishing the Institute was to carry out engineering and economic investigations and prepare techno-economic feasibility reports for the development of fishery harbours at suitable sites along the Indian coast to provide fishery harbour facilities to Mechanized Fishing Vessels

(MFVs). After the cessation of the FAO/UN assistance, the Institute received technical assistance in the form of equipment and expert consultancy services from Swedish International Development Agency (SIDA) for a period of 2 years from January 1974. In August 1983, it was renamed as Central Institute of Coastal Engineering for Fishery (CICEF). The technical expertise of the Institute was further developed in the subsequent years and from August 1983, the Institute is also catering to the requirements of Aquaculture Engineering for development of Coastal Aquaculture Farms along the Indian coast. The Institute received UNDP/FAO assistance in the form of equipment and consultants from 1986 to 1991 for the development of coastal aquaculture farms.



4.3.2 Organization

The Institute is headed by the Director and the total sanctioned strength of officers and staff is 47 that comprises of technical and administrative personnel. The break-up of the posts is as follows:

Cwann	Non-Plan					
Group	Technical	Non-Technical				
A	10	-				
B (Gazetted)	03	01				
B (Non-Gazetted)	09	02				
С	07	15				
Total	29	18				

The inter-disciplinary team comprises of Engineers and Economists who have specialized knowledge and vast on-field experience in conducting necessary pre-investment studies to identify sites for development of Fishery Harbours, Fish Landing Centres and Brackish water Shrimp Farms, and preparation of technoeconomic feasibility reports, detailed construction plans for the projects and other supporting facilities.



4.3.3 The Organization Chart of the Institute is as shown below:

	DIRECTOR - 1	
TECHNICAL	ECONOMICS	ADMINISTRATION
Deputy Director (CE) 4 Nos.	Deputy Director (ECO) - 1	Administrative Officer -1
Assistant Director (CE) 3 Nos.	Assistant Director (ECO) - 1	Accountant -1
Assistant Engineer (CE) 2 Nos.	Sr. Economic Investigator - 1	Stenographer - Grade I - 1 Grade II - 1
Junior Engineer 8 Nos.	Economic Investigator - 1	UDC Cum Storekeeper -1
Foreman 1 No.		Lower Division Clerk - 2
Driller 5 Nos.		Starr Car Driver Grade I-1, Grade I-1, ORD. Grade - 1
Field Assistant 1 No.		Multi Tasking Staff - 5

Organizational chart

4.3.4 Mandate

The Objectives of the Institute in respect to development of fishery harbours/fish landing centres and coastal aquaculture farms are as below:

To carry out reconnaissance surveys/prefeasibility studies to identify priority sites, follow it up by detailed engineering and economic investigations and prepare techno-economic feasibility reports.

To prepare preliminary construction plans and supporting facilities etc.

To give technical advice on engineering and economic aspects as required.

To monitor the progress of construction sanctioned under the Centrally Sponsored Scheme in association with the Ministry of Fisheries, Animal Husbandry and Dairying.

4.3.5 Achievements of the Institute

The Institute, till end of December, 2024 has carried out investigations at 104 sites and prepared project reports for 127 (including revised and modernisation plans) for the development of Fishery Harbours/Fish Landing Centres.

During UNDP/FAO assistance, four pilot brackish water shrimp farms and one shrimp seed hatchery were developed. Under the World Bank assisted Shrimp Culture Project, the Institute

carried out survey and sub-soil Investigations at 13 sites covering a total area of 9,640 ha. Technoeconomic feasibility reports were prepared in respect of 10 sites covering a total productive pond area of 3,826 ha. Trial culture operations were carried out at Digha, Canning and Dighirpar in West Bengal and Bhairavapalem in Andhra Pradesh.

4.3.6 Achievements during 2024-25

4.3.6.1 Pre-Feasibility Studies

- 1. Prepared and submitted Pre-Feasibility study report for following:
 - a. development of fishery harbour at Pudimadaka in Anakapalli district and Budagatlapalem in Srikakulam district of Andhra Pradesh.
 - b. development of fish landing centre at T R Pattinam (Pattinacherry) in Karaikal region of Puducherry.
 - c. development of fishery harbour using cost effective and environment friendly technology at of Andhra Pradesh
- 2. Prepared and submitted preliminary report on the development of fishery harbour at Point Pedro in Jaffna district of Sri Lanka for the comments and concurrence of all the stakeholders including Sri Lankan Government.

4.3.6.2 Guidelines/Concept note

- 1. Prepared and submitted a concept note on development of Smart and Integrated Fishing Harbour in India, an innovative approach to optimize operations, enhance sustainability and improve the welfare of coastal communities.
- 2. Prepared and submitted Detailed Project Report (DPR) Model Template for the development of Smart and Integrated Fishing Harbour (Greenfield Smart Ports and Augmentation of brownfield Fishing harbours).

4.3.6.3 Techno Economic Feasibility Report (TEFR)

Prepared and submitted the following Techno-Economic Feasibility Report (TEFR) for modernisation/ upgradation of fishing harbours including elements of smart, intelligent, blue ports, green ports etc. for 'smart and integrated fishing harbour'.

 Vanakbara fishing harbour in the UT Administration of DNH and Daman & Diu.

Expected outcome: Landing and related shore-based facilities to 248 mechanised fishing vessels comprising 51 numbers of 14.8 m Trawlers, 172 numbers of 20.0 m trawlers, 20 numbers of 24.5 m trawlers and 5 numbers of 18.0 m tuna long-liners. and

2. Karaikal Fishery Harbour Stage II in the UT of Puducherry.

Expected outcome: Landing and related shore-based facilities to 1,465 mechanised fishing vessels comprising 187 numbers of 14.0 m Trawlers, 1,276 numbers of 17.0 m trawlers and 2 numbers of 20.0 m tuna long-liners.

3. Chinnamuttom fishery harbour in Tamilnadu.

Expected outcome: Landing and related shore-based facilities to 374 mechanised fishing vessels comprising 50 numbers of 15.0 m long-liners, 204 numbers of 18.0 m trawlers and 100 numbers of 23.0 m trawlers and 20 numbers of 25.0 m trawlers.

4.3.6.4 Field Visits

1. Fishery harbour at Muthalapozhy in Thiruvananthapuram district of Kerala for the Vamanapuram river mouth problem along with HED engineers and CWPRS Scientists and suggested remedial measures. Proposed Smart and Integrated fishery harbour components for expansion of Muthalapozhy fishery harbour.







Field visit to existing fishery harbour at Muthalapozhy in Thiruvananthapuram district of Kerala

2. Kollamcode and Paruthiyoor sea-erosion sites in Thiruvananthapuram district of Kerala and suggested remedial measures.





Field visit to Kollamcode and Paruthiyoor sea-erosion sites in Thiruvananthapuram district of Kerala

Institute conducted *Swachchata Hi Seva* (SHS) from 17th September 2024 to 2nd October 2024 with the theme as *Swabhav Swatchchata*, *Sanskar Swatchchata* at the Institute premises and fishery harbours at Mangalore, Malpe in Karnataka.



Swachchata Hi Seva programme



SHS at outdoor SHS at Mangalore Fishery Harbour





4.4 Central Institute of Fisheries, Nautical & Engineering Training, (CIFNET)

4.4.1 Introduction

Indian fishery after independence has witnessed remarkable technological developments with due thrust and support from Central and State Governments. One of the revolutionary changes in this direction was the introduction of sophisticated deep sea fishing vessels, which necessitated a great demand for qualified and certificated personnel for manning them. Realizing the urgent need and importance of organizing suitable fisheries training system at the national level and to meet the demands of Fishing Industry, the Government of India established the Central Institute of Fisheries Nautical and Engineering Training – (CIFNET) in 1963 at Kochi to meet the statutory manning requirements of deep sea fishing vessels as laid down in the Merchant Shipping Act (1958) and to skill personnel required by the supporting shore installations. The institute was originally named Central Institute of Fisheries Operatives (CIFO) and started in the year 1963, it was later renamed as CIFNET in 1976. The Merchant Shipping (Amendment) Act 1987 stipulated that all fishing vessels with mechanical propulsion are required to be manned by duly certificated personnel, so that the diversification of fishing and development of deep-sea fisheries could be effectively implemented with adequate trained manpower capable of effectively handling the type and class of vessels. Subsequently, two units

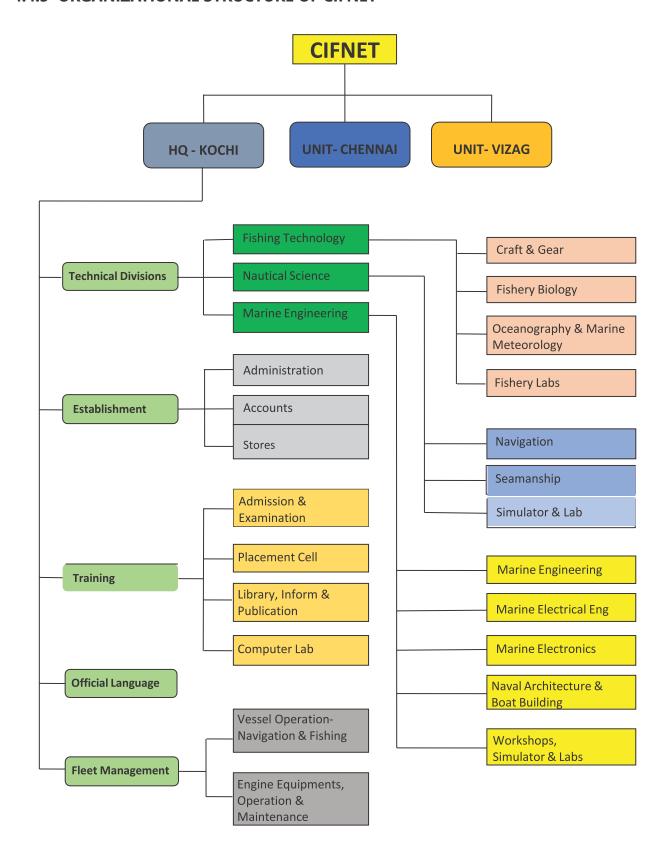
of the Institute were set up at Chennai in 1968 and at Visakhapatnam in 1981 to cater to the increased demands of trained manpower in the country.

4.4.2 Mandate

- To create technical manpower for the operation of ocean going /deep sea fishing vessels and to run infrastructure establishments
- ii) To create trained manpower to manage fishery establishment
- iii) To train the fishermen of the coastal states through capacity building training programme under Blue Revolution / Pradhan Mantri Matsya Sampada Yojana (PMMSY)
- iv) To provide training for technical teachers for manning the fishermen training centers attached to Maritime States and Union Territories
- To conduct studies on fishing craft, fishing gears and equipments and provide extensive training to accelerate advancement in fishing technology for enhancing productivity of fishermen and increasing marine fish production
- vi) To help developing nations in the South-East Asian, Middle East and African regions to create technical manpower for development of Marine Fisheries
- vii) To provide technical consultancy service in all matters with special reference to technical manpower requirements



4.4.3 ORGANIZATIONAL STRUCTURE OF CIFNET





The details of the CIFNET staff position functioning under all three centers are given in the table below.

CIFNET Staff strength, Sanctioned strength, filled and vacant posts as on 31st December 2024

Category of post	Sanctioned Strength	Posts filled	Total vacant
Group "A"	40	21	19
Gr."B"(G)	6	3	3
Gr."B"(N.Gaz)	66	28	38
Group "C"	167	87	80
Total	279	139	140

4.4.4 Courses offered by CIFNET

The Institute conducts various courses as stated below:

- I) Bachelor of Fisheries Science (Nautical Science) of 4-year duration, approved and affiliated by Cochin University of Science & Technology, Kochi recognized by UGC.
- ii) Two trade courses, Vessel Navigator Course (VNC) & Marine Fitter Course(MFC) of 2 years duration, approved by Ministry of Labour, affiliated to National Council for Vocational Training(NCVT).
- iii) Short term training programmes for fishermen of coastal states and UTs under PMMSY through outreach and in-house programmes.
- iv) Short term training programmes for Training of Trainers (TOT) of officials from sister

organizations, fisheries departments of the States Govt. & UTs and short-term course for Coast Guard officials and students from VHSS and professional colleges.

- v) Ancillary course Shore Mechanic Course (SMC) of 1 year duration for the sponsored candidates.
- vi) Statutory course namely Elementary fishing Technology course (EFTC), and Advanced Fishing Technology course (AFTC) conducted as per the demand. EFTC is mandatory for appearing for the Mate Fishing Vessel Examination for Non-CIFNET (Private) candidates. The Advanced Fishing Technology Course (AFTC) is mandatory for appearing for the Skipper Grade I & II Fishing Vessel Examination conducted by MMD.

Student's strength in Regular Courses of CIFNET as on December 2024

Training	Vessel Navigator Course(VNC)		Marine Fitter Course(MFC)		BFSc (NS)				- TOTAL
Centre	1 st year	2 nd	1 st	2 nd year	1 st	2 nd	3 rd	4 th	IOIAL
		year	year		year	year	year	year	
Kochi	20	18	20	16					74
					NIL	NIL	40	35	75
Chennai	20	19	20	19	-				78
Vizag	20	10	20	15	-				65
	60	47	60	50	NIL	NIL	40	35	292
TOTAL	107		110		75				

Training and Vessel Target and Achievements

The performance of CIFNET for the FY 2024-25 (upto December 2024) including training and operational parameters is furnished below.

Perfo	Performance of CIFNET 2024-2025 (December 2024)							
S.No	Parameters	Annual Target 2024-2025	Total Achievement up to December 2024					
I. Targ	get for Institution Training Programmes							
1	No. of students under Degree course – B.F.Sc. (NS)	75	75					
2	No. of students under Trade Courses (NCVT) Vessel Navigator Course/ Marine Fitter Course	240	217					
3	No. of students under Ancillary Course (Shore Mechanics Course) (As Per Demand)	20						
4	Statutory & Refresher Course (As Per Demand)	10	2					
II. Tar	get for Other Training Programmes	-						
5	Short Term training courses (STC)		1515					
(a)	Fishermen training(In house)		433					
(b)	Extension training for fishermen (Outreach)	1700	1045					
(c)	STC for officials(Coast Guard, Fisheries officials)		37					
(d)	Professional students/VHSS							
III. Ta	rget for fishery training vessels							
1	Days out at sea	400	31					
2	Fishing Days	320	25					
3	Fishing Effort(hrs)	1100	51.30					
4	Fishing Effort(Hooks)	3500						
5	Catch(Kg)	12000	28					
6	Institutional trainee Days	2500	310					
7	Post Institutional trainee days	3500	249					

The summary of short term training programmes of CIFNET (April-December 2024)

SI		Total no	TOTAL		
No	Training Programmes	Kochi	Chennai	Vizag	
1	Fishermen Training programmes (In house)	154	199	80	433
2	Fishermen Training programmes (Outreach)	500	465	80	1045
5	Course for Professionals of sister organisations	37			37
	TOTAL	691	664	160	1515

The Details of the short term courses conducted by CIFNET for the period from April 2024 to December 2024 is tabulated as shown below

SHORT TERM PROGRAMMES FOR GOVT.OFFICERS

SI No.	Short term / Extension course title	No. of participants	Sponsor	Period	Centre
1	Fisheries Technology Course for	12	Coast Guard	01.07.2024 to 05.07.2024	CIFNET
2	Assistant Commandants.	25	Commandants	16.12.24 to 20.12.24	Kochi

DETAILS OF SHORT TERM TRAINING PROGRAMMES FOR FISHERMEN UNDER PMMSY CONDUCTED BY CIFNET 2024-25 (upto Dec.2024)

SI	Short term / Extension	No. of		Period	Period					
No	course title	partici pants	Sponsor	From	То	Centre				
I. Sh	. Short term training for fishermen under PMMSY									
Kocł	ni									
1	Skill Development Training Programme under PMMSY on the subject "Basic of Seamanship, Navigation, Marine Electronic Equipments and Maintenance of Engines"	43 Fisherme n from Tamil Nadu		08.07.2024	10.07.2024	CIFNET,Kochi				
2	Skill Development Training programme under PMMSY on the subject "Basic of seamanship, Navigation, Marine Electronic Equipment & Maintenance of Engines"	62 No.sof fisherme n from Tamil Nadu		24.07.2024	26.07.2024	CIFNET,Kochi				
3	skill Development Training Programme under PMMSY on "Basic of Seamanship, Navigation, Marine Electronic Equipments & Maintenance of Engines"	49	Tamil Nadu fishermen	29.07.2024	31.07.2024	CIFNET,Kochi				
4	Skill Development training programme on"Life Saving and Fire fighting appliances & Electronic Equipments"	50	sponsored	23.07.2024	25.07.2024	Mangrol, Gujarat				
5	Skill Development training programme"Defect Rectification and maintenance of boat engines" was conducted	50	by NETFISH - MPEDA The programme was funded	23.07.2024	25.07.2024	Mangrol, Gujarat				
6	Skill Development training programme "Safety at Sea, Marine Electronic equipments, maintenance of engines"	100	by NFDB, Hyderabad	26.07.2024		Mangrol,Gujara t				
7	Skill Development extension training programme on the subject "Safety at Sea, Marine Electronic equipments, maintenance of engines"	100		27.07.2024		Satpati, Maharashtra				



SI	Short term / Extension	No. of		Period		
No	course title	partici pants	Sponsor	From	То	Centre
8	Skill Development training programme on the subject "Life Saving and Fire fighting appliances & Electronic Equipments"	50	sponsored by NETFISH -	29.07.2024	31.07.2024	Dhakti,Dahanu, Maharashtra
	Skill Development Training Programme on Lifesaving & Firefighting appliances & Electronic equipments	50	MPEDA funded by NFDB,Hyder	05.11.2024	07.11.2024	Karwar,Karnata ka
	Skill Development Training Programme on "Safety at sea, Marine Electronic Equipments Maintenance of Engines"	100	abad	08.11.2024		Karwar, Karnataka
	Total, Kochi	654				
Chei	l nnai					
1	"Communication and Navigational Equipments onboard Fishing Vessel" for fishermen	105		26-04-2024		Nettukuppam, Ennore, Tiruvallur District, Tamil Nadu Periyakuppam,
2	defects and troubleshooting of boat engines"	100		30.04.2024		Ennore Chennai
3	Three days Skill Development Training Programme (Inhouse) under PMMSY Scheme on "Defect Rectification & Maintenance of Boat Engine	52		01.05.2024	03.05.2024	CIFNET Unit,Chennai.
4	Three days Skill Development Training Programme (Inhouse) under PMMSY Scheme on "Defect Rectification & Maintenance of Boat Engine"	45		08.05.2024	10.05.2024	CIFNET Unit,Chennai
5	Three days Skill Development Training Programme (Inhouse) under PMMSY Scheme on "Defect Rectification & Maintenance of Boat Engine"	39		14.05.2024	16.05.2024	CIFNET Unit, Chennai
6	Three days Skill Development Training Programme (In house) under PMMSY Scheme on "Defect Rectification & Maintenance of Boat Engine"	16		20.05.2024	22.05.2024	CIFNET Unit, Chennai.
7	One day extension training programme(outreach/Awareness) under PMMSY sc heme on the topic "Communication and Navigational equipment's onboard fishing vessel"	100		27.05.2024		Puthupattinam, Chengalpattu, Tamil Nadu
	Three days Skill Development Training Programme (Inhouse) under PMMSY Scheme on "Basic of Seamanship, Navigation, Marine Electronic equipments & maintenance of engines	47		28-05-2024	30-05-2024	CIFNET Unit, Chennai
	Skill Development/Awareness Training Programme (Extension) under PMMSY Scheme on "Defect Rectification & Maintenance of Boat Engine"	50 fisherme n funded by NFDB		10.09.2024	12.09.2024	Puducherry
	"Defect Rectification and Maintenance of Boat Engine"	60		03.10.2024	05.10.2024	Puducherry



SI	Short term / Extension	No. of	_	Period		
No	course title	partici pants	Sponsor	From	То	Centre
	Skill Development Training programme under PMMSY scheme on "Defect Rectification and Maintenance of Boat Engine"	50	funded by NFDB, Hyderabad	10.12.2024	12.12.2024	at Karaikal
	Total - Chennai	664				
Viza	g			L	L	I
1	3 days skill development training programme under PMMSY on Communication and Navigation Equipments onboard fishing vessels was conducted for fishermen of at from to	40		20.05.2024	22.05.2024	CIFNET Unit, Vizag
2	3 days skill development training programme under PMMSY on "Maintenance of boat Engines and Fishing Practice"	40		27.05.2024	29.05.2024	CIFNET Unit, Vizag
3	"Defect Rectification and Maintenance of Boat Engine" under PMMSY;		40	08-08-24		Yanam

4.4.5 Glimpses of the Fishermen Training Programmes Conducted by CIFNET

One Day Extension Training Programme (Outreach/Awareness programme) under PMMSY Scheme on the topic "Communication and Navigational Equipments onboard Fishing Vessel" for 105 fishermen on 26-04-2024 at Nettukuppam, Ennore, Tiruvallur District, Tamil Nadu.





One day extension training programme under PMMSY on "defects and troubleshooting of boat engines" for 100 fishermen at Periyakuppam, Ennore Chennai on 30.04.2024





Skill Development Training Programme (Inhouse) under PMMSY Scheme on "Defect Rectification & Maintenance of Boat Engine" was conducted with 52 fishermen from 01.05.2024 to 03.05.2024 at CIFNET Unit, Chennai.







3 days skill development training programme under PMMSY on Communication and Navigation Equipments onboard fishing vessels was conducted for 40 fishermen of Visakhapatnam, Andhra Pradesh at CIFNET Unit, Vizag from 20.05.2024 to 22.05.2024



One day extension training programme(outreach/Awareness) under PMMSY scheme on the topic "Communication and Navigational equipment's onboard fishing vessel" was conducted for 100 fishermen at Puthupattinam, Chengalpattu, Tamil Nadu on 27.05.2024









3 days skill development training programme under PMMSY on "Maintenance of boat Engines and Fishing Practice" was conducted for 40 fishermen of Visakhapatnam, Andhra Pradesh at CIFNET Unit, Vizag from 27.05.2024 to 29.05.2024



43 No.s of Fishermen from Tamil Nadu have undergone Skill Development Training Programme under PMMSY on the subject "Basic of Seamanship, Navigation, Marine Electronic Equipments and Maintenance of Engines" for the period from 08.07.2024 to 10.07.2024 at CIFNET, Kochi.







49 No.s of Fishermen from Tamil Nadu have undergone the skill Development Training Programme under PMMSY on the subject "Basic of Seamanship, Navigation, Marine Electronic Equipments & Maintenance of Engines" for the period from 29.07.2024 to 31.07.2024 at CIFNET, Kochi





Skill Development Training programme under PMMSY on the subject "Basic of seamanship, Navigation, Marine Electronic Equipment & Maintenance of Engines" for the period from 24.07.2024 to 26.07.2024 at CIFNET, Kochi. 62 Fishermen from Tamil Nadu participated in the training programme.





CIFNET conducted fishermen extension training programme at Mangrol, Gujarat







Skill Development extension training programme on the subject" Safety at Sea, Marine Electronic equipments, maintenance of engines" was conducted on 27.07.2024 at Satpati, Maharashtra for 100 fishermen





The Fisheries Technology Course for the Assistant Commandants of Indian Coast Guard was commenced at CIFNET, Kochi on 01.07.2024







4.4.6 Other Events held at CIFNET

4.4.6.1 Programmes organized by CIFNET

a) CIFNET conducted Matsya Sampada Jakrukta Abhiyan"

As per Ministry's instructions CIFNET organized, the "Matsya Sampada Jakrukta Abhiyan" on the 3rd anniversary of Pradhan Mantri Matsya Sampada Yojna (PMMSY), an outreach programme to enhance production across India and ensure 'last-mile connectivity.' CIFNET has

organised the programme on 23.01.2024 at CIFNET, Kochi, Chennai and Vizag. The programme was conducted for the fishermen stakeholders, fishery officials, students and public. In connection with this the 3 centres have organized various programmes including conduct of Workshops on PMMSY for the fishermen and other stakeholders, open house of the Institute, blood donation camps, release of books and reports







Inauguration of One day Workshop on "Registration, Survey and Certification of fishing vessels" and Launching of revamped CIFNET's website was done by Sh. George Kurian, Hon'ble MoS, FAHD & Minority affairs, Gol. The programme was presided over by Smt. Neetu Kumari Prasad, IAS, Joint Secretary (Marine Fisheries), GOI.





The one day workshop on "Registration, Survey and Certification of fishing vessels" was organized by Department of Fisheries, Govt of India with support of DG Shipping was conducted at CIFNET Kochi on 8.11.24. Following the inaugural session, technical session of the workshop commenced with presentations by experts from Directorate General of Shipping, Indian Register of Shipping, Shipping Corporation of India and representatives of State and Central Fisheries Research Institutions.





c) Training of Trainers on "Seaweed cultivation and Pearl Culture"

As per the instruction of Ministry, CIFNET has proposed to conduct skill Development Training Programme under PMMSY scheme on the subject" Seaweed cultivation and Pearl Culture" for the fishermen across the coastal states. In this regard 11 Nos of Officers and faculties from



- d) VNC student awarded merit certificate by Tamil Nadu Chief Minister The Vessel Navigator Trainee, Shri Stivin Loyd of Chennai CIFNET unit was invited to receive All India Topper Merit Certificate from Hon'ble Tamil Nadu Chief Minister Mr. M.K. Stalin
- e) The faculties, staff and students of CIFNET actively participated in the National Maritime Day Celebrations programmes organized at CIFNET, Kochi during the month The faculties,



CIFNET attended a Trainers Training Programme (TOT) at CSMCRI, Marine Algae Research Station, Mandapam, Tamil Nadu from 24.06.2024 to 26.06.2024 so that the fishing technology faculty members can be able to conduct theory and practical classes and Marine Engineering faculty members can understand the design and maintenance of cage.



staff and students of CIFNET participated in the Walkathon organized in connection with the National Maritime Day Celebrations at Kochi on 02.04.2024. At CIFNET, Kochi, a blood donation camp was organized by NMDCC, Kochi at CIFNET, Kochi on 03.04.2024 .Faculties and students of CIFNET and the students from above mentioned organizations donated blood. A <u>Painting Competition</u> for <u>School children</u> was conducted at CIFNET Kochi on 01.04.24



f) Official language Technical seminar conducted at CIFNET

An official language Technical seminar was conducted at CIFNET, HQ, Kochi on 27.03.20204. During the seminar Smt. Anitha HariGanesh, Asst. Director, Hindi Teaching Scheme, Kochi delivered lecture on "Hindi as Link language" and Sh.Kiran Auyyar.V,Jr.Translation Officer, Customs, Kochi gave a talk with PPT on "Adopting Hindi through Technology". The programme was presided over by Sh. M. Habibullah, Director, CIFNET



h) CIFNET Cultural Programme-2024 was celebrated on 25.03.2024 at CIFNET, Kochi. The students of Kochi,Chennai and Visakhapatnam presented various cultural events as part of the

g) All India CIFNET HeatsAthletic Meet was conducted at SH College Ground, Ernakulam on 24.03.2024. Sh. M. Habibullah, Director, CIFNET inaugurated the Sports Meet. CIFNET conducted and Selection trials for track and Field events between Kochi & Vizag units (Trade Course students) And also competitions were held between the BFSC 2nd,3rd and 4th year students. The overall Champion ship (MFC/VNC) was won by CIFNET, Kochi. The overall championship of BFSc was won by the BFSc 2nd year.



competitions. In the BFSC category, BFSC.3rd year has won the Trophy for best performance. In the VNC/MFC Category, the CIFNET,Kochi has won the best performance award







4.4.6.2 PARTICIPATION OF CIFNET IN GOVERNMENT PROGRAMMES

a) Vigilance Awareness Week 2024 Campaign

All the staff of CIFNET took the Vigilance pledge during the Vigilance Awareness Week, Several capacity Building Training programme on the topic Preventive Vigilance was organised. Workshops and Classes were also arranged. Essay competition, Elocution competition and Drawing Competitions were arranged among the students promoting integrity and a corruption-free environment. A <u>Walkathon</u> with the display of Anti-corruption placards and banner was conducted by CIFNET in which all the Employees and students of CIFNET participated





b) Swachhata Hi Seva 2024 Campaign at CIFNET

CIFNET has conducted Swachhata Hi Seva 2024 and Special Campaign 4.O at CIFNET during the month of Sept.2024 and October 2024. During the Campaign the office campus, nearby public roads, beaches were cleaned by the staff and students. Disposal of unserviceable items was conducted ,Scrap items were identified and

removed, weeding out of files were carried out. Various competitions for students as part of the theme were conducted like Quiz, competition, Elocution competition, Drawing competition etc. seminar (workshop) in connection with SHS 2024 were arranged.Walathons were conducted at all the centres of CIFNET. The phase II Campaign is scheduled on all days during the month of October 2024





Beach Cleaning campaign





Cleaning the office premises



Walkathon



Files weed out



Walkathon

c) International Yoga Day Celebration at CIFNET

As per the instructions received from Ministry, a fortnight long programmes were organized as a part of the International Yoga Day 2024 at all the three centres of CIFNET during June 2024

d) World Environment Day was celebrated at CIFNET on 05.06.2024

At CIFNET HQ, Kochi, Dr Bijoy Nandan, former VC, Kannur University, Inaugurated the various programmes on 05/06/2024. As part of the celebration PPT presentation on environmentally related topics like endangered species and mangroves were conducted for the VNC/MFC students. Apart from this Dr. Vipin PM, I(FT) imparted classes to officers and staff members on the topics "Micro-plastic pollution in various fish species at Mangrove forest regions" and "Life Cycle Assessment of carbon during commercial trawling operations". At CIFNET Chennai unit, in this regard, PPT presentation programme, sapling



plantation and beach cleaning at Kashimedu beach were conducted unit World Environment Day was celebrated at CIFNET Visakhapatnam unit also. As part of the celebration, seminar presentation, sapling of plantation and a walkathon were conducted at CIFNET, Visakhapatnam unit

e) Plant 4 mother campaign by CIFNET

As a part of global campaign for "Plant 4 mother" during the period from September 2024 to March 2025, CIFNET inaugurated the campaign with planting of saplings on 17.10.2024 by Sh. M. Habibullah, Director and Smt. Veenadevi K R, Asst. Conservator of Forests, Central Region. An awareness talk by the Chief Guest on "Importance of Conservation of Forest and Environment"

f) Observance of Rashtriya Ekta Diwas was held at CIFNET Kochi on 31.10.24. Director Sh. M. Habibullah, administered the pledge, which was followed by all officers, staff &Trainees. Thereafter floral tributes were paid to the Iron man of India Sh. Sardar Vallabhbhai Patel. On the occasion of Rashtriya Ekta Diwas, pledge was taken by all officers, staff and trainees of CIFNET-Unit, Chennai followed by tribute to Sardar Vallabhbhai Patel by offering garland and organized Walkathon for Unity

g) National Space Day Celebrated at CIFNET

As per the instructions of the Ministry CIFNET Unit, Visakhapatnam in association with Directorate of Fisheries, Government of Odisha celebrated the "National SpaceDay-2024" on 06.08.2024 at the Fishing Harbour, Paradeep by organising a conceptual workshop entitled "Application of space technology in fisheries sector". Shri Hrusikesh Bisoyi, Deputy Director, (CIFNET) Unit, Visakhapatnam presided the workshop. Shri Subhash Bhalse, Instructor (Electronics) and Shri Rijesh Parakkal, Bosun from CIFNET, Visakhapatnam, Fishermen

Representatives, Fishing Vessel Owners, Sagar Mitras participated and graced the event. The inaugural session was followed by technical sessions and demonstration of the role of Indian Space Research Organization (ISRO) in fishing vessel communication and navigation equipment and its functions was explained to the fishermen. Lecture on COM-NAV system for Marine domain and Demonstration, Maritime traffic monitoring system, SAGARMITRA - A network to support Emergency messaging system for Fishermen. The Deputy Director, CIFNET, Visakhapatnam has explained about the Potential Fishing Zone through Remote Sensing system. The program was attended by around 400 participants like Fishermen, boat owners, Sagarmitras etc. The Transponder demonstration was conducted onboard the vessel. Om Basudev

In connection with national space day ISRO is organizing celebrations throughout the country during the month of August with participation of various educational institute. In this connection CIFNET HQ, Kochi conducted a painting competition on 05.08.24 for MFC/VNC/BFSc(NS) students All the trainees and faculties of CIFNET Unit Chennai have attended the Seminar and demonstration on the Applications of Space Technology in Fisheries Sector, Pre activities of National Space Day celebration- 2024 through online. The programme was organized by Fishery Survey of India, Department of Fisheries, MAHD&Fy, Chennai in collaboration with Department of Fisheries, Govt of Tamil Nadu at Chennai on 07.08.24 .As part of the National Space Day Celebrations, to commemorate the success of Chandrayan -3, all the staff and students of CIFNET attended the programme via online mode on 13.08.2024. Shri. Rajeev Ranjan Singh, Hon'ble Union Minister, MOFAH&D, Govt. of India was the Chief Guest of the programme 2024



4.5 FISHERY SURVEY OF INDIA

4.5.1 Introduction

The Fishery Survey of India is responsible for the survey and assessment of marine fishery resources of the Indian EEZ with its headquarters in Mumbai. The FSI has six operational Bases at Mumbai, Mormugao and Kochi along the West Coast, Chennai and Visakhapatnam along the East Coast and Port Blair in the Andaman & Nicobar Islands. A total of 11 ocean ongoing survey vessels were deployed for fisheries resources survey and monitoring. Besides the resources surveys, the FSI monitors the fishery resources for the purpose of regulation and management, makes an assessment of the suitability of different types of craft and gear for deep-sea and oceanic fishing, imparts in-vessel training to CIFNET trainees, disseminates information on fishery resources through various media to the fishing community, industry, other end users, etc. The survey fleet of the institute undertakes bottom trawl surveys, midwater/columnar resources surveys and long-line surveys for demersal, columnar and oceanic tunas/oceanic sharks respectively.

4.5.2 Mandate

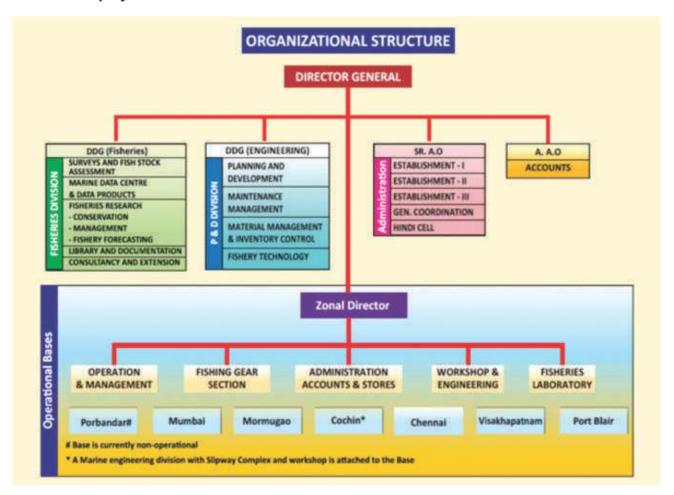
The mandate of the Institute is tuned from time to time to match the developmental activities of the fisheries sector as well as to meet national and global requirements. The mandate of the institute is given below:

 Exploratory surveys, charting of fishing grounds, assessment of fish stocks in the Indian EEZ and adjoining high seas and research thereof, besides the specific surveys on request from the States and the Union Territories.

- Data collection and periodic re-validation of the potential of fishery resources to provide advice on Fishery management issues enshrined in the national, regional and global conventions and agreements and other associated activities.
- Monitoring survey of fishery resources in the exploited areas including coral reefs, application of Monitoring, Control and Surveillance (MCS) for regulating fishing activities and promoting the Code of Conduct for Responsible Fisheries (CCRF) in the Indian EEZ.
- Maintain Data Bank and disseminate information on fishery resources to the endusers and act as an interface between the State/UTs and the Ministry of Fisheries, AH &D Agriculture and Farmers' Welfare, Government of India for Marine and Inland fish production and related aspects.
- Assessment of suitability of fishing gear, accessories and equipment with special reference to the preservation of the environment and ecology of marine habitat.
- Fish stock identification and biodiversity studies including application of genetic tools and techniques.
- Marine Fisheries forecasting including the application of Remote Sensing for the benefit of Artisanal, Mechanized and Industrial sectors.
- Human Resources Development through the practical training of fishing operatives, fishermen, fisheries officials and students.



4.5.3 Organogram/ Organizational Chart of the Institute, along with the Detailed Write-up on the Total Employees of the Institute



4.5.4 Staff strength (up to December, 2024)

Group	Category	Sanctioned posts	Filled Posts	Vacant Posts
A	Scientific	24	10	14
	Technical	16	12	4
	Administrative	1	0	1
В	Scientific	29	20	9
	Technical	35	21	14
	Administrative	28	21	7
	Floating	89	25	64
С	Scientific	1	0	1
	Technical	158	61	97
	Administrative	117	64	53
	Floating	184	37	147
	Total	682	271	411



4.5.5 Major Initiatives and Achievements during the year against the targets

4.5.5.1 Target and Achievements of Survey Vessels

During 2024-25 (up to December 2024) except for Matsya Darshini, the remaining vessels are awaiting for their drydocking repairs against their target. The target achieved by Matsya Darshini is days out at sea 100, fishing days 78, efforts (Hrs.) of bottom trawling 136.5 and 274 Hrs of Mammals survey.

4.5.5.2 Expenditure

Expenditure incurred in 2024-25 up to December 2024 is ₹ 36.63 Crore

4.5.5.3 Meetings

The half-yearly Review meeting of Operational and Scientific Activities (ROSA) of FSI for the year 2024-25 was held from 25-26th November 2024 at Mumbai, FSI, (HQs.) under the Chairmanship of Dr. Sreenath K. R., Director General, FSI. Officers from the headquarters and Base in-charges along with engineers from all bases participated in the meeting.



Half-yearly review meeting of Operational and Scientific Activities of FSI held on 25-26 November 2024 at Mumbai, FSI, (HQs.)

4.5.6 Workshop/ Open-house/ Seminars conducted during the year

As part of the extension activities, Bases of FSI conducted 17 Regional Workshops / Open House during the year. A total of 763 participants

including fishermen, school/college students and state officials attended the workshop. 4401 visitors benefited from the open house conducted onboard the survey vessels and office premises.





Mumbai Base conducted an open House onboard "Matsya Vrushti" in Mumbai on 28.11.2024



Mormugao Base conducted a workshop at Kasaba, Kasargod, Kerala on 26.09.2024



Workshop on 'Impacts of Marine Pollution' held on 05.06.2024 at GRFTHSS and VHSE, Thevara, Ernakulam



An open house and marine exhibition at the FSI Cochin Base office was held on 08.11. 2024



Visakhapatnam Base conducted OPEN HOUSE onboard "Matsya Shikari" & "Matsya Darshini" on 27.09.2024



Port Blair base conducted an Interactive Workshop for the students of Pondicherry University on 16.10.2024



4.5.7 Awareness program on "Marine Plastic Litter"

Fishery Survey of India and its Bases conducted an awareness program on "Marine Plastic Litter" for the local fishermen and students through campaigns, rallies and beach cleaning. FSI (HQs.) and Base offices carried out **51** different awareness campaigns in a sequel which in turn reached up to **5042** beneficiaries.



Mumbai Base organized an awareness program on **Sea based** Marine Plastic Litter (SBMPL) on 5th June 2024



Chennai Base organized a workshop on "Marine Plastic Litter" at Thengaithittu, Puducherry, on 13.11.2024



Visakhapatnam Base organized a workshop on "Marine Plastic Litter" at Visakhapatnam on 30.05.2024



Awareness Programme on "Marine Plastic Litter at Haddo, Port Blair on 20.06.2024

4.5.8 Marine Mammal stock assessment in India

FSI has undertaken Project "Marine Mammal Stock Assessment in India" under the central sector scheme component of the Pradhan Mantri Matsya Smapada Yojana (PMMSY) in collaboration with ICAR-CIFT (Central Institute of Fishing Technology) & MPEDA-NETFI SH (Marine

Fisheries Research Institute and Marine Product Export Development Authority).

Vessel MFV Matsya Darshini of Visakhapatnam Base of FSI had undertaken the marine mammal stock assessment survey on the Andhra Pradesh and Odisha coasts. During the survey operation, a total of 1967 spinner dolphins and Indo-Pacific bottlenose were recorded.



a) Sighting of Black-headed Gull (*Chroicocephalus ridibundus*) on the upper East Coast of India

During the Marine Mammal Survey conducted by the Fishery Survey of India, Visakhapatnam, the departmental survey vessel MFV Matsya Darshini was deployed on the Odisha coast in April 2024. During the survey, numerous migratory birds were observed in coastal and deeper waters. The species Black-headed gull, *Chroicocephalus ridibundus* (Linnaeus, 1766) was observed in flocks resting on the water surface or chasing

after the prey (shoals of fishes).

b) Garbage disposal on board MFV Matsya Darshini during the April 2024 voyage

During the Marine Mammal Survey from 08th April to 27th April 2024, the waste accumulated from the operation of the vessel at sea i.e. plastic bottles, buckets, polythene bags, cardboard boxes etc. were collected. After completion of the voyage, the litters were handed over to Greater Visakhapatnam Municipal Corporation (GVMC).





c) Retrieval of marine litter in the offshore waters of Bheemunipatnam and off Pudimadaka, Off Kalingapatnam Andhra Pradesh

The departmental survey vessel MFV Matsya Darshini was deployed for the Marine Mammal Survey on the Andhra Pradesh coast. During May 2024 and June 2024, marine litter was retrieved in

the offshore waters of Bheemunipatnam, off Pudimadaka and off Visakhapatnam, Andhra Pradesh at depths of 54m, and 2480m. It was a one thousand litre capacity marine diesel engine oil tank with a metal grill. On arrival of the vessel at shore, the retrieved material was handed over to the Greater Visakhapatnam Municipal Corporation (GVMC) for disposal.







d) Exploratory Fishery Resources Survey indicates a good catch rate in the Andhra Pradesh coast post uniform fishing ban period

The survey vessel MFV Matsya Darshini of FSI, Visakhapatnam was deployed during June 2024 to study the distribution, abundance and biology of Fishery Resources post-uniform fishing ban period along the Andhra Pradesh coast. On 10th June 2024, in the area Lat. 17°48'N / Long. 83°34'E (South off Bheemunipatnam) at a depth of 46 M,

218 kg of fish catch was recorded in a single haul (90 minutes net dragging time). The catch comprised of Pony fishes, Ribbonfish, Barracudas, Squids, Croakers, Grunts, Goatfishes *etc*. The fishing ground is 7 to 8 miles away from shore and the local fishers can venture to the above ground to harvest these resources. The initial survey during the post-ban period is indicative of a good catch rate at the Andhra Pradesh coast





e) New Record of parasitic isopod *Argathona sp.* (Stebbing, 1905) from *Nemipterus japonicus* (Bloch, 1791) in the Andhra Pradesh waters

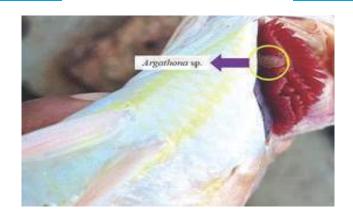
During the bottom trawl operation, onboard the vessel MFV Matsya Darshini of Visakhapatnam Base of Fishery Survey of India in the area Lat. 18°00.3'N, Long. 83°59.2'E (South off Srikakulam, Andhra Pradesh) and at a depth of 52 M, the

isopod parasite *Argathona* sp. (Stebbing, 1905) was found infesting *Nemipterus japonicus* (Bloch, 1791) commonly known as Japanese threadfin bream. The parasite was found infesting the gill rakers of the host. The length of the parasite was 10 mm and the width was 4 mm. The present observation is the new record for the genus *Argathona* from *Nemipterus japonicas* in the Andhra Pradesh waters.



Nemipterus japonicus (Bloch, 1791)









4.5.9 Educational Tourism

The Newly renovated **Marine Museum** attached to the Visakhapatnam Base is included in the Educational Tourism, by the District Tourism & Culture Office, Regional Tourist Visakhapatnam

4.5.10 Publication

Visakhapatnam Zonal Base offices of FSI published Resource Information Series (RIS) Vol. XXVIII No. 04 and Vol. XXIX No. 01&02 in trilingual (*i.e.* Telugu, Hindi & English) for the quarter January - March 2024 was published on **07.05.2024 and 23.08.2024**

4.5.11 Internship Training Programme

Fishery Survey of India conducts the internship training programme for College students for their part of the educational curriculum. A total of 81 Degree and Postgraduate students from different colleges from Tamil Nadu, Lakshadweep Island and Kerala state took part in the internship training programme. Scientists and Engineers from Chennai and Cochin Base trained them on various methods of fishery biology, fish taxonomy, stock assessment, Fishing gear materials etc.

4.5.12 Gap Analysis Study Visit Aspirational Districts:

As per the directives of Dept. of Fisheries, MoF, AH&D, FSI officials in 6 groups were deputed on tour to Aspirational Districts of **Gujarat** and

Maharashtra to access the efforts carried out under PMMSY, FIDC, KCC and to find out the GAP analysis in the districts during **07**th **-20**th **October 2024**.

4.5.13 Dissemination of Information

Visakhapatanam and Mumbai Base of FSI disseminated the information on rich fishing grounds to the end users (fishers) through All India Radio, Visakhapatan and Akashwani, Mumbai.

Shri. Ashok S. Kadam, Senior Fisheries Scientist gave an interview to Akashvani Mumbai on the theme subject "Marine Plastic Litter" and "Management and Importance of Artificial Reef" "Marine Plastic Litter" and Shri D. Bhami Reddy, Mechanical Marine Engineer gave a talk on "Sea Based Marine Plastic Litter (SB-MPL) / Abandoned Lost Discarded Fishing Gear (ALDFG) under Glo-litter project" at All India Radio (AIR), Visakhapatnam.

4.5.14 Skill Development

13 candidates sponsored by CIFNET were posted as Fitter (Workshop) and In-vessel trainee on a tenure basis on deck side and engine side onboard MFV *Matsya Varshini* and MFV *Lavanika*

4.5.15 Visit of Dignitaries

 Smt. Neetu Kumari Prasad, IAS, Joint Secretary (Marine) along with the Ministry officials visited Port Blair Base of



Fishery Survey of India to discuss mainly on Tuna cluster and the role of FSI in the development of the fisheries sector in A & N Islands on 12.11.2024 in connection with the visit of Secretary (Fisheries) to review the base activities on 13.11.2024.

- Dr Abhilaksh Likhi, IAS, Hon'ble Secretary to the Govt. of India, Department of Fisheries, Ministry of Fisheries, AH & D visited Port Blair Base of Fishery Survey of India to discuss on Tuna cluster and the role of FSI in the development of the fisheries sector in A & N Islands on 13.11.2024. He also visited to Junglighat Fish landing centre, where he interacted with the Boat owners' associations and local fishermen about the fishing vessel and infrastructure facilities available at the fish landing centre. Thereafter, he visited the departmental vessel MFV Blue Marlin berthed at Junglighat repair jetty.
- Adv. George Kurian, Hon'ble Minister of State for Fisheries, Animal Husbandry and Dairying, visited the Fishery Survey of India (FSI) in Kochi on September 26, 2024, During his visit, he released three new publications: Treasures of the Deep: An Atlas of India's Major Fishery Resources and

- Fishing Grounds, Atlas of Marine Mammals of India, and Hindi Atlas of Deep-Sea Fishery Resources of the Southwest Coast of India,
- Hon'ble Minister of State Adv. George Kurian, Dept. of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, New Delhi visited FSI, Mormugao Base on 27.12.2024
- Shri Binod Kumar, Chief Controller of Accounts (CCA), M/o Agriculture and Farmers Welfare, Ministry of Fisheries, AH & D, New Delhi visited this Base on 12.04.2024.
- Smt. V. Shilpa, Joint Director and Shri A. S.
 Chaitanya, Deputy Director,
 Visakhapatnam Metropolitan Region
 Development Authority (VMRDA) visited
 Visakhapatnam Base on 29.08.2024
- Shri Sagar Mehra, Joint Secretary (Inland Fisheries & Administration) Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, New Delhi visited Visakhapatnam Base on 06.09.2024
- Hon'ble Justice Shri Rangaswamy Nataraj, Karnataka High Court, Bangalore. visited Visakhapatnam Base on 31.12.2024



Adv. George Kurian, Hon'ble Minister of State for Fisheries, Animal Husbandry and Dairying, released three new publications in Kochi Base on September 26, 2024



Shri Sagar Mehra, Joint Secretary (Inland Fisheries & Administration) Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying visited Visakhapatnam Base on 06.09.2024





Dr. Abhilaksh Likhi, IAS, Secretary, Ministry of Fisheries, AH&D discuss on Tuna cluster and the role of FSI in the development of the fisheries sector in A & N Islands on 13.11.2024.



Dr Abhilaksh Likhi, IAS, <u>Secretary</u>, Ministry of Fisheries, Animal Husbandry & Dairying (<u>MFAH</u>&D), visited FSI Vessel MFV Blue Marlin on 13.11.2024

4.5.16 Students visit to the Bases and Vessels

 A total of 2367 students along with faculty of different colleges and Institutes visited the different bases of the Fishery Survey of India during the year under report. They demonstrated various operational methodologies and navigational/sea safety equipment, fishing gears & accessories etc. Also, they were briefed about the Fishery Survey of India, its function, mandate and Extension Activities achievements.

4.5.17 Participation in Trade Fair/Exhibition

Fishery Survey of India participated in the following national exhibition and trade fair. During the exhibition various types of fishing boats, gears, charts on survey activities, survey fleet, fishing methods, fishery resources etc. These exhibitions benefitted various stakeholders, students and the general public

Sn	Bases	Events	Place and Date
1	Mumbai	Participated in the 14 th National Exhibition and Conference	Muzaffarpur, Bihar. 26 th - 28th October 2024
2		Participated in 15 th AGROVISION	Nagpur, Maharashtra 22-25 November, 2024
3		Participated in the Koli Seafood Festival, Versova	Versova, Mumbai 17 -19 March 2024.
4	- Cochin	Marine exhibition at "ARTHA 2024'held at Sacred Heart College	Thevara, 06.12.2024 to 07.12.2024
5		Marine exhibition at 'Global Livestock Conclave 2024' held at KVASU Campus,	Wayanad, Kerala 20.12.2024 to 29.12.2024



Sn	Bases	Events	Place and Date
7	Visakhapatn am	Participated in the VIBRANT NORTH EAST - 2024 Exhibition	Guwahati, Aasam 19 th – 21 st September 2024.
8		Participated in the 65 th Kisan Mela organized by Acharya N.G. Ranga Agricultural University and Department of Agriculture	Anakapalle Andhra Pradesh 13.12.2024
9		Participated in the National Agriculture Exhibition (15 th Krishi Fair 2024)	Puri, Odisha, 21 -25 TH December 2024



Participated in the 14th National Exhibition in Muzaffarpur, Bihar. **26th -28th October 2024**



Marine exhibition at 'Global Livestock Conclave 2024' held at KVASU Campus, Wayanad, Kerala 20.12.2024 -29.12.2024



Visakhapatnam Base participated in the "VIBRANT NORTH EAST "- 2024 Exhibition at Guwahati from 19th – 21st September 2024



Visakhapatnam Base participated in the National Agriculture Exhibition during 21st - 25th December 2024 at Puri, Odisha



4.5.18 Outreach and Training programme

Fishery Survey of India conducted training programmes for fishermen interaction, hands-on training programmes and internships for college students during the year

SL.No	Base	Events	Place and Date
		Fishermen Meet At FSI, Mormugao, Goa	Mormugao, Goa
1	Mormugao	and on board the vessels MFV Sagarika and	21.11.2024
		MFV Yellow Fin	
2	- Cochin	Hands-on Training Programme on	At FSI, Mormugao,
		Fabrication Gears At FSI, Mormugao, Goa	Goa
			13.11.2024
		Campaign on Fisheries Developmental	Aizawl, Mizoram,
		Schemes (GoI) in Date:	Kohima Nagaland
		Location: Dept. of Fisheries, Nagaland	11.12.2024
3	Chennai	Internship training programme for students	Presidency College &
		of Madras University, Chennai	Pachaiyappa's College,
3			Chennai 10.05.2024 to
			10.06.2024
4	- Port Blair	Fishermen interaction for the study of	Port Blair, A & N
		Socioeconomic conditions of fishermen	Islands 05.08.2024.
		community of A & N Islands	
5		Training to newly recruited Fisheries	Port Blair on
		Inspectors and Fisheries Field Assistants of	02.04.2024
		Dept. of Fisheries, A &D Admin	



Chennai Base FSI conducted an internship training programme from 10.05.2024 to 10.06.2024



Outreach Campaign on Fisheries Developmental Schemes (GoI) in Kohima, Nagaland on 11.12.2024





Training to newly recruited Fisheries Inspectors and Fisheries Field Assistants of Dept. of Fisheries, A &D Admin, Port Blair on 02.04.2024



"Fishermen Meet" on board the vessels MFV Sagarika and MFV Yellow Fin on 21.11.2024

4.5.19 Official Language Activities

4.5.19.1 Hindi Pakhwada/ Workshops

The Fishery Survey of India, HQs, Mumbai and its Base offices observed "*Hindi Day*" on 14.09.2024 and "*Hindi Fortnight*" during 14th – 28th September 2024. During the Hindi Fortnight, various competitions were conducted such as Artificial Intelligence, Official works and Financial

Management, Hindi essay writing, Hindi noting & drafting, General Knowledge on Official Language, Antakshari, Hindi Poem recitation, etc. Prizes were distributed to the winners of the competitions during the event

A total of 13 Hindi workshops on various topics were organized for the benefit of the officers and staff of FSI.



Mumbai Base conducted a Hindi workshop on 29.05.2024



Mormugao Base conducted a Hindi workshop on 26.06.2024



Cochin Base celebrated Hindi Pakhwada on 24.09.2024



Chennai Base conducted a Hindi workshop on 26.09.2024



4.5.19.2 Hindi awards/ shields received by Bases



Cochin Base awarded The Rajbhasha rolling trophies, for exceptional performance in Official Language Implementation on 23.10.2024.



Visakhapatnam Base was awarded Second time for exceptional performance in Official Language Implementation on 24.05.2024





World Ocean Day



World Blood Donor Day - 2024



Port Blair Base celebrated World **Blood Donar**– 2024 on 14.06.2024





4.6 National Institute of Fisheries Post Harvest Technology And Training (NIFPHATT)



4.6.1 Introduction

Integrated Fisheries Project, the forerunner of NIFPHATT, was established in the year 1952 at Quilon as Indo-Norwegian Project as the offspring of a tripartite agreement between Governments of India, Norway and the UNDP. The basic objective was area and community development in general and fisheries development in particular. The headquarters of the project, along with the Norwegian Experts was shifted to Kochi in 1963. Due to the positive

impact of the sector, subsequent years witnessed the setting up of similar units of the project at Kannur in Kerala, Karwar in Karnataka and Mandapam in Tamil Nadu. These units continued their activities until these units were handed over to the respective state governments in 1972.

The administration of the project in Cochin was taken over by the Government of India renaming it as Integrated Fisheries Project and it continued the programmes as a Central Government scheme under the Ministry of Agriculture. The



Government of India, recognising activities of the project in the development of Indian fisheries and its enduring need for the development activities in the various realms of the fisheries industry, declared Integrated Fisheries Project (IFP) as a permanent organization with effect from 26-12-1974. Thereafter the programmes and policies of the project were framed and implemented under the various Five Year Plans.

The mandate of IFP was reoriented and redefined by the Ministry of Agriculture according to the recommendations made by Cadre Review Committee in 2005. As a result, the processing, marketing & training division, refrigeration, and civil engineering sections were retained in IFP while other divisions were transferred to other subordinate offices under the Ministry of Agriculture viz. Fishery Survey of India (FSI) and Central Institute of Fisheries Nautical Engineering and Training (CIFNET). The Government of India renamed Integrated Fisheries Project (IFP) as National Institute of Fisheries Post Harvest Technology And Training (NIFPHATT) as per the Gazette Notification No. S.O. 937 dated 3rd May 2008.

4.6.2 Mission and Mandates

- Upgradation of post-harvest technology and its transfer to beneficiaries such as rural fishermen community, small scale industries, export processing houses and students through consultancy, job work and training
- b. Development of value-added products through process and product diversification of all varieties of fish including low value, unconventional and seasonally abundant fishes

- c. Imparting training in post-harvest technology, refrigeration technology, quality control and value added products
- d. Providing consultancy services and training for rural development programmes/ women empowerment programmes in fish processing, supporting local fish farmers, self-help groups of fishermen community, fishermen's cooperative societies functioning under Panchayathi Raj Institutions
- e. Popularization and test marketing of value-added products from fish varieties including low value, unconventional species and seasonally abundant fishes
- f. Extension of the activities through popularization and test marketing of value-added products to new areas and develop markets in all states in a phased manner with added attention to rural areas and enthusing entrepreneurs to enter into seafood processing industry

4.6.3 New Products developed and launched at World Food India 2024- Exhibition

Government initiatives towards ensuring food & nutritional security and PMMSY have promoted Tilapia culture and Seaweed Culture in the country. In this background, National Institute of Fisheries Post Harvest Technology (NIPHATT) has developed six new diversified products from tilapia and seaweed. As an initiative towards sustainable utilization of fishery resources, a pet food was also developed from trimmed meat obtained from the canning process. All these products were officially launched at the World Food India 2024 Exhibition. The products are:



- a. Seaweed Kheer
- b. Tilapia Fish Curry
- c. Tilapia Kheema / Minced Meat
- d. Tilapia Fish Cutlet
- e. Tilapia Fish Momo
- f. Tilapia Fish Nugget
- g. Happy Puppy Dog Feed

a) Seaweed Kheer

Seaweed Kheer is a rich and creamy, delicious dessert, enhanced with the health benefits of seaweeds. Seaweed is blessed with its anti-inflammatory properties, reduces risk factors of heart disease, ensure gut health and its fibre contributes to weight loss. This natural Kheer is sweetened with jaggery and no refined sugar has been used. The rich creamy texture is due to natural coconut milk and is suitable for lactose intolerant individuals. This product is ready to eat and has a shelf life of eight months.



b) Tilapia Curry

Tilapia Fish Curry in North Indian style is a flavourful and aromatic dish that perfectly blends the mild taste of Tilapia with traditional Indian spices. The use of tomatoes in the curry adds a tangy, slightly sweet flavour, forming the rich base of the sauce. Cumin powder is a key ingredient, contributing an earthy, slightly spicy, and nutty profile that beautifully complements the tomatoes and balances the heat from other spices. This product is ready to eat and has a shelf life of eight months.



c) Tilapia Kheema

Frozen Tilapia Kheema is made of select, fresh quality Tilapia Fish. This frozen minced fish meat is ideal for preparing cutlets, nuggets, fish fingers and fish balls. The flavour of the dish can be customized by adjusting the spices according to the customer's preference. Tilapia has a mild taste, which allows for a wide range of seasoning options, from spicy and aromatic to mild and savoury. This product has a shelf life of eight months.





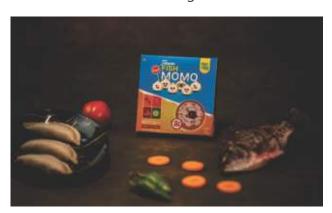
d) Tilapia Fish Cutlet

Frozen Tilapia Fish Cutlet is a croquette of fish, veggies and authentic Indian spices coated in egg and breadcrumbs. It is crispy and crunchy outside, while soft and moist inside. Tilapia meat ensures healthy balanced diet with high protein and low-fat content. This product is ready to fry and has a shelf life of eight months.



e) Tilapia Fish Momo

Frozen Tilapia Fish Momo is made from flavoursome Tilapia fish and vegetable filling with fresh hints of cabbage, carrot, and spring onion makes a wholesome food. This product is ready to cook and has a shelf life of eight months.



f) Tilapia Fish Nugget

Frozen Tilapia Fish Nugget is made with tilapia fish meat along with select vegetables and spices, battered and breaded, with a hint of oregano. It is super crispy outside and juicy inside. It can be served as a starter or evening snack. This product is ready to fry and has a shelf life of six months.



g) Happy Puppy - Dog Feed

Happy Puppy dog feed is a perfect meal for pet and is prepared with Tuna meat (42%), Carrot (5%) and Pumpkin (5%). The trimmed meat obtained from canning operation was used so as to reduce fish wastage. Tuna meat is powerhouse of protein and essentials. It promotes healthy metabolism and energy level of the pet, enhance immunity, bone strength and density. This product has a shelf life of eight months.





4.6.4 Major Activities and Performance during 2024-25 (01st April 2024 to 30th November 2024)

4.6.4.1 Processing Section

This section carries out the mandates mentioned in serial no. 1 & 2



The section emphasizes on continuous production of high quality and economically viable, consumer friendly and convenient frozen products viz. IQF whole fish from different varieties, slices, dressed fishes and fish kheema conforming to the national and international standards.

Well equipped with Walk-in Coolers, Silent Cutter/Chopper, Modified Atmosphere Packaging (MAP) machine and Chest Freezers for development of diversified value-added product such as Fish Cutlet, Fish Pickle, Fish Wafer, Fish Mixture, Fish Curry, etc. The above facility along with pilot scale kitchen in the plant is used for research, development and standardization of new products.

Canning plant of NIFPHATT has machineries like precooking chamber, exhausting chamber, double seaming machine, sterilization chamber/counter pressure autoclave and boiler. Within these facilities, the focus is on production of ready to serve products like Tuna in oil, Diet Tuna in water, Tuna Flakes in oil, Mackerel in oil, Products in retort pouches, etc.











Tuna processing plant is made available to the entrepreneurs who export fish and fishery products from the country on a dry lease basis as a promotional and marketing measure for encouraging fresh fish export.

A total of 98.66 tonnes of raw materials (including 26.12 tonnes of product used for further value addition) was processed by NIFPHATT during the financial year 2024-25 (up to 30th November 2024). 74.84 tonnes of various frozen products, dried products, value-added products and canned products were developed.

4.6.4.2 Marketing Section

This section carries out the test marketing of the products developed in connection with product development and training activities.

The uniqueness of NIFPHATT compared to others seems to be the pilot scale production and test marketing facilities. This up-scaled version from laboratory level amounts to applied research which is easily replicable to actual commercial production level. Moreover, the trainees both fisherwomen, SHGs and university students are exposed to the intricacies involved in handling large quantities of raw material during production. The feedback of the consumers received through the test marketing section aid to the continuous improvement of products as well. The raw materials for all these activities are sourced by the marketing section through the landings from department vessels and fishermen cooperative societies.

During this year, a total quantity of 71.56 tonnes (upto November 2024) landed from fishermen cooperative societies and department vessels in Kochi and Visakhapatnam unit.

A total of 40.60 tonnes (up to November 2024) of fish and fishery products were test marketed through Ernakulam stall, Pala stall, Dealers and Visakhapatnam unit and fetched a revenue of Rs.134.92 Lakhs.

4.6.4.3 Training Section

This section carries out activities in connection with the mandates mentioned in serial no. 3 & 4. On a broader perspective, this section has two separate target groups, University/College students and fisherwomen self-help groups (conducted as inplant and on-site)

a) On-job /In-plant Training in Fisheries Post Harvest Technology

The course is primarily aimed at providing hands on exposure to the students specialised in fish or food processing and allied areas. Even though the students acquire requisite theoretical knowledge from classrooms, this programme extends insight in to the practical aspects of fisheries postharvest technology when applied to actual field level. NIFPHATT with its expertise and experience in the field has formulated the curriculum to mould the trainees fit for fisheries industry. The curriculum includes theoretical, In-plant/practical and audio-visual sessions. Field visits to approved export units, landing centres, other fisheries Institutes, etc. give them wider exposure to the current scenarios of the industry. During the period under report, 195 students from various colleges and 59 Vocational Higher Secondary Education (VHSE) students attended the On-job training programme of the Institute. 342 students attended the In-plant training programme of the Institute.

















b) Training on Value Addition of Fishery Products

NIFPHATT, Kochi conducted three days training programme on Value Added Product Development from Seafood from 21.08.2024 to 23.08.2024. 11 members of Fish Farmer Producer Organizations (FFPOs) from Rajasthan and Haryana attended the programme. The programme was sponsored by Krishi Vikas Sahakari Samiti Limited. During the training, participants were enlightened on the importance of hygienic handling while handling a highly perishable commodity like seafood. Trainees were also equipped with the knowhow for

producing various seafood value added products such as fish cutlets, fish finger, fish samosa, fish roll, fish pickles, fish wafers, fish mixture, fish curry, etc.











c) Training on Microbiological Analysis of Seafood

Institute's state-of-the-art laboratory facility is unique and a paradigm to a student who is eager in learning the practical aspects of seafood microbiology. The facility is also used for in-house quality evaluation of the raw materials and developed products. During the report period, 13 trainees representing industry and various colleges attended the programme.







d) Apprenticeship Training

This is a one-year programme exclusively designed for the passed-out candidates from Vocational Higher Secondary Schools. The training is conducted in association with Regional Directorate of Skill Development & Entrepreneurship, Trivandrum, under the Ministry of Skill Development and Entrepreneurship, Government of India. The major objective of the

programme is to create a cadre of fisheries experts with sound practical and theoretical knowledge. During the programme, trainees are given hands-on experience in all the processing activities, quality assurance, microbial analysis and hygienic handling of seafood. Students are also paid monthly stipend to meet their pocket expenses. During the period under report, three students are pursuing the programme.

4.6.5 Fairs and Exhibitions Participated

NIFPHATT has actively participated in 5 exhibitions and fairs organised by various Government and Non-Government agencies during the period under report for popularising and test marketing various fisheries products developed by NIFPHATT with a message "fish is a healthy food."





2nd Fisheries Summer Meet 2024 organized by Ministry of Fisheries, Animal Husbandry & Dairying on 12.07.2024 at Ida Scudder Trade Centre, Madurai. Shri. Rajiv Ranjan Singh, Hon'ble Minister of Fisheries, Animal Husbandry and Dairying, Shri. Geroge Kurian, Hon'ble Minister of State of Fisheries, Prof. S. P. Singh Baghel, Hon'ble Union Minister of State for Fisheries, Dr. Abhilaksh Likhi, Hon'ble Secretary (DoF) and Shri. Sagar Mehra, Hon'ble Joint Secretary (Inland Fisheries) visited NIFPHATT Stall.





National Exhibition cum 2nd International Congress & Expo organized by CCS & Co for Youth from 11.09.2024 to 14.09.2024 at Science City, Kolkata







New Seafood Products from NIFPHATT, conquer World Food India 2024 organized by Ministry of Food Processing Industry from 19.09.2024 to 22.09.2024 at Bharat Mandapam, New Delhi. Prof. S. P. Singh Baghel, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying, Ms. Neetu Kumari Prasad, Hon'ble Joint Secretary (Marine Fisheries), Shri. Sagar Mehra, Hon'ble Joint Secretary (Inland Fisheries & Administration) and other officials visited NIFPHATT Stall.





"SWA" Knowledge Festival organized by Janmabhumi from 03.11.2024 to 07.11.2024 at Calicut Trade Centre, Calicut





Maricon -2024- International Congress on Frontiers in Marine Sciences, School of Marine Science CUSAT & NCPOR from 08.04.2024 to 10.04.2024 at CUSAT, Ernakulam



4.6.6 Academic Visits

During the period under report, 498 students and 33 faculties representing various educational institutions across the country visited the Institute. During the visit, they were acquainted with the facilities and activities of the Institute.

4.6.7 Visit of Norwegian Ambassador at NIFPHATT on 22nd May 2024.

Her Excellency Ms. May-Elin Stener, Norwegian Ambassador to India, Ms. Filippa Braarud- Second Secretary and Mr. Asheesh Agarwal, Senior Adviser from Embassy of Norway in India visited NIFPHATT on 22.05.2024 and had fruitful discussions in the field of Fisheries.













4.6.8 Visit of Shri. George Kurian, Hon'ble Minister of State for Fisheries AH&D at NIFPHATT on 18th June 2024

Shri. George Kurian, Hon'ble Minister of State for Fisheries AH&D, visited NIFPHATT on 18.06.2024 and familiarised the activities of the Institute. Minister witnessed various post-harvest activities of the institute and interacted with the trainees. Various value-added fishery products developed by the Institute were showcased during the visit.













Visit of students from College of Fisheries Science, Tripura

Visit of students from School of Industrial Fisheries, CUSAT





Visit of students from Annamalai University, Tamil Nadu



Visit of International Trainees sponsored by CMLRE

4.6.9 Performance for the year 2024-25 (1st April 2024 to 30th November 2024)

S. No	Particulars	Achievement up to 30.11.2024
1	Raw material processed (Tons)	98.66
2	Fish products developed (Tons)	74.82
3	No. of cans developed	14966
4	Fish landed/procured from fishermen co-operative societies (Tons)	71.56
5	Fish products marketed (Tons)	40.60
6	Revenue generated through test marketing (Rs. In Lakhs)	104.59
7	No. of trainees trained	650
8	No. of trainee days for self-help groups & students	5420
9	Revenue realized from training (Rs. In Lakhs)	5.59
Revenue realized from all sources (Rs. In Lakhs)*		112.03

^{*}not reconciled with PAO



Chapter 5

TRADE MATTERS

Trade in livestock and livestock products including fish/fishery products are regulated as per the Foreign Trade Policy-Export Import Policy (EXIM) of Government of India which is implemented by Department of Commerce, Ministry of Commerce and Industry. However, in order to prevent ingress of Exotic Diseases through import of livestock and livestock products as well as fish and fishery products, Ministry of Fisheries, Animal Husbandry and Dairying regulates trade in such products, as per provision of Section 3 and Section 3A of the livestock importance Act, 1898. The Department oversees the Sanitary and Phytosanitary issues for the import and export of fish and fishery products.

Import of live animals including fishes fall under the category of restricted list (it is not free to import) as per EXIM Policy. For imports an importer has to obtain a license from Directorate General of Foreign Trade (DGFT) that is issued on the recommendation of the Department of Fisheries (GoI). The Department of Fisheries (GoI) makes a decision on the DGFT's recommendation based on the risk analysis and the related germplasm policy.

The Central Government is empowered to regulate, restrict and prohibit import of live animals in accordance with Section 3 of the Live-Stock Importation Act, 1898. Notification S.O. 1495(E) and 1496(E) dated 10th June, 2014 under Section 3 of Livestock Importation Act were issued by the Ministry of Fisheries, Animal Husbandry and Dairying. These notifications define classes of animals that can be considered as "Live-Stock" and requirement of veterinary health certificate for their import and quarantine procedure of live animals.

Livestocks and fish/fishery products are categorized under Open General License (OGL) as per EXIM Policy. In this regard, the Ministry has issued notification S.O. 2666(E) dated 17th October, 2014 listing out the livestock products and procedure for import of live-stocks products. The import of these products is subject to Sanitary Import Permits (SIPs), which are guided by risk analysis done through veterinary health certificates that accompanies the livestock products. The Department of Fisheries issues SIPs for live-stock and fish products that are valid for one year or six months, depending upon the nature of products and may be used for multiple consignment.

Import of animals/fish and animal/fish products is allowed only through designated seaports/airports of Bangalore, Chennai, Delhi, Hyderabad, Kolkata, and Mumbai where Animal Quarantine and Certification Services (AQCS)/arrangements are available. Import of fish products is allowed through the seaport of Vishakhapatnam (Andhra Pradesh), sea and airport of Kochi and the Land Custom Station at Petrapole (for imports from Bangladesh only). However, as per requirement of the sector, the Ministry is also notifying the ports for ease of doing business.

Procedure for Import: The Committee on risk analysis under the Chairmanship of Joint Secretary (Trade) has been established under the Ministry of Fisheries, Animal Husbandry and Dairying. It considers application received for issuance of SIP to import various livestock products including fish and fishery products. After necessary amendment in notification S.O. 2666 (E) dated 16th October, 2014, the Ministry of Fisheries has launched a web portal for online



submission of SIP applications, their processing and issuance. During the reporting period (1st April 2024 to 15th January 2025) the Trade Unit of the Department of Fisheries (GoI) has issued 1639 Sanitary Import Permits to various firms/organizations for enabling them to import various fish and fisheries products.

For restricted fishery items, the Directorate General of Foreign Trade (DGFT) seeks comments from the Department of Fisheries (GoI) before issuing import licenses to importers. If the cases are related to import of live exotic aquatic animals, the matters are referred to the National Committee on Introduction of Exotic Aquatic Species into Indian Waters, in the Department of Fisheries under the chairmanship of Joint Secretary (Inland Fisheries). Based on the recommendation of the said Committee and the examination & observation by the Department of Fisheries, the applications are approved. During the reporting period (1st April 2024 to 15th January 2025) about 31 number of applications under restricted categories such as live ornamental fishes, trout eyed ova, fish body oil and Mother of pearl etc. were processed and allowed.

In order to facilitate the **Ease of Doing** Business in the fisheries sector, Department of Fisheries (GoI) has done away with the requirement of SIP for import of SPF shrimp brood stock from the CAA approved overseas suppliers and import of fish and related oil into India. However, at the port of entry, AQCS shall issue NOC to the customs after verifying the pre-boarder quarantine certificate and another certificate declaring freedom from WOAH listed pathogens of the susceptible species, issued by the competent authority of the exporting country.

In addition, to facilitate the 'Ease of Doing Business' in the seaweed sector, the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying vide F. No. 1503529/5/2024 dated 21st October 2024 notified the 'Guidelines for Import of Live Seaweeds into India'. The step in this regard is expected to facilitate the import of high-quality seed materials or germplasm from abroad, enabling domestic multiplication to ensure farmers have access to quality seed stock.



Chapter 6

Scheduled Caste Sub-Plan (SCSP) and Tribal Sub-Plan

The Department of Fisheries aims at strengthening the infrastructure of the States/UTs for the development of fisheries sector under its various schemes. A large population of the country belonging to the Scheduled Castes, Scheduled Tribes, other weaker sections of the society and women are engaged in activities in fisheries sector. As a corollary, various schemes implemented by the Department of fisheries aim at benefitting the weaker sections of the society.

As per the Guidelines issued by the NITI Aayog vide D.O. letter No. N-11016/12(1)/2009-PC dated 15th December, 2010 to earmark 16.6 percent of funds under Scheduled Caste Sub Plan (SCSP). The Department has earmarked Rs. 250.00 Crores in FY 2024-25 in RE under different schemes/programmes pertaining to SCSP component. As against the allocated amount Rs.

122.30 Crores that has been incurred under different schemes in FY 2024-25 as of 31st January, 2025. The Department has accorded approval of total project cost of Rs. 85.53 crore with a central outgo of Rs. 33.39 crore to 3340 beneficiaries under PMMSY.

The Department had been exempted from earmarking funds under Tribal Sub Plan (TSP) up to FY 2017-18. From FY 2018-19, 8.60 percent has been fixed under TSP. The Department has earmarked Rs. 188.50 Crores in RE during FY 2023-24, of which Rs. 173.68 Crores has been already incurred (as of 31st January, 2025). The Department has accorded approval of total project cost of Rs. 101.68 crore with a central outgo of Rs. 48.54 crore to 8950 beneficiaries under PMMSY.





Chapter 7

Empowerment of Women

7.1 Role of Women in Fisheries Sector

Women constitute approximately half of the India's population and play a vital role in building our Nation. Women play a crucial role in Marine fisheries and aquaculture, specifically in the small-scale, post-harvest activities and artisanal fisheries sector. It is estimated that there are about 5.4 million people fully engaged in fisheries activities, out of which, 3.90 million are fishermen and 1.50 million are fisherwomen. They represent half of the total working population worldwide in the seafood industry as a whole, with fisheries, aquaculture, seafood processing and all related services.

Activities carried out by women, paid and unpaid, spread across the value chain including pre and post-harvest activities. This includes seaweed and shellfish collection, fishing, weaving and repairing nets, processing, sales, local and intra-regional trade. Clams, crabs, fish fry, seaweed etc. are fished by women in states like Kerala, Tamil Nadu, West Bengal, Andhra Pradesh, Odhisa, Gujarat and the North East.

Women in small-scale fisheries play key roles in managing finances at the household level and also managing aquatic resources at the community level. Women in indigenous and local coastal communities have extensive local and traditional ecological knowledge, which contributes towards sustainable use and conservation of marine and coastal ecosystem.

Women in the small-scale and artisanal fisheries sector have difficulty securing their rights as workers because their role is often unrecognized. They have limited or no access to social security, capital and credit and face hardship in security land rights and access to fishery resources. They

also face unsafe, unhygienic and unfair working conditions. In most, places, women in post-harvest activities are constantly struggling for even basic facilities at landing centres and markets. Their roles in harvesting have been limited to collection, hand picking and fishing from smaller water bodies while employment opportunities are generally seasonal in nature and with poor wages. There is also a sizeable difference in the incomes earned by men and women with income for women being quite low.

It has been the endeavor of the Department to focus on providing benefits to women engaged in animal husbandry, dairying and fisheries. The Department has been working towards overall development of the Fisheries sector in the country and also ensures that, women entrepreneurs/farmers are well supported and encouraged. It has provided financial assistance and technical hand holding for activities varying from seaweed culture in the coastal areas, encouraging women SHGs engaged in breeding ornamental fish, culture of food fish in ponds and tanks, paddy-cum-fish culture, cage culture in reservoirs, coastal areas, setting up of backyard RAS units, establishing breeding units for native species in Northeast states, Aquatic Animal Health Laboratories (AAHLs), procurement of fish transportation vehicles, cold chain management, fish drying and processing besides conducting various awareness programs, workshops/ seminars, capacity building and training & exposure visit programs formation of fisheries cooperatives, creating opportunities for women to develop as startup/entrepreneurs.

A total of 60,048 women beneficiaries have benefited under PMMSY through projects worth Rs 3,463.74 crore. Thus, in order to recognize the



effort by women in the sector, many successful and enterprising women beneficiaries have been recognized in many events and forums.

7.2 Role of Women in the Fisheries and Aquaculture sector

7.2.1 Fresh Water Pearl Culture

Freshwater pearl culture is a diversified activity in aqua-farming systems. It is an ancient technology developed by Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar. There are three identified pearls mussel species namely Lamellidens margnialis, L. corrianlis and Parreysia corrugate. These different varieties of pearls are cultured using three different of pearls are cultured using three different surgical procedures. The technology has attracted several rural, artisan and enterprising communities including women. Therefore, groups of women should be encouraged and trained in pearl culture for alternative source of income.

7.2.2 Backyard Ornamental Fish culture

A practice of ornamental fish culture is seen as a lucrative and stable business that can be taken up by women in remote villages. Women should be encouraged to adopt innovative and economically advantageous technologies.

7.2.3 Community Pond Aquaculture

A large number of small and backyard ponds in the coastal areas are being used for bathing, washing and also as dumping ground, resulting into environmental problems. Women could be employed and trained in developing the neglected water bodies for raising short term crops of fish fry, fingerlings costs. These initiatives will lead to sustainable economic development.

7.2.4 Seed Collection and grading

As alternative income sources, seeds can be collected and graded by women. Women have existing skills for grading juvenile sea bass fattening of crabs, mussel, pearl and oyster; involvement in grading thereby increasing their economic independence.

7.3 Key Gender Issues in Aquaculture

Currently, there is no set mechanism or platform for making the women, aware of the market related information. Time constraints due to household priorities also prevent women from coming to the forefront and take up fisheries as a major economic activity. However, such issues can be overcome to a great extent through technology dissemination, imparting training on time efficient technologies and techniques. Therefore, efforts are being made to create awareness for encouraging women to come forward.

7.4 Occupational Roles in Post Harvest

India fisherwomen are involved in sorting and grading different varieties of fish for sale in local markets from the beach. Adoption of traditional method-ITK (Indigenous Technical Knowledge) like smoking fish is followed and products are sold in nearby markets. Women are involved in packing of fish and other post-harvest processing methods. Additionally, women organize themselves as Self Help Group (SHGs) and sell their value-added products through exhibitions, fairs and now days their products are seen in supermarkets and are also exported.

7.5 Gender Budget Cell

A Gender Budget Cell has been set up in the Department with the objective of influencing and effecting a change in the Ministry's policies, programmes in a way that can tackle gender imbalances, promoting Gender equality and empowering women. It is headed by Joint Secretary (Inland Fisheries & (Administration). Currently, the Department has not earmarked any specific funds for women component, however, it is advising States/UTs and implementing Agencies for utilizing around 30 percent of allocated funds towards women beneficiaries under the existing centrally sponsored/Central Sector schemes being implemented by the Department. The Gender Budget Cell has identified the following Schemes



under which funds are allocated towards women beneficiary:

- Pradhan Mantri Matsya Sampada Yojana (PMMSY)
- Fisheries Infrastructure Development Fund (FIDF)
- Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana





Chapter 8

International Cooperation(IC)

8.1 Overview

Fisheries sector offers tremendous scope towards sustainable and economic development of the country and the large population dependent on it. During 2022, the total global fisheries and aquaculture production reached an all-time record of 223.2 million tonnes with 185.4 million tonnes of aquatic animals and 37.8 million tonnes (wet weight) of algae, a 4.4 percent increase from 2020 (The State of World Fisheries and Aquaculture-Report 2024).

Globally, fisheries and aquaculture sector employs an estimated 62 million people in primary production alone and has an estimated 20.7 kg of aquatic animal food per capita. Aquatic products continue to be one of the most traded food commodities, involving over 230 countries and territories and generating a record USD 195 billion in 2022.

The world population is projected to reach 8.5 billion by 2030. Providing sufficient food, nutrition and livelihoods for this growing population demands significant investments and strategic cooperation between different sector and countries across the globe. While aquaculture with its revolutionary techniques has the potential to meet the rising global demand for aquatic foods, future expansion of the aquatic food sector globally is set to prioritize sustainability ensuring healthy diets from healthy oceans and inland water bodies.

Accordingly, a commitment fostering responsible and sustainable fishing practices worldwide is crucial for sustainable development of fisheries and achieving Blue Economy. This includes efforts to sustainably replenish fish stocks, preserve aquatic resources for future generations, create

awareness amongst the mass, promote transparency, encourage cooperation, establish meaningful collaborations, ensure equitable resource access for all nations, implement fair regulations that balance stakeholder interests, and foster inclusive governance. These efforts collectively pave the way for a sustainable and productive future.

International Cooperation (IC) plays a vital role in addressing these factors and driving sustainable development in the sector. It serves as an efficient platform for effective management of fisheries resources and working together towards sustainability of aquatic resources globally. 'International Cooperation' works through effective agreements, commitment towards sustainability of resources, taking into account interest of related stakeholders, needful cooperation and collaborations towards comparative advantage and sustainable future of ocean and seas and overall wellbeing of people dependent on it. Currently there are large number of International efforts ongoing for forging commitments and agreements towards this end.

India is a party to several international treaties and agreements, including the United Nations Convention on the Law of the Sea (UNCLOS) of 1982, the United Nations Fish Stocks Agreement (UNFSA) of 2001, the UN Convention on Biological Diversity (1995), the FAO Code of Conduct for Responsible Fisheries (CCRF) and the International Plan of Action on Marine Fisheries (1995). Additionally, India upholds the Kyoto Declaration and Plan of Action (1995), the International Labour Organization (ILO) standards for the safety and health of fishers at sea and the United Nations Sustainable Development Goal 14 (SDG 14) concerning life



below water. Furthermore, India is a signatory to several international conventions, treaties, and agreements, as well as an active member of Regional Fishery Bodies (RFBs), thereby upholding numerous international obligations within the fisheries sector.

India is also member to various regional fisheries bodies including the Asia-Pacific Fishery Commission (APFIC); Network of Aquaculture Centres in Asia and the Pacific (NACA); Indian Ocean Tuna Commission (IOTC), South Indian Ocean Fisheries Agreement (SIOFA) and the Bay of Bengal Programme Intergovernmental Organization (BOBP-IGO). Besides, it is also a member of other regional bodies that deal with environment (e.g. South Asian Cooperative Environment Programme, International Union for Conservation of Nature) and Trade (Bay of Bengal Initiative for Multi-Sectoral Technical Economic Cooperation-BIMSTEC). Even economic and geopolitical setups such as South Asian Association for Regional Cooperation (SAARC) have undertaken initiatives in both fisheries and environmental related matters from time to time.

Most of the regional organizations to which India is a party (BOBP-IGO and NACA) their functions are limited to policy advocacy and capacity building.

8.2 Engagement with Regional Fisheries Management Organizations (RFMO's):

Regional Fisheries Management Organization (RFMOs) is international organization formed by countries with fishing interests in an area. Some of them manage all the fish stocks found in a specific area, while others focus on particular high migratory species, notably tuna, throughout vast geographical areas. There are several IOTC resolutions on conservations and management measures which are binding on its members.

Regional Fisheries Management Organizations (RFMOs) are crucial for fostering intergovernmental collaboration in fisheries management. The Indian Ocean Tuna

Commission (IOTC) serves as the RFMO responsible for overseeing tuna and tuna-like species in the Indian Ocean, where India holds a mandate under its jurisdiction.

India is a member as Contracting and Cooperative Party (CPC) in the IOTC and the Department has plans to play a leadership role particularly in the IOTC. The Department officials along with experts from Fishery Survey of India (FSI) and ICAR-Central Marine Fisheries Research Institute (CMFRI) have actively participated in the IOTC meetings and made contributions to the regional science-based fisheries management including necessary interventions in order to protect the country's national interest and that of the small-scale fisher communities. India has also hosted some important meetings of the IOTC, such as the 19th Working Party on Data Collection and Statistics (WPDCS19) during 28th November to 02nd December, 2023 and the 26th Session of the Scientific Committee (SC26) during 04th -08th December, 2023 at Mumbai.

India has recently in 2023 also joined the South Indian Ocean Fisheries Agreement (SIOFA) as the Cooperating Non-Contracting Parties (CNCP), which is an important RFMO managing the fish resources other than tuna and highly migratory species in the southern Indian Ocean. The officials of the Department have actively participated in the SIOFA meetings, and the Department is taking steps to become a contracting party of the SIOFA.

8.3 Engagement with World Trade Organization (WTO) and other global organization

Fish ranks among the most widely traded food commodities globally. World trade in aquatic animal products has grown significantly in value terms, with exports rising from USD 7.9 billion in 1976 to a record high of USD 192 billion in 2022 at an average annual growth rate of 7.2 percent in nominal terms and 4.0 percent in real terms (The State of World Fisheries and Aquaculture-Report



2024). Around 260 million people depend directly or indirectly on marine fisheries for their livelihoods. Countries across the world provide subsidies to their marine fisheries sector running into billions of dollars. Numerous studies indicate that some of the capacity enhancing subsidies given to marine fisheries sector contribute to Overfishing and Overcapacity, Overfished stocks (depletion of stocks) and Illegal, Unreported and Unregulated (IUU) fishing. It is estimated that at least 34% of global stocks are overfished compared with 10% in 1974, meaning they are being exploited so quickly that the fish population cannot replenish itself. It is estimated that currently Government funding to fisheries is at USD 35 billion per year globally, of which some USD 22 billion increases the capacity to fish unsustainably. Therefore, the WTO members decided to find a solution to tackle fisheries subsidies within the framework of international trade rules and WTO Negotiations on fisheries subsidies were launched to clarify and improve existing WTO disciplines on fisheries subsidies.

UN SDG 14.6 states "By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to illegal, unreported and unregulated (IUU) fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective S&DT for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation."

The WTO's work to curb harmful fisheries subsidies is high on many members' agenda. The topmost decision-making body of the WTO is the Ministerial Conference (MC), which usually meets every two years. At the 12th WTO Ministerial Conference (MC12), held on 12th -17th June 2022 in Geneva, members adopted the historic Agreement on Fisheries Subsidies (mainly on the pillars of IUU Fishing and Overfished Stocks) after working on these issues in the WTO's Negotiating since 2001. Towards this, India played a key role in securing the interests of small-scale and artisanal fisheries in developing countries.

Department of Fisheries has been working with Department of Commerce for securing the interest of the country and that of the poor fisherfolk. The Department has conducted Secretary-level consultations with the Department of Commerce, the Permanent Mission of India to the WTO. Besides, a Task Force on WTO matters also held consultation meetings chaired by the Joint Secretary, involving interministerial and state representatives. These discussions aim to determine a suitable stance for India in the negotiations on fisheries subsidies disciplines, with a specific focus on ensuring appropriate and effective Special & Differential Treatment (S&DT) to safeguard the interests of Indian fisherfolk and preserve policy space for developmental aspirations in the marine fisheries

As part of the Indian delegation, the Department of Fisheries, GoI officials attended the "second wave" of negotiations during 'Fish Weeks' on Fisheries Subsidies of the WTO as well as intersessional and bilateral meetings in this connection. The second wave of negotiations was focused to third pillar, viz. to formulate additional disciplines targeting subsidies contributing to 'Overcapacity and Overfishing', along with corresponding provisions for special and differential treatment to address the needs of developing and least-developed country members.

A delegation led by Hon'ble Minister for Commerce & Industry participated in the 13th Ministerial Conference (MC-13) of the WTO held at Abu Dhabi, United Arab Emirates during 26th February to 01st March 2024 including the officers from Department of Fisheries. The key issue of prohibiting subsidies for 'Overcapacity and Overfishing' could not be concluded during MC13 as several WTO Member countries had diverse positions. Therefore, WTO Members including India have agreed to continue to negotiate in future on the outstanding issues including prohibiting subsidies under Overcapacity and Overfishing pillar.



India is also a member of the World Trade Organization (WTO) in matters related to animal health, previously known as the Office International des Epizooties (OIE). This organization, recognized under the WTO's Agreement on Sanitary and Phytosanitary Measures (SPS Agreement), plays a significant role in issues concerning aquatic animal health and the fisheries sector. International Organization for Standardization (ISO) is one of the other international organisation, which are also concerned with the fisheries sector. ISO/TC 234 Fisheries and Aquaculture is the specialized technical committee which develops global standards related to the fisheries sector.

8.4. Memorandum of Understanding (MoU) with potential countries in fisheries:

With regards to bilateral cooperation in the field of fisheries, the Department currently has active Memorandum of Understanding (MoU) with various potential countries namely Bangladesh, Vietnam, Norway and Iceland for bilateral cooperation in fisheries. The Progress under these MoU are at various levels through the Joint Working Group (JWG). Further, the Department is also in process of renewal of the MoU signed with Indonesia, Morocco and Vietnam. A draft MoU is also under active consideration for signing with the Republic of Korea, France, Maldives, Singapore, Philippines, Angola, Gambia and Faroe Islands. In Addition, there is a Mechanism of Joint Working Group (JWG) between India and Sri Lanka on Fisheries issues.

Due to high economic value of the sector, fisheries is also included as one of the major areas of bilateral cooperation under various MoUs signed with a number of other countries like European Union, Australia etc.by the Department of Agriculture, Cooperation and Farmers Welfare and Department of Animal Husbandry and Dairying, Government of India.

8.5. GloLitter:

The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D), Government of India (GoI) is participating in the IMO-FAO GloLitter Partnership (GLP) Project as a Lead Partnering Country (LPC) with the aim of prevention and reduction of Marine Plastic Litter (MPL) and in particular, sea-based Marine Plastic Litter (SBMPL) to reverse the negative environmental impacts of plastic discard and loss. India, under the GloLitter Partnerships Project on 27.02.2024 published its National Action Plan (NAP: 2024-2026) for management and prevention of sea-based marine plastic litter.

To tackle the marine plastic pollution, the Hon'ble Union Minister of Fisheries, Animal Husbandry and Dairying, Government of India on World Fisheries Day-2024 have launched the IMO-FAO GloLitter Partnership Project GloLitter. The Department of Fisheries, MoFAH&D, Gol, in collaboration with the Fisheries Survey of India (FSI), Mumbai and other key stakeholders are implementing the NAP activities. During the reporting period total sixty-nine awareness programs, campaigns, and rallies was conducted for targeted groups of fisherfolk, fishing industry representatives, Self Help Groups, Students, State Government Officials, NGOs and General Public and about 4,420 beneficiaries have reached out.

8.6. Engagement in G20 under the Brazilian Presidency:

Under the Brazilian Presidency of the G20, the Department of Fisheries actively participated in high-level discussions on global fisheries and aquaculture, emphasizing sustainable practices and food security within the scope of Agricultural Working Group (AWG). The Department, represented at the Joint Secretary level, engaged in substantial deliberations, defending India's position on critical issues such as sustainable fisheries management, equitable resource



distribution, and the integration of fisheries into global value chains. After India's suggestion, the SDG 14.6 has been inserted which specifically states about the "Special and Deferential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation". India suggested deletion of the line "that builds on the significant progress made at and" from the text. For this insertion, India belief that small sector fishers will be benefitted from the S&D treatment which will protect their livelihood and save from rigid regulations and protocols. It is well known fact that small sector and artisan fishers are struggling with climate change and overfishing by the industrial fleets and their traditional rights need to be secured

These discussions aligned with the broader G20 agenda, particularly the Blue Transformation initiative led by the FAO, which aims to enhance the sustainability of aquatic food systems, promote equitable livelihoods, and strengthen value chains. The Department's participation underscored India's commitment to advancing sustainable fisheries and aquaculture, ensuring food security, and supporting the livelihoods of small-scale fishers and fish farmers globally.

- 8.7. Other important events including meetings participated and collaborative initiatives taken up by the Department towards International Cooperation in fisheries and aquaculture are detailed below:
- 1. Participation in Workshop on Building a Framework for Implementing Cooperation in Sectors of Mutual Interest, held at Greece from 09.01.2024 to 11.01.2024.
- 2. Participation in the 12th Governing Council Meeting of BOBP-IGO and BOBLME Sub-Regional Planning Meeting held 19.01.2024 to 20.01.2024 at Negombo, Sri Lanka.

- 3. Participation in the WTO on Fisheries Subsidies for attending Fish Month meeting held between 22.01.2024 to 26.01.2024 at Geneva, Switzerland.
- 4. WTO on Fisheries Subsidies for attending Fish Month, held during 05.02.2024 to 09.02.2024 at Geneva, Switzerland.
- 5. 13th Ministerial Conference (MC-13) of World Trade Organisation (WTO) held during 26.02.2024 to 29.02.2024 at Abu Dhabi, UAE.
- 6. DoF participated the GloLitter Task Force Meeting and RegLitter Inception Meeting held during 04.03.2024 to 08.03.2024 at Hanoi, Vietnam.
- 7. Attended the Regional Seminar and Capacity Building on Blue Ports Initiative (BPI) in Asia, held during 09.04.2024 to 11.04.2024 at Fangchenggang, Guangxi, China.
- 8. 2nd Workshop on the development of the Indian Ocean Rim Association (IORA) guidelines on Illegal Unreported and Unregulated (IUU) Fishing) held at La Reunion (France) from 02.05.2024 to 04.05.2024.
- 9. Participation in the Regional Benchmarking Workshop on AMR surveillance in human health, animal health and environment sector held from 08.05.2024 to 10.05.2024 at Bangkok, Thailand.
- 10. Participated in the 28th Session of the Indian Ocean Tuna Commissioner (IOTC) during 13.05.2024 to 17.05.2024 at Bangkok, Thailand.
- 11. Represented India in the 17th Round of Informal Consultation of States Parties (ICSP) to the Agreement for the implementation of the provisions of the



- UNCLOS of 10th December 1982 relating to conservation and managing of straddling fish stocks and highly migratory fish stock during 15.05.2024 to 17.05.2024 at New York, USA.
- 12. Participation in the 91st General Session of World Assembly of Delegates of the WOAH from 26th-30th May, 2024 at Paris, France.
- 13. India Ocean Tuna Commission (IOTC)
 Working Party on Data Collection and
 Statistics (WPDCS) during 27.05.2024 to
 30.05.2024 at Nairobi, Kenya
- 14. Represented the country in the Knowledge Co-Creation Program on "Enhancing Capacity for Sustainable Fisheries Development" from 27.05.2024 to 06.07.2024 at Tokyo, Japan.
- 15. High level Event of Ocean Action (HLEOA), as the precursor to the 3rd UN Ocean Conference (UNCO3) from 05.06.2024 to 08.06.2024 at San Jose, Costa Rica.
- 16. 3rd G20 AWG Meeting on "Governance and Public Policies on Fisheries and Aquaculture from 11.06.2024 to 12.06.2024 at Brasilia, Brazil.
- 17. Fish-Vet + Dialogue II: One health and Biosecurity held from 18.06.2024 to 19.06.2024 at Rome, Italy.
- 18. Participation in the Regional Training workshop on measuring Fish Losses: A Gender Responsive Approach held from 24.06.2024 to 28.06.2024 at Bangkok, Thailand.
- 19. 11th Meeting of the Parties (MoP11) of Southern Indian Ocean Fisheries Agreement (SIOFA) on 01.07.2024 to 05.07.2024 at Seoul, Korea.
- 20. 36th Session the Committee on Fisheries (COFI) held from 08.07.2024 to 12.07.2024 at Rome, Italy.

- 21. Participation in the "Intensive Fish Farming" organized by MASHAV, Israel's agency for International Development Cooperation held on 16.07.2024 to 25.07.2024 in Israel.
- 22. Participation in the Australian Biosecurity Symposium at the Gold Coast from 26.08.2024 to 30.08.2024 under Canberra Fellowship Program at Victoria and Queensland, Australia.
- 23. 4th Agricultural working Group Meeting under G20 Presidency on 10.09.2024 to 11.09.2024 at Mato Grosso, Brazil.
- 24. Participated in the 'Green Tech Global Forum' hosted by Government of Italy and panel discussions on "IORA-Italy Partnership: Sustainable Development and Blue Economy" on 16.09.2024 to 17.09.2024 at Rome, Italy.
- 25. FAO Regional Workshop on opportunities and challenges in Economic and Post-Harvest related to market access for fisheries and Aquaculture Products from 01.10.2024 to 03.10.2024 at Bali, Indonesia.
- 26. IORA Guideline on Illegal Unreported and Unregulated (IUU) Fishing during 01.10.2024 to 03.10.2024 at Bali, Indonesia.
- 27. Participation in the Network for the Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC) from 22.10.2024 to 26.10.2024 at Amsterdam (Netherlands), Bonn (Germany) and Brussels (Belgium).
- 28. Participation in the Regional workshops by WOAH on Preparedness and Response for Emerging Diseases in Aquatic Animals for Asia and the Pacific, and Antimicrobial Usage and Antimicrobial Resistance in Aquaculture on 29.10.2024 to 01.11.2024 in Singapore.



- 29. Indian delegation attended the 6th meeting of Indo-Sri Lanka JWG on Fishermen issues from 29.10.2024 at Colombo, Sri Lanka.
- 30. Southeast Asian Fisheries Development Center & Bay of Bengal Programme Inter-Governmental Organization (SEAFDEC/BOBP-IGO) Regional Training Course on enhancing capacity for Monitoring Control and Surveillance (MCS) from 19.11.2024 to 22.11.2024 at Bangkok, Thailand.
- 31. Annual Aquaculture Africa (AFRAQs) 2024 Conference on 20.11.2024 to 21.11.2024 at Hammamet, Tunisia.
- 32. India Ocean Tuna Commission (IOTC) 27th session of the Scientific Committee from 02.12.2024 to 06.12.2024 at Cape Town, South Africa.
- 33. Regional Training Programme on Fishing Vessel Boarding Operations from 06.01.2025 to 17.01.2025 at Cape Town, South Africa.

International collaborations in fisheries:

The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D), Government of India (GoI) is also an implementation partner for project "Food Security through Integrated Aquaculture (EIAA)" along with State Government of Assam and Odisha. EIAA is a Global Programme part of the Special Initiative "Transformation of Agricultural and Food Systems" of the German Federal Ministry for Economic Cooperation and Development (BMZ). In India, it envisages to contribute to SDG 1, 3 and also complement various Government schemes including the Pradhan Mantri Matsya Sampada Yojana (PMMSY) implemented in fisheries.

The Department has taken up cooperation with Global Environment Facility (GEF) Council under FAO's for implementation of project namely "Transforming Andhra Pradesh aquaculture to a sustainable, reduced footprint, and climate-resilient food system". The project is set to be implemented in State of Andhra Pradesh and aims at transformation towards sustainable food systems that are nature positive, resilient, with decreased pollution.

Collaboration with World Bank and AFD has resulted into a new Sub-scheme the Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana. The Union Cabinet has approved it as a new Central Sector Sub-scheme under the Pradhan Mantri Matsya Sampada Yojana for implementation in the next four years i.e. 2023-24 to 2026-27 with total outlay of Rs.6000 core. It intends to support formalization of the unorganized fisheries sector by creating a National Fisheries Digital Platform for providing work-based identifies to the fishers, fish farmers, fish vendors including the fisheries sector microenterprises and small enterprises. PM-MKSSY is also facilitating access to institutional credit, aquaculture insurance, enhancing the fisheries value-chain efficiencies, adoption of safety and quality assurance system for supply of safe fish products to consumers in the domestic market; and creation and maintenance of jobs in the sector.

Department has initiated for Indo-French Institutional Technical Cooperation on "Blue Transformation of Fishing Harbors for Sustainable Fisheries Development' as a technical project with grant in kind support from AFD (Agence Française de Développement -French Development Agency).

The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India is in process of finalisation of Technical Cooperation Programme (TCP) with Food and Agriculture Organization (FAO) of the United Nation for the Strengthening of Blue Ports in India. The TCP intends to benefit two pilot project of Smart and Integrated Fishing Harbour in India at Vanakbara (Diu) & Jakahau (Gujarat) that



represents an innovative approach to modernizing fishing infrastructure while prioritizing environmental sustainability, efficiency, and safety Implementation of smart technologies in fishing harbour can revolutionize the industry by improving operations, enhancing safety measures, and promoting sustainable practices.

The Department is also actively collaborates and cooperates with the FAO and its affiliated bodies, such as the Committee on Fisheries (COFI), the Sub-Committee on Aquaculture (COFI-AQ), and the Sub-Committee on Fish Trade (COFI-FT). It remains dedicated to exploring further opportunities for collaboration and cooperation to ensure the comprehensive development of the sector.



Chapter 9

Accounting Organisation Of Department Of Fisheries

Overview

The Secretary is the Chief Accounting Authority in the Department of Fisheries. He discharges his functions with the assistance of Financial Adviser and Chief Controller of Accounts.

2. As per Para 1.2.3 of Civil Accounts Manual, the Chief Controller of Accounts for and on behalf of the Chief Accounting Authority is responsible for:-

- a) Arranging all payments through the Pay and Accounts Offices/Principal Accounts Office except where the Drawing and Disbursing Officers are authorized to make certain types of payments.
- b) Compilation and consolidation of accounts of the Ministry/ Department and their submission in the form prescribed, to the Controller General of Accounts; preparation of Annual Appropriation Accounts for the Demands for Grants of his Ministry/Department, getting them duly audited and submitting them to the CGA, duly signed by the Chief Accounting Authority.
- c) Arranging internal inspection of payment and accounts records maintained by the various subordinate formations and Pay and Accounts Offices of the Department and inspection of records pertaining to transaction of Government Ministries / Departments, maintained in Public Sector Banks.
- 3. The Chief Controller of Accounts, Department of Fisheries performs his duties with the assistance of 2 Controller of Accounts, 1 Assistant Controller of Accounts, 9 Pr. Accounts Officers (Admn./Estt., Accounts, Treasury Payments, IAW and IAP) at HQs and with the help

of 11 Pay and Accounts Offices of Ministry of Fisheries, Animal Husbandry & Dairying and Ministry of Agriculture & Farmers Welfare. Zonal Internal Audit party headed by Senior Accounts Officer is also stationed at Kochi who works under the control of IAW (HQ). All officers of Pay & Accounts Offices including Principal Accounts Office are on the strength of Ministry of Agriculture & Farmers' Welfare; therefore, there is a need of augmentation of man power in Departmental Accounting Organization of Department of Animal Husbandry & Dairying and Department of Fisheries respectively. The details regarding distribution of work in the Office of Chief Controller of Accounts are given at **Exhibit** 'A'.The Department of Fisheries have 04 CDDOs and 13 NCDDOs. The Non-Cheque Drawing DDOs submit bills to the Pay and Accounts Offices under pre-check system of payment. Accounting information Flow chart is given at Exhibit 'B'.

Role and Responsibilities of CCAs as Heads of Accounting Organization in Ministry / Department

As per para 1.3, Appendix-'1.1' of Civil Accounts Manual, Revised Fourth Edition (2024), the Pr.CCAs/CCAs/CAs(IC) of the Ministries / Departments concerned are the Head of the accounting organization in the respective Ministries / Departments. Their broad functions are prescribed as below:-

a. Receipts, Payments and Accounts:

I. Ensure establishment of effective and efficient systems with necessary internal controls for accounting of all receipts and payments of the Ministry/Department.



- ii. Supervise payments and receipts transactions conducted through PAOs and Cheque Drawing DDOs and ensuring that they are done in conformity with prescribed Rules and Regulations.
- iii. Supervise timely payment to all eligible claimants (Government servants, vendors/suppliers, grantee and loanee institutions etc.) and ensure that the procurements through GeM are carried out as per codal provisions.
- iv. Ensure efficiency, accuracy and timely submission of monthly and annual accounts to O/o CGA.
- v. Ensure timely, accurate, comprehensive, relevant and useful Financial Reporting.
- vi. Ensure accuracy and timely submission of monthly reports to O/o CGA.
- vii. Monitor efficient service delivery to the Ministry/Department through the accredited/authorized banks and monitor their performance for timely realization of receipts into Government Accounts.
- viii. Monitor adherence to the prescribed accounting standards, rules and principles.
- ix. Ensure timely submission of Audited Annual Appropriation Accounts duly signed by Chief Accounting Authority of the Ministry/ Department to O/o CGA.
- x. Ensure preparation of annual 'Accounts at a Glance' for their Ministry/Department.
- xi. Examine the proposal of Ministries/ Departments for opening of a Personal Deposit Account or framing accounting procedure in respect of a newly created Fund in the Public Account of India and monitor their smooth operations.
- xii. Review the payment sanctions (including GST refunds sanction) as per the monetary limits prescribed by O/o CGA from time to time.

- xiii. Monitor the clearance of balances under Debt, Deposit, Suspense and Remittance (DDSR) heads and take timely corrective measures to clear adverse balances under these heads.
- xiv. Monitor opening of appropriate heads of account for new schemes/ expenditures as per prescribed chart of accounts of the Object heads by the Department of Expenditure and the List of Major and Minor Heads of Accounts (LMMHA).
- xv. Monitor timely and accurate authorization of pension and other retirement benefits to retiring Government servants.
- xvi. Coordinate with GeM Standing Committee on matters relating to procurement and the related payments.
- xvii. Pr.CCAs/CCAs/CAs(IC) shall function as nodal officer of the Ministry for PFMS matters.
- xviii.Follow up with Loanee on repayment of loan and interest

In respect of the above responsibilities, the Head of Accounting Organization i.e. Pr.CCAs/CCAs/CAs(IC) shall function under the direction, superintendence and control of the CGA.

b. <u>Budget formulation including Outcome</u> Budget:

- I. Pr.CCA/CCA/CA (IC) shall monitor and assist in preparation of budgetary proposals and assist the administrative Ministries/Departments in better inter-se programme prioritization/allocation within the budgetary ceilings, based on the analysis of expenditure and profile of each programme/sub-programme.
- ii. Provide necessary support to the administrative Ministries/Departments in preparation of Outcome Budgets/Output-Outcome Monitoring Framework (OOMF) in accordance with the time schedule/ guidelines laid down from time to time by Ministry of Finance.



- iii. Furnish the budget estimates in respect of Public Account transactions to Budget Division and Composite Demands controlled by Budget Division for their inclusion in the Budget.
- iv. Furnish budget estimates for interest on Provident Fund balances of employees and on various deposits in the Public Account including Reserve Funds.
- v. Monitor all reports and statements related to Budget documents.

c. Estimation of Non-Tax Revenue Receipts:

Assist FA in periodical reviews of various non-tax revenue receipts of the Ministries/Departments with the Administrative Divisions and furnish estimates of non-tax Revenue Receipts to Budget Division, DEA.

d. Internal Audit/Risk Based Audit:

- i. Discharge the duties of Member Secretary of Internal Audit Committee headed by the administrative Secretary to review audit paras of PAC, C&AG and Internal Audit and concomitant compliance/course correction.
- ii. They are responsible to conduct special audit in Ministries/Departments as per the direction of Chief Accounting Authority or CGA. The Internal Audit Wing working under the control and supervision of the Pr.CCAs/CCAs/CAs would move beyond the existing system of compliance /regulatory audit and would focus on:
- a. Assessment of adequacy and effectiveness of internal controls in general, and soundness of financial systems and reliability of financial and accounting reports in particular;
- b. Identification and monitoring of risk factors (including those contained in the Outcome Budget/OOMF Framework);
- c. Critical assessment of economy, efficiency and effectiveness of service delivery mechanism to ensure value for money; and

- d. Providing an effective monitoring system to facilitate mid-course corrections.
- iii. Furnishes financial appraisal of schemes and monitors projects and schemes through regular Internal Audit.
- iv. Conducts audit of accredited banks, authorised/other banks/CPPCs and Focal Point Bank branches including e-FPBS in respect of Government transactions in organisations where it has been required.
- v. Shall ensure to prepare the Annual Audit Plan and Annual Internal Audit Review.

The above functions shall be carried out as per the guidelines issued by the CGA from time to time.

e. <u>Public Financial Management System & IT projects:</u>

- i. Act as nodal officers for PFMS and assists FA to ensure that guidelines/ instructions issued on PFMS are followed /implemented and resolve issues relating to efficient running of PFMS.
- ii. Monitor the usage of PFMS and its different modules including coordinating with Ministry and PFMS Division of O/o CGA for timely, accurate and useful financial reporting for the purpose of tracking flow of funds to the last level implementing agency/beneficiary and its utilization under Central Sector/Centrally Sponsored/Direct Benefit Transfer schemes of Government of India.
- iii. Coordinate integration of data bases and processes for establishing a Government Integrated Financial Management Information System (GIFMIS).
- iv.Render professional expertise in the functioning of the financial management system, from the system point of view and making it more effective.
- v. Monitoring the implementation of security guidelines issued for access control and other related security aspects of PFMS and ensuring data security by regular monitoring of the system.



- vi. Ensure correct mapping of the accounting basket of Central Sector and Centrally Sponsored Schemes for accurate expenditure reporting.
- vii. Carry out regular review of reports and information in PFMS and to present it to the Executive for decision making.
- viii. Monitor relevant PFMS reports and dashboard on regular basis to ensure accuracy of reports relating to performance of the schemes in their respective Ministries.
- ix. Monitor timely weeding out of dormant registration of Agencies, etc.

f. Expenditure and Cash Management:

Coordinate with Ministries/Departments for compliance of Cash Management system guidelines issued by Budget Division, MoF (Monthly Expenditure Plan[MEP]/Quarterly Expenditure Plan (QEP) limits, implementation of TSA system for release of funds to Autonomous bodies in just in time.

g. <u>Disclosure and reporting requirements</u> under FRBM Act.

Assist in preparation of the disclosure statements required under the FRBM Act in respect of their Ministry/Department for incorporation in the consolidated statement compiled by the Ministry of Finance for the Government as a whole.

h. Monitoring of Assets and Liabilities:

Assist Ministries/Departments for maintaining comprehensive record of Assets and Liabilities and monitor and maintain records of Government Guarantees through the Principal Account Office.

i. <u>Interaction between Ministry of Finance and</u> the Fas:

The Pr.CCAs/CCAs/CAs (IC) shall provide required material and assistance for the quarterly meeting of FAs with Secretary (Expenditure) and other financial inputs as required by FAs from

time to time.

j. General Administration and Coordination:

- i. Exercise the powers of the Head of the Department for the Accounting Organisation and is responsible for the Administration and Establishment related functions.
- ii. Discharge of responsibilities in terms of the statutory powers to be exercised being the Appointing Authority/Disciplinary Authority.
- iii. Exercise appropriate oversight on the overall quality and maintenance of departmental accounts by their Pay and Accounts Offices/Principal Accounts Offices.

Note:

- a. In Ministries/ Departments which are headed by Pr. CCAs, it shall be the prerogative of the Pr. CCA to delegate any item of the above listed responsibilities to the CCAs/CAs as per their administrative convenience and exigency, and subject to the established codal provisions.
- b. In addition to the above, Head of Accounting Organization i.e. Pr.CCAs/CCAs/CAs (IC) as the case may be, shall also be responsible for any other responsibility assigned by the Chief Accounting Authority.
- c. In addition, Budget section of the Ministry should ordinarily function under the control of CCA and CCAs are expected to act as Nodal Officer for PFMS inter alia in resolving issues relating to its smooth function and efficient running in terms of Para 43 and Para 44 of Charter for Financial Advisor issued vide FS & Secretary (Expenditure) D.O. Letter No.23(3)/E.Coord/2018 dated 13/06/2023.

5. Banking Arrangements

State Bank of India is the accredited bank for PAOs and its field offices in the Department of Fisheries. e-Payments processed by the PAOs/CDDOs are settled through CMP, SBI, Hyderabad in favor of the bank account of vendors/beneficiaries and in some cases, cheques issued by the PAOs/CDDOs



are presented to the nominated branch of the accredited bank for payment. The receipts are also remitted to the accredited banks by the respective PAOs/CDDOs apart from Non-Tax-Receipt Portal (NTRP). Any change in accredited bank requires specific approval of Controller General of Accounts, Department of Expenditure, Ministry of Finance.

Principal Accounts Office has 11(Eleven) Pay & Accounts Offices. Five PAOs are located in Delhi/NCR, two in Mumbai, one each in Chennai, Kolkata, Kochi and Nagpur. All payments pertaining to the Department/Ministry are made through PAOs/CDDOs attached with respective PAOs. Drawing and Disbursing Officers present their claims/bills to the designated PAOs/CDDOs, who issue cheques/releases e-payment after exercising the necessary scrutiny as per provisions contained in Civil Accounts Manual, Receipt and Payment Rules and other orders issued by Govt. from time to time.

6. Internal Audit Wing

Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It basically aims at helping the organization to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes. It is also an effective tool for providing objective assurance and advice that adds values, influence change that enhances governance, assist risk management and control processes and improve accountability for results. Internal Audit Committee has been constituted under the Chairmanship of Secretary (Fisheries). There are 17 Auditee Units/DDOs in the Department of Fisheries excluding Autonomous Bodies and other Grantee Institutions.

7. Public Financial Management System (PFMS)

Public Financial Management System

(PFMS) initially started as a Plan Scheme named CPSMS of the erstwhile Planning Commission in 2008-09.

I. Employees Information System (EIS) Module:

This module has been implemented in the Drawing and Disbursing Office of Department of Fisheries.

II. EAT Module of PFMS:

All Autonomous Bodies of Department of Fisheries have been on-boarded on Expenditure Advance Transfer (EAT) module of PFMS.

III. Online Portal (Bharat Kosh) for collection of Non-Tax Revenue

NTRP Portal in M/o Fisheries, Animal Husbandry and Dairying is functional from April, 2017. The collection of Non-Tax Revenue of the Department of Fisheries in the Financial Year 2024-25 up to 30.11.2024 is Rs. 17.99 Crores which has been collected through Bharat Kosh on NTR e-Portal.

FAQs on NTRP are available at website link http://cga.nic.in//Page/FAQs.aspx.

8. New Initiatives by Ministry of Finance and O/o Controller General of Accounts

A. 'e-Bill System'

- a) The Union Minister for Finance & Corporate Affairs Smt. Nirmala Sitharaman launched the e-Bill system for Central Government Ministries on the 46th Civil Accounts Day. New e-Bill system to enable paperless submission and end to end digital processing of bills.
- b) In a phased manner, the new system will make the entire process of submission and backend processing of bills completely paperless and transparent. Thus, it is a major step forward in realizing the vision of "Digital India" and promoting ease of doing business.
- c) The objectives of the system are to:
- i) Provide convenience to all vendors/ suppliers of the government to submit their



bills/claims at any time, from anywhere.

- ii) Eliminate physical interface between suppliers and government officers.
- iii) Enhance efficiency in processing of bills/claims.
- iv) Reduce discretion in processing of bills through "First-In-First-Out" (FIFO) method.
- d) Currently, the suppliers of various goods and services to the Government have to submit physical, ink signed copies of their bills to the respective Ministries/ Departments/ Offices of the Government of India. Similarly, the government employees also need to submit hard copies of their claims. At the backend too, the processing of bills is done through a mixed system of physical and digital modes. So, the suppliers/vendors or their representatives need to visit the offices to deliver bills. Moreover, they are able to track the status of processing of their bills.
- e) Under the newly launched e-Bill system, vendors/suppliers can upload their bills online along with supporting documents from the convenience of their homes/ offices at any time through digital signature. For those not having a digital signature, the facility of e-sign using Aadhaar has also been provided. So, the suppliers will no longer be required to visit the offices concerned for this purpose.
- f) At the backend too, the electronic bill received will be processed by the authorities digitally at every stage and finally, the payments will be credited digitally to the bank account of the vendor. The vendor/supplier would be able to track the status of processing of their bills online. Thus, the new system will bring in lot of efficiency and transparency in the system and is a big citizen-centric decision of the Government of India.
- g) The e-bill system has been developed by the Public Financial Management System (PFMS)

Division in the office of the Controller General of Accounts in the Department of Expenditure, Ministry of Finance. The bills will be processed by First-In-First-Out (FIFO) method.

h) In addition to promoting ease of doing business and bringing convenience to lakhs of vendors/suppliers, the e-Bill system will be environment friendly, eliminating the need to submit crores of paper bills annually and will thus save tonnes of paper every year. The e-Bill system has an elaborate digital storage facility for retrieval of documents and a robust audit trail.

B. Revised procedure for release of funds under Centrally Sponsored Schemes:

For better monitoring of availability and utilization of funds released to the States under The Centrally Sponsored Schemes (CSS) and to reduce float. The Department of Expenditure has modified the procedure for release of funds under CSS and Every State Government will designate a Single Nodal Agency (SNA) for implementing each CSS.

Brief on process Flow for SNA Model:

- a) Every State Government will designate a Single Nodal Agency (SNA) for implementing each CSS. The SNA will open a Single Nodal Account for each CSS at the State level in a Scheduled Commercial Bank.
- b) After opening of Single Nodal Account of the scheme and before opening zero balance subsidiary account of IAs or assigning them drawing rights from SNA's account, the IAs at all levels shall return all unspent amounts lying in their accounts to the Single Nodal Account of the SNA.
- c) The SNAs shall ensure that the interest earned from the funds released should be mandatorily remitted to the respective Consolidated Funds on pro-rata basis in terms of Rule 230(8) of GFR, 2017.



- d) Funds available in the bank account of SNA should not be more than 25% of the amount likely to be released (including state share) under a CSS to a State for 2022-23.
- e) SNAs and IAs will mandatorily use the EAT module of PFMS or integrate their systems with the PFMS to ensure that information on PFMS is updated by each IA at least once every day.
- f) In case of CSS having no State share and where as per the scheme guidelines, funds are released by the Central Ministry/Department directly to the districts/blocks/Gram Panchayats/Implementing agencies, the requirement of notifying a single Nodal Agency and opening of a Single Nodal Account at the State level may be waived by the Secretary of the Central Ministry/Department concerned in consultation with the Financial Adviser.

C. Revised procedure for release of funds under Central Sector Schemes:

In supersession of all previous issued orders, Ministry of Finance, Department of Expenditure has issued an O.M. No. F.No.1(18)/PFMS/ FCD/2021 dated 09th March 2022 mentioning Guidelines/Procedure for flow of funds under Central Sector Schemes by designating Central Nodal Agency (CNA) regarding release of funds under the Central Sector Schemes. The procedure effective from 1st April, 2022 by the Ministries/ Departments of Government of India for flow of funds under the Central Sector Schemes have been divided in two Models:-

I) Implementation through Treasury Single Account(TSA) Model I- This model will be applicable in case of Central Sector Schemes having annual outlay of more than Rs. 500 Crores and implemented without involvement of State agencies. It shall be mandatory to implement such schemes through the Treasury Single Account(TSA) Model.

- **II) Implementation through Scheduled Commercial Banks(SCB) Model II** This model will be applicable in case of Central Sector Schemes having (A) annual outlay of less than Rs. 500 crores
- or (B) the schemes are being implemented by agencies of the State Governments exclusively or in addition to the Central Agencies or (C) other schemes not covered in Model-1.

Brief on Process Flow for Central Sector Schemes:

- a) Identification of Central Sector Schemes for Implementation through Model I or Model II.
- b) Notification of ABs/CPSEs/Implementing Agencies as Central Nodal Agencies (CNA).
- c) Open Assignment Account with RBI (e-Kuber) for each scheme under Model I.
- d) Open an Account for each scheme in scheduled commercial banks (SCB)under model
- e) Listing & Closure of existing Bank Accounts of CNA & Sas.
- f) Balance in Account must be transferred to Consolidated Fund of India(CFI) under Model I and Unspent amount of the scheme is returned by all the Sub Agencies (SA's) to the CNA account under Model II.
- g) Interest earned from the funds is remitted to the Consolidated Fund of India (CFI) under Model II.
- h) Mandatorily use of EAT module of PFMS or integration of their systems with the PFMS.

<u>Structural Changes/Reforms initiated by</u> <u>Ministry of Finance (FY- 2023-24)</u>

- 1) Master circular dated 21.05.2024 on the 'CNA Model'.
- A) Model 1: Implementation through Treasury Single Account (TSA)

This model will be applicable for schemes



having Budget Estimate of Rs. 100 crore or more in a Financial Year and which are being implemented though only two level of Central/State Government agencies eligible to open account in RBI. Agencies may be a Central Autonomous Body or a Central Public Sector Enterprise or a State Government Agency.

B) Model – 1A: Implementation through Hybrid Treasury Single Account (TSA)

This Model is applicable to schemes having Budget Estimate of Rs 100 Crore or more in a Financial Year, and where there is a private Sub-Agency (SA) involved in implementation of the scheme which cannot open an account in the RBI and/or where there are more than two level of Government/Private SAs involved in implementation of the scheme as RBI does not provide facility to open accounts for 3rd& below level agencies.

C) Model – 2: Implementation through scheduled commercial bank (SCB)

This Model shall be applicable for Central Sector Schemes with Budget Estimate of less than Rs 100 crore. However, Ministries/Departments may also opt for Model 1/1A to implement such schemes. Under this model, every Ministry/Department will designate a Central Nodal Agency (CNA) for implementing each Central Sector Scheme and CNA will open a Central Nodal Account (savings bank account) for each Central Sector Scheme in a scheduled commercial bank authorized to conduct Government business by the Ministry/Department concerned.

2) SNA SPARSH model - "Just-in-Time" release of Centrally Sponsored Schemes (CSS) funds through e-kuber platform of Reserve Bank of India (RBI) as promulgated by DoE vide their OM dated 13.07.2023, 21.05.2024, 04.10.2024 and 17.12.2024 respectively.

As per DoE order 1(27)/PFMS/2020 dated 17.12.2024, Pradhan Mantri Matsya Sampada Yojana (PMMSY) is to be implemented in 26 states

(21 existing and 5 new) through SNA SPARSH.

3) Revised Procedure for flow of funds under Centrally Sponsored Schemes (CSS) - Implementation of Central SNA (CSNA) module.

A facility of SNA-Central has been developed by PFMS Division, O/o CGA in pursuance of Department of Expenditure OM F.No 1(13)/PFMS/2021 dated 24.05.2023 for fund release from Government of India directly to implementing agencies, having no state share, under Centrally Sponsored Schemes. Standard operating process (SOP) for implementation of CSNA module has been issued by PFMS Division, O/o CGA vide their OM dated 27.05.2024. National Fisheries Development Board (NFDB), Hyderabad has been designated as CSNA for implementation of Central Sector Component of Pradhan Mantri Matsya Sampada Yojana (PMMSY) in Department of Fisheries.

D. Consolidated instruction on various aspects of Security while using PFMS:

Ministry of Finance, Department of Expenditure, Office of the Controller General of Accounts vide O.M. No. 1-17016/1/2022-ITD-CGA/10985/229 dated 30.09.2022 has issued consolidated instructions on various aspects of security while using PFMS:

a) Access Management:

- I) For new user registration of officials dealing with PAO and DDO module of PFMS, only NIC / GOV domain email id will be allowed. Same email-id and mobile number can be used maximum for four user ids within same PAO code and additional three user ids for across PAO codes keeping in view of multiple charges handled by users in different field offices.
- ii) A system of two levels approval for creation of user and e-mail/SMS alert on creation of users to approve has been built into the system.
- iii) Marking of inactive user ids > 45 days as disabled is being enforced in PFMS.



- iv) At the time of relieving of any Group A& Group B Officer who is a user in PFMS viz. CCA level user, PAO type user, his/her digital signature & user id should be deactivated.
- v) A notification to alert the user for change is given in case user login in the system other than the system generally being used by the user.

b) Password Policy in PFMS:

- i) Password should be of length of minimum 8 characters.
- ii) Password mandatorily should include both special as well as Alpha numeric Characters.
- iii) Password should not have similarity with user name or part of the user name.

c) Processing of Payments:

- i)The I Key/DSC of the Pr. AO has to be invariably approved by the CCA level user, whereas I Key/DSC of PAOs by the Pr. Accounts Officer level user and that of the CDDOs by the PAO level user. The Timeout procedure for inserting the I Key/DSC for every session has been made in PFMS.
- ii) PAOs may be advised strictly not to access the PAO/DDO module and not use digital signatures for making payment from the computers installed outside their office locations.
- iii) All guidelines stipulated to be followed for making payments should be strictly adhered to and verification against physical documents should be done at all levels unless stipulated by explicit directions for user of electronic mediums.
- iv) All Pay and Accounts Officers authorized for making payments shall verify each payment file of a batch with the corresponding physical bill/ebill without fail before putting the digital signature.

d) Network Security:

i) Always user genuine software, install the latest updates/patches for operating system,

Antivirus and Application Software.

- ii) Enable firewall, Limit user privileges on the computer, Check and verify email sender IDs and web links before opening file attachments.
- iii) Use strong passwords, Protect against social engineering attacks.
- iv) Use only official supplied USB storage media.
- v) Users should be periodically briefed about Cyber Security measures.
- vi) Avoid downloading and installing pirated software
- vii) Internet-connected computers should not be used for drafting/storing sensitive official documents/correspondences.
- **E.** Revised Guidelines on Financial Limits to be observed in determining cases relating to 'New Service'/ 'New Instrument of Service' promulgated by Budget Division, DEA vide their OM No. F.1(22)-B(AC)/2022 dated 23.02.2024.
- **F.** Re-appropriation of funds- Revised guidelines on the subject has been issued by Department of Expenditure, Ministry of Finance vide their OM No. 01(14)/2016-E.II(A)(Part-III) dated 28.03.2024.
- **G.** Civil Accounts Manual, Revised Fourth Edition has been published by O/o CGA in month of February 2024 which was released by Finance Secretary on Civil Accounts Day, 2024.
- H. Delegation of Financial Power Rules 2024 has been published by Department of Expenditure, Ministry of Finance, which has come into force with effect from the 1st day April, 2024.

I. Some other New Initiatives-

- · Implementation of DoE guidelines on TSA/SNA/CNA/SNA SPARSH/Hybrid TSA & CSNA in letter and spirit.
- The statement of scheme-wise expenditure, unspent balances,



outstanding UCs, scheme wise and state wise MIS of excess/deficit transfer from treasury to SNA, fund available in SNA account, interest remitted to CFI, status of legacy data are being shared with the program division on weekly basis for monitoring of fund flow and helping them in just in time (JIT) release.

- A series of training has been organized by Principal Accounts Office on e-bill and TSA module of PFMS to all the stake holder including divisional heads.
- A special drive was launched for settlement of outstanding MEA debit claims by Principal cum Pay & Accounts Office.
- Delay in payment to seller/supplier in Government e-market place (GeM) and status of pending bill with reference to block budget as per PFMS are being informed to respective Head of Department with a copy to PPS to Secretary and AS & FA so that payment could be released within stipulated timeline prescribed by DoE.
- Internal Audit Committee headed by Chief Accounting Authority i.e. Secretary (Fisheries) has been set up in terms of O/o CGA OM. A special drive for liquidation of outstanding internal audit paras have been launched in 2023-24 and periodical review of outstanding paras has taken place in SoM chaired by Secretary on weekly basis.
- Setting up of committee for NPS oversight mechanism and uploading of quarterly report in NPS dashboard along with comments of Financial Advisor.
- Designation based e-mail has been opened for all officials of Principal cum Pay & Accounts Office.
- Special campaign 2.0 for disposal of

- pending matter including RTI, PG and VIP references.
- Pan India training cum Roll-out plan for electronic bill system (e-bill) of PFMS in 2023-24.
- Operationalization of revised/new Object Heads of Accounts under Rule (8) of DFPR issued vide DoE notification dated 12.12.2022 and O/o CGA OM dated 15.12.2022 and a workshop was also organized by Principal cum Pay & Accounts Office in this regard.
- To improve the internal control and upgradation of skills, officers/officials working in Principal cum Pay & Accounts Office have been transferred as per CVC, DoP&T guidelines and instructions issued by O/o CGA.
- Implementation of 2nd factor biometric authentication through FIDO device to access PFMS.
- Opening of Scheme-wise bank account for release of 100% Central Financial Assistance to implementing Agencies and GIA (Salary, General & Creation of Capital Assets) to ABs other than TSA/SNA/CNA route.
- Celebration of Civil Accounts Week from 01.04.2023 to 07.04.2023.
- Enhancing efficiency of payment process by way of monitoring TM-02 report (under CAM report in payment tab) of PFMS on weekly & monthly basis.
- Enhancing efficiency of payment process by way of monitoring TM-02 report (under CAM report in payment tab) of PFMS on weekly & monthly basis.
- Constitution of PFMS cell in Principal cum Pay & Accounts Office under the chairmanship of CA as the first port of call for the PD and IFD for any PFMS related



- issue in pursuance of MoF, DoE, PFMS division O.M Pr.AO(Admn)/PFMS Cell/2024-25/1228-56 dated 12.12.2024.
- Risk based audit of DoF schemes in terms of O/o CGA guidelines.
- Implementation of new window based digital signing utility in place of existing Java based utility in the sanction module of PFMS.
- Special drive for issue of qualifying service certificate by Head of Office to Government servant in consultation with PAOs on time in terms of Rule 32 of Central Civil Pension Rules, 2021.
- Reconciliation of expenditure between PAO & DDO on monthly basis.

- Dealing with pension matters sensitively and on time.
- Special drive for liquidation of CGA and C&AG audit paras.
- Roll-out of processing of Electronic Inter Government Adjustment Advices (e-IGAA) in PFMS.
- Preventive measures at various levels to avoid any financial irregularities in terms of O/o CGA OM dated 19.07.2023.
- 9. The expenditure as on 31.12.2024 with reference to the B.E. 2024-25 is given at Exhibit-C.





EXHIBIT- 'A'

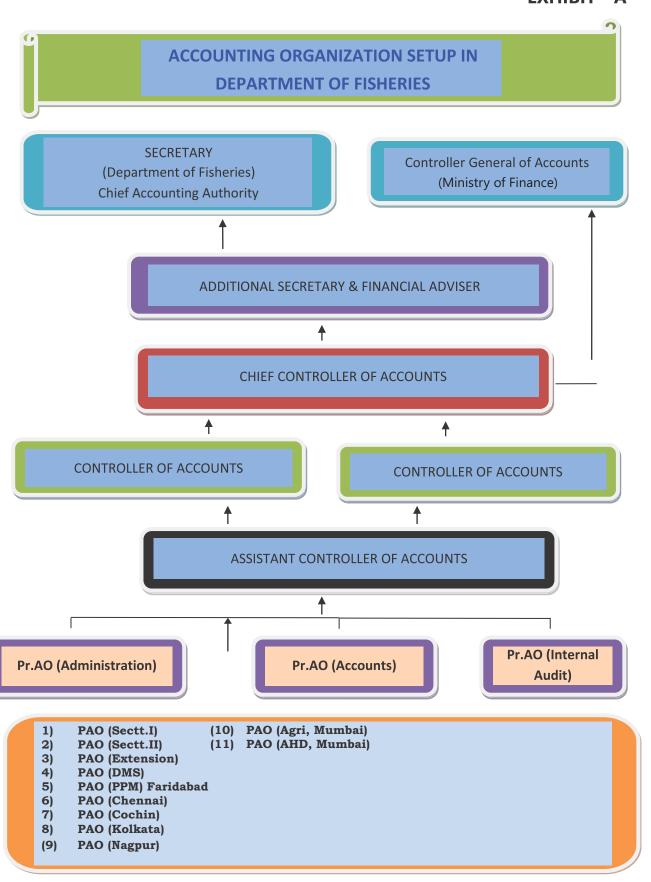




EXHIBIT- 'B'

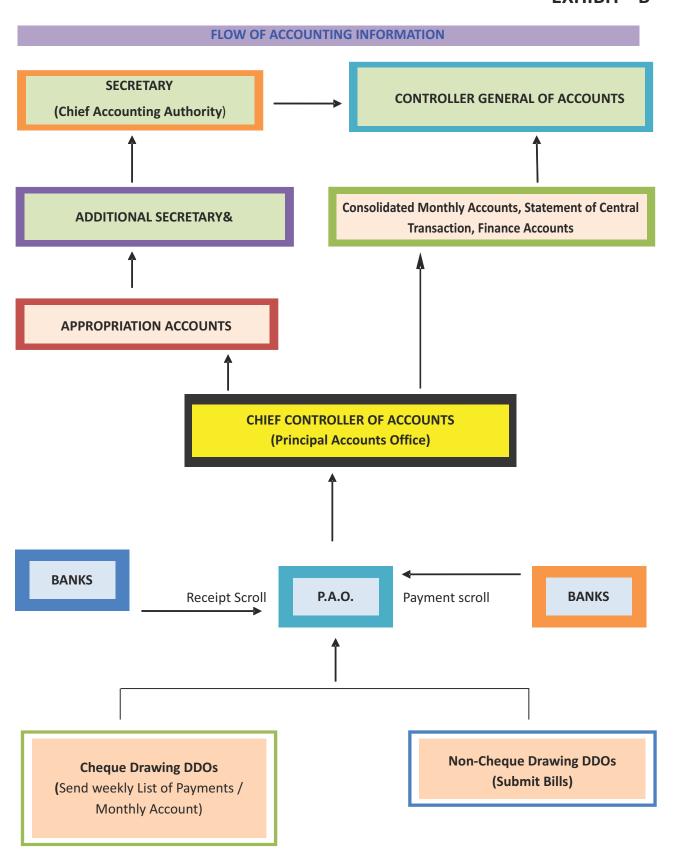




Exhibit 'C'

Grant No. 43

Department of Fisheries

Monitoring of Expenditure over BE& RE

Transaction Date: 01.04.2024 to 31.12.2024

(Rs. in Crores)

Sr. No.	Name of Scheme/Description	BE 2024- 25	Progressive Exp. upto 31.12.2024	%age of expenditure over BE
	1	2	3	4
1	Establishment Expenditure of the Centre			
1.1	Secretariat	68.92	21.80	31.63%
1.2	Fisheries Institute	143.02	58.24	40.72%
	Total - Establishment Expenditure of the Centre	211.94	80.04	37.77%
		l		
2	Central Sector Schemes / Projects			
(*)	Fisheries and Aquaculture Infrastructure			
2.1	Development Fund	30.00	0.00	0.00%
	Total - Central Sector Schemes / Projects	30.00	0.00	0.00%
3	Other Central Sector Expenditure			
3.1	National Fisheries Development Board	16.78	9.00	53.64%
3.2	Coastal Aquaculture Authority	5.72	2.86	50.00%
	Total - Other Central Sector Expenditure	22.50	11.86	52.71%



Sr. No.	Name of Scheme/Description	BE 2024- 25	Progressive Exp. upto 31.12.2024	%age of expenditure over BE
	1	2	3	4
4	Centrally Sponsored Schemes			
4.1	Pradhan Mantri Matsya Sampada Yojana (PMMSY)	2352.00	243.83	10.37%
	Total - Centrally Sponsored Schemes	2352.00	243.83	10.37%
	Total (Grant No. 43)	2616.44	335.73	12.83%

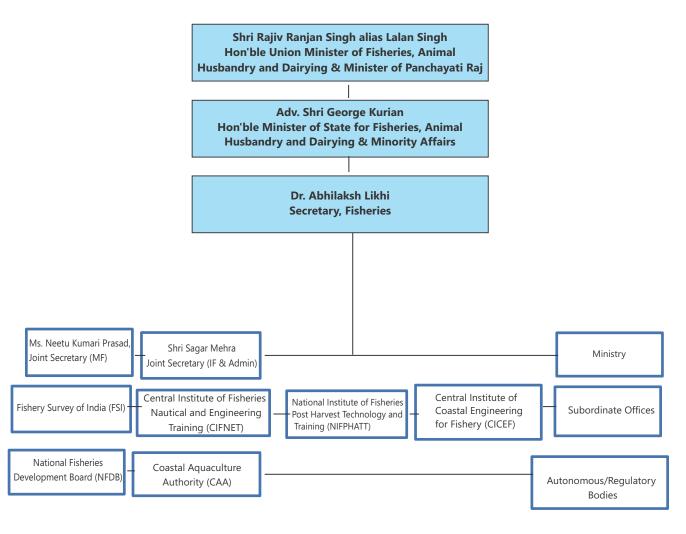


ANNEXURES



Annexure-I

Organizational Structure of Department of Fisheries





Work Allocation of Joint Secretaries (Inland & Marine) Department of Fisheries

Joint Secretary (Inland Fisheries & Administration)

Admn. I, Admn. II, Cash, General Admin, Trade & Codex Ailementarius, Plan Coordination, General Coordination, Public Grievances & Administrative Reform, International Cooperation, Official language, Information Technology. All matters related to Inland Capture Fisheries, FIDF, NFDB, FISHCOPFED, Matters related to Ornamental & Cold water fisheries, FAO, OIE, WTO, etc, Trade-SIPs, Coordination with ICAR institutions for Inland Fisheries CIFRI, CIFA, CIFE, DCFR, NBFGR & other institutions related inland fisheries, Inland Fishing Infrastructure Cold-Chain, Markets, Fish Landing Centers & other Post Harvest Operations, PMMSY Schemes of all states except Maritime States/UTs, inland Fishers Welfare Scheme and Programs , KCC, Department of Fisheries Administration (other than matters related to administration of Fisheries Institutions and CAA), Budget & Accounts, Fisheries Statistics, Court cases- inland fisheries, Press/information Social Media, Website/Dash board related activities, Parliament affairs and Coordination Any other matters entrusted by Secretary Fisheries.

Joint Secretary (Marine Fisheries & Chief Vigilance Officer)

All matters related to Marine Fisheries, Coastal Aquaculture & Mariculture, Matters of Coastal areas within the geographical jurisdiction of CAA, Quarantine 7 Diseases-regulation, surveillance & control, Matter related to Fisheries Institutions- FSI, CIFNET, CICEF, NIPHATT except administrative matters, Coordination with ICAR Institutes of CMFRI, CIBA, CIFT, NIO, NIOT, CSRI, NBFGR & other institutions related marine fisheries, Coastal Aquaculture Authority (CAA), Marine fishing Infrastructure including Fishing Harbours, Fish Landing Centres & other Post Harvest Operations like Cold-Chain, Markets etc. Export promotion, matter of MPEDA, RGCA, EIA, Matters related to IOTC, FAO, OIE, WTO Etc, Externally Aided Projects, All PMMSY Schemes of Maritime States/UTs, Monitoring, Controlling and Surveillance Scheme under PMMSY, Marine Fishers Welfare Schemes and Programmes, Court Cases-Marine Fisheries, any other matters entrusted by Secretary (Fisheries).



Annexure-II

Financial Allocation and Expenditure during FY 2024-25

Actual Expenditure as on 31st January, 2025 (Rs. In crore)

Budget Components	Budget Estimates	Revised Estimates	Final Requirement	Funds Concurrence
Pradhan Mantri Matsya Sampada Yojana	2,352.00	1500.00	361.34	955.11
Fisheries and Aquaculture Infrastructure Development Fund	30.00	25.00	0.00	7.38
National Fisheries Development Board (NFDB)	16.78	11.50	9.00	9.00
National Institute of Fisheries Post Harvest Technology and Training (NIPHATT)	17.02	13.22	11.62	11.62
Fishery Survey of India (FSI)	79.81	43.67	34.61	34.61
Central Institute of Coastal Engineering For Fishery (CICEF)	6.04	5.68	4.43	4.43
Central Institute of Fisheries, Nautical & Engineering Training (CIFNET)	31.14	20.73	17.85	17.85
Directorate of Aquatic Animal Health and Quarantine	9.00	1.46	0.00	1.40
Coastal Aquaculture Authority	5.72	5.00	4.29	4.29
Secretariat Economic services	68.92	40.19	26.35	26.35
Grand Total	2,616.44	1,666.47	469.49	1,072.06



ABBREVIATIONS



Short Form	Full Form
AAQU	Aquatic Animal Quarantine Unit
AFTC	Advanced Fishing Technology Course
AIC	Aquatic Innovation Centre
AKAM	Azadi Ka Amrit Mahotsava
AOC	Aqua One Centre
APFIC	Asia-Pacific Fishery Commission
APFIC	Asia-Pacific Fishery Commission
AQCS	Animal Quarantine and Certification Services
AQF	Aquatic Quarantine Facility
ASCM	Agreement on Subsidies and Countervailing Measures
BE	Budget Estimate
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical Economic Cooperation
ВМС	Brood stock Multiplication Centre
BOBP-IGO	Bay of Bengal Programme Inter-Governmental Organization
CAA	Coastal Aquaculture Authority
CBF	Culture Based Fisheries
CBS	Core Banking Solutions
CCRF	Code of Conduct for Responsible Fisheries
CGFM	Cluster Groupon Fisheries Management
CICEF	Central Institute of Coastal Engineering for Fisheries
CIFA	Central Institute for Freshwater Aquaculture
CIFNET	Central Institute for Fisheries Nautical and Engineering Training
CIFO	Central Institute of Fisheries Operatives
CMFRI	Central Marine Fisheries Research Institute
COFI	Committee of Fisheries
COFI-AQ	Sub-committee on Aquaculture
COFI-FT	Sub-committee on Fish Trade
CPIO	Central Public Information Officer
CPWD	Central Public Works Department
CS	Central Sector Scheme
CSS	Central Sponsored Scheme
DAAHQ	Directorate of Aquatic Animal Health & Quarantine



DBT	Direct Benefit Transfer
DDL	Disease Diagnostic Laboratory
DDO	Drawing and Disbursing Officer
DFS	Department of Financial Services
DGFT	Director General of Foreign Trade
DLC	District Level Committee
DoF	Department of Fisheries
DPIIT	Department of Promotion of Industry and Internal Trade
DSFS	Deep Sea Fishing Station
EAP	Externally Aided Projects
EAT	Expenditure, Advances & Transfer
EEs	Eligible Entities
EEZ	Exclusive Economic Zone
EIS	Employees Information System
EWS/PwD	Economically Weaker Section/Persons with Disabilities
FAO	Food and Agriculture Organization
FAQ/UN	Food and Agriculture Organisation / United Nations
FFPOs/Cs	Fish Farmers Producer Organizations/Companies
FIDF	Fisheries and Aquaculture Infrastructure Development Fund
FISHCOPFED	National Federation of Fishers' Cooperatives Ltd.
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FLC	Fish Landing Centre
	Fish Landing Centre Fish Market PriceIn formation System
FLC	
FLC FMPIS	Fish Market PriceIn formation System
FLC FMPIS FSI	Fish Market PriceIn formation System Fishery Survey of India
FLC FMPIS FSI GAIS	Fish Market PriceIn formation System Fishery Survey of India Group Accidental Insurance Scheme
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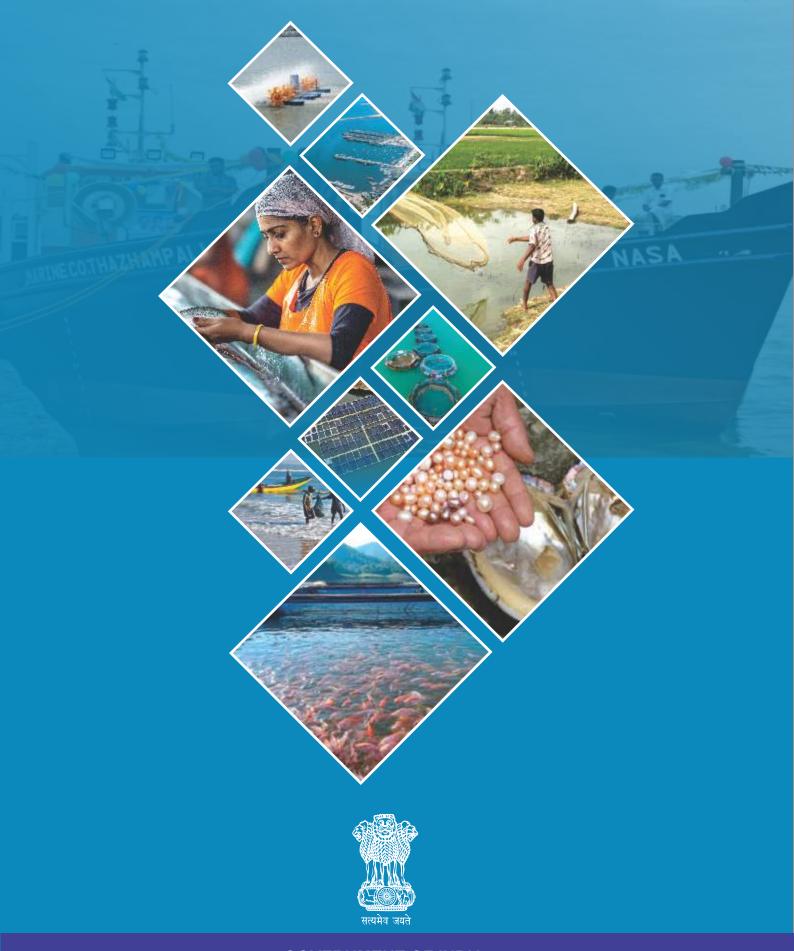


IOTC	Indian Ocean Tune Commission
ISO	International Organization for Standardization
ITK	Indigenous Technical Kno0wledge
IUU	Illegal, Unreported and Unregulated
JWG	Joint Working Group
KCC	Kisan Credit Card
LPC	Lead Partnership Country
MAP	Modified Atmosphere Packaging
MCS	Monitoring, Control and Surveillance
MFC	Marine Fitter Course
MFVs	Mechanized Fishing Vessels
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MMT	Million Metric Tonnes
MoA	Memorandum of Agreement
MSCS	Multi-States Cooperative Society
NABARD	National Bank for Agriculture and Rural Development
NACA	Network of Aquaculture Centresin Asiaand the Pacific
NBC	Nucleus Breeding Centres
NBFGR	National Bureau of Fish Genetic Resources
NCDC	National Cooperative Development Corporation
NCVT	National Council for Vocational Training
NFDB	National Fisheries Development Board
NGR	Negotiating Groups of Rules
NIFAP	National Inland Fisheries and Aquaculture Policy
NIFPHATT	National Institute for Fisheries Post-Harvest Technology &Training
NLEs	Nodal Loaning Entities
NMP	National Mariculture Policy
NRCP	National Residue Control Programme
NSPAAD	National Surveillance Programme for Aquatic Animal Diseases
NTRP	Non-Tax Receipt Portal
OIE	Office International des Epizooties
OLIC	Official Language Implementation Committee
PAC	Project Appraisal Committee
PAO	Pay and Account Office/Principal Accounts Office
PDC	Project Development Cell



PFMS	Public Financial Management System
PISFH	Pre-investment Survey of Fishing Harbours
PL	Post Larvae
PMMSY	Pradhan Mantri Matsya Sampada Yojana
PMU	Project Monitoring Unit
RAS	Re-circulatory Aquaculture System
RE	Revised Estimate
RFB	Regional Fishery Bodies
RFMO	Regional Fisheries Management Organization
RKVY	Rashtriya Krishi Vikas Yojana
ROSA	Review of Operational and Scientific Activities
RTI	Right to Information
S&DT	Special & Differential Treatment
SAARC	South Asian Association for Regional Cooperation
SCP	Self Contained Proposal
SCSP	Scheduled Caste Sub Plan
SDG	Sustainable Development Goals
SGO	Sectoral Group of Secretaries
SHG	Self Help Group
SIDA	Swedish International Development Agency
SIPO	Singapore-India Partnership Office
SLBC	State Level Bankers Committee
SLC	State Level Committee
SMC	Shore Mechanic Course
SOP	Standard Operating Procedure
SPF	Specific Pathogen Free
SPS	Sanitary and Phytosanitary Measures
TEFR	Techno Economic Feasibility Report
UNCLOS	United Nations Convention on the Law of the Sea
UNFSA	United Nations Fish Stock Agreement
UTs	Union Territories
VNC	Vessel Navigator Course
WAAW	World Antimicrobial Awareness Week
WGMSS	Working Group on Maritime Safety and Security
WTO	World Trade Organisation





GOVERNMENT OF INDIA
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
DEPARTMENT OF FISHERIES