

Basic Framework of PMMSY

Subject: Pradhan Mantri Matsya Sampada Yojana - A scheme to bring about Blue Revolution through sustainable and responsible development of fisheries sector in India

1. Background

- 1) Fisheries and aquaculture are an important source of food, nutrition, employment and income in India. The sector provides livelihood to about 16 million fishers and fish farmers at the primary level and almost twice the number along the value chain. Fish being an affordable and rich source of animal protein, is one of the healthiest options to mitigate hunger and malnutrition.
- 2) The Gross Value Added (GVA) of fisheries sector in the national economy during 2018-19 stood at Rs 2,12,915 crores (current basic prices) which constituted 1.24% of the total National GVA and 7.28% share of Agricultural GVA. The sector has immense potential to double the fishers and fish farmers' incomes as envisioned by government and usher in economic prosperity.
- 3) Fisheries sector in India has shown impressive growth with an average annual growth rate of 10.88% during the year from 2014-15 to 2018-19. The fish production in India has registered an average annual growth of 7.53% during last 5 years and stood at an all-time high of 137.58 lakh metric tons during 2018-19. The export of marine products stood at 13.93 lakh metric tons and valued at Rs.46,589 crores (USD 6.73 billion) during 2018-19.
- 4) Foreseeing the immense potential for development of fisheries and for providing focused attention to the sector, the Government in its Union Budget, 2019-20 has announced a new scheme, the Pradhan Mantri Matsya Sampada Yojana (PMMSY).

2. PMMSY SCHEME

- 1) Pradhan Mantri Matsya Sampada has been approved at a total estimated investment of Rs. 20,050 crores to be implemented over a period of 5 years from FY 2020-21 to FY 2024-25.
- 2) The scheme intends to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernisation and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare.
- 3) The PMMSY is an umbrella scheme with two separate Components namely (a) Central Sector Scheme (CS) and (b) Centrally Sponsored Scheme (CSS). The Centrally Sponsored Scheme (CSS) Component is further segregated into Non-

beneficiary oriented and beneficiary orientated sub-components/activities under the following three broad heads:

- (i) Enhancement of Production and Productivity
- (ii) Infrastructure and Post-harvest Management
- (iii) Fisheries Management and Regulatory Framework

3. AIMS AND OBJECTIVES

The Aims and Objectives of the Pradhan Mantri Matsya Sampada Yojana (PMMSY) are:

- (a) Harnessing of fisheries potential in a sustainable, responsible, inclusive and equitable manner
- (b) Enhancing of fish production and productivity through expansion, intensification, diversification and productive utilization of land and water
- (c) Modernizing and strengthening of value chain - post-harvest management and quality improvement
- (d) Doubling fishers and fish farmers incomes and generation of employment
- (e) Enhancing contribution to Agriculture GVA and exports
- (f) Social, physical and economic security for fishers and fish farmers
- (g) Robust fisheries management and regulatory framework

4. IMPLEMENTATION STRATEGY AND ACTIVITIES

- a) PMMSY will be implemented as an umbrella scheme having both Centrally Sector Components and Centrally Sponsored Scheme Components. It would focus on all round development of Fisheries sector through a bunch of diverse interventions along the fisheries value chain right from production to consumption.
- b) PMMSY fully recognizes the roles of the States/Union Territories for effective implementation and optimal outcomes. While majority of the activities under the Scheme would be implemented in partnership with States/UTs, in some of the key areas of national importance, the entire funds would be borne by Central government.
- c) The Scheme would maintain a fine balance between production and productivity activities including technology infusion, post-harvest infrastructure including strengthening and modernization of value chain and a robust Management and Regulatory Framework. While enhancing fish production and productivity continues to be one of the key objectives of PMMSY, thrust would be given for quality, sustainability, standards and traceability in fisheries sector from 'catch to consumer', post-harvest infrastructure and management, modernization and strengthening of value chain, enhancement of fisheries export competitiveness and a robust fisheries management and regulatory framework.

- d) The scheme would create a conducive environment for private sector participation, development of entrepreneurship, business models, promotion of ease of doing business, innovations and innovative project activities including start-ups, incubators etc. in fisheries sector.
- e) While implementing PMMSY, to the extent possible, 'cluster or area-based approaches' will be adopted in order to enhance competitiveness of fisheries sector, facilitate economies of scale, generate higher incomes, accelerate growth and expansion of the sector in an organized manner, amplify outcomes, etc. Potential growth clusters/areas for development of fisheries and aquaculture will be identified and will be developed as an integrated cluster with requisite interventions/activities, forward and backward linkages and with facilities for quality brood, seed and feed, critical infrastructure, processing and marketing networks, etc.
- f) Suitable linkages and convergence will be fostered with various centre and state government schemes wherever feasible for consolidating and amplifying outcomes and save public resources. Some of the identified central schemes for linkages and convergence frameworks are "Sagarmala Project" of the Ministry of Shipping, PMKSY of Ministry of Food Processing Industries, MGNREGS and National Rural Livelihoods Mission of Department of Rural Development, Rashtriya Krishi Vikas Yojana (RKVY) and other schemes of Ministry of Agriculture and Farmers Welfare, etc.
- g) Unlike Blue Revolution for the first time, under PMMSY well-structured Implementation framework would be created for effective implementation right up to District and sub-district level by creation of institutional mechanisms. State Programming Units, District Programme Units and Sub-district programme Unit would be created in some of the high fisheries potential districts based on a set of parameters. It is expected that these arrangements would give the much-needed focused attention and a mission mode direction to PMMSY.
- h) PMMSY envisages development of Fisheries Management Plans, Integrated District Fisheries Development Plans under the leadership of District Collector/Deputy Commissioner through a District Level Committee, which will be consolidated at the State/UT level into State Fisheries Development Plans, for effective planning; optimal utilization of resources and integrating with other schemes and programmes.
- i) Thrust will be on water management and spatial planning supported by regulatory framework. Adequate allocations will be made for infusing new and emerging technologies like Recirculatory Aquaculture Systems, Biofloc, Aquaponics Cage Cultivation etc. to enhance production and productivity, quality, productive utilization of waste lands and water for Aquaculture.

- j) Enhancing exports to Rs 1 lakh Crore by 2024-25 is one of the key objectives of PMMSY. Towards this end, focus will be given under PMMSY for species diversification, value addition, infrastructure creation and modernization, end to end traceability, brand promotion, certification etc. in close collaboration with MPEDA.
- k) Promotion of startups in Fisheries and Aquaculture, incubation centers, sea ranching, encouraging innovations, entrepreneurship models are some of the pioneering approaches envisaged under PMMSY.
- l) Focused fisheries development in J&K, Ladakh, Islands, Northeast, and Aspirational Districts through area specific strategic development planning.
- m) Large scale promotion of Aquaculture in Northern India especially in alkaline and saline areas is a focus area under PMMSY for which adequate financial resources would be earmarked.
- n) PMMSY envisages an activity wise minimum assured financial allocation with clear quantifiable physical targets. This give an assured investment in key sub-sectors unlike thin and wide spread of financial resources under Blue Revolution.
- o) Under PMMSY, Species diversification, promotion of high value species like Seabass, Scampi, mud crab, and thrust on *Penaeus indius* (shrimp) including establishing a national network of Brood Banks for all commercially important species is envisaged. For the first time, thrust is given to Genetic improvement of commercially important fish species and establishing Nucleus Breeding Center for self-reliance in Shrimp Brood stock with allocation of requisite funds.
- p) Promotion of good aquaculture practices, end to end traceability from 'catch to consumer', use of Block Chain Technology, Global Standards and Certification, Accreditation of Brood banks, Hatcheries, Farms etc. are incorporated as a part of the scheme for the first time with adequate financial allocations. These steps will ensure quality, higher productivity, improve export competitiveness and fetch higher prices to fishers and farmers.
- q) For addressing diseases, antibiotics and residues issues, aquatic health management is given focus under PMMSY supported by an Integrated Laboratory Network.
- r) Development of Coastal fisher communities in a holistic manner through integrated modern fishing villages with necessary infrastructure is envisaged for the first time under PMMSY. Collectivization of fishers and fish farmers through Fish Farmer

Producer Organizations to increase bargaining power of fishers and fish farmers is the key new strategy under PMMSY.

- s) Thrust on organic aquaculture promotion and certification. For the first item under PMMSY, Aquaparks would be developed as hub of fisheries and aquaculture activities as one stop 'parks' with assured, affordable, quality inputs under one roof, post-harvest infrastructure facilities, business enterprise zones, logistic support, business incubation centers, marketing facilities etc. Aqua park(s) would be developed to house Modern Aquarium.
- t) Under PMMSY Insurance coverage for fishing vessels would be introduced for the first time. Further, enhanced insurance cover for fishermen would be incorporated.
- u) Well-structured extension support services are envisaged under PMMSY for the first time to provide requisite services to fishers and fish farmers. Youth would be engaged in fisheries extension by creation of 3347 *Sagar Mitras* in coastal fisher villages. Besides, large number of Fisheries Extension Services Centers would be set up in private space to create job opportunities to young professionals.
- v) Mega investments are proposed in construction and strengthening of Fishing Harbours and Landing centers for hygienic handling of fish, reduce post-harvest losses, higher value realization etc. Reforms in their management and operations would be a focus area under PMMSY. Thrust on urban marketing infrastructure to deliver quality and affordable fish. State of the art whole sale fish markets, retail markets. E-marketing and E-trading of Fish- A National platform would be created.
- w) Support for acquisition of technologically advanced Fishing Vessels for fishermen for promotion of deep-sea fishing. Support for upgradation of Fishing vessels for improving the export competitiveness. Swatch sagar - Biotoilets in fishing vessels is an important initiative.
- x) Thrust on Seaweed and Ornamental Fisheries to generate huge employment.

5. **FUNDING PATTERN:**

PMMSY will be implemented with the following funding pattern.

Central Sector Scheme (CS)

- (a) The entire project/unit cost will be borne by the Central government (i.e. 100% central funding).

- (b) Wherever direct beneficiary oriented i.e. individual/group activities are undertaken by the entities of central government including NFDB, the central assistance will be up to 40% of the unit/project cost for General category and 60% for SC/ST/Women category.

Centrally Sponsored Scheme (CSS)

CSS component and sub-components implemented by the States/UTs (**Non-beneficiary orientated**): The entire project/unit cost will be shared between Centre and State as detailed below:

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

CSS component and sub-components implemented by the States/UTs (**Beneficiary orientated i.e. individual/group activities**). The Government financial assistance of both Centre and State/UTs governments together will be limited to 40% of the project/unit cost for General category and 60% of the project/unit cost for SC/ST/Women. This governmental assistance will in turn be shared between Centre and State/UTs in the following ratio:

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

Funding pattern for Livelihood and nutritional support activity

As recommended by the Expenditure Finance Committee, the activity namely "Livelihood and nutritional support for socio economically backward, active traditional fishers' families for conservation of fisheries resources during fish ban/lean period" under PMMSY would continue as per the norms, guidelines and funding pattern of the Saving-cum-Relief Component of the Centrally Sponsored Scheme (CSS) - Blue Revolution Scheme: Integrated Development and Management of Fisheries. Accordingly, the governmental assistance of Rs 3000 per annum per enrolled beneficiary under this activity under PMMSY will also be shared as detailed below:

- (a) The North Eastern & the Himalayan States: 80% Central share and 20% State share.
- (b) Other States: 50% Central share and 50% State share.
- (c) Union Territories (with legislature and without legislature): 100% Central share.

Each enrolled beneficiary under this component is required to contribute Rs. 1500 annually. The funding pattern for this activity under the PMMSY is summarized as below:

States/UTs	Funding pattern	Contribution
(i)	(ii)	(iii)
General States	(i) 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	(i) 80:20 Centre and NE & Himalayan States	Centre share Rs. 2400 + State share Rs. 600 + Beneficiary share Rs. 1500 = Rs. 4500/-year
Union Territories	100% as Centre share for UTs	Centre share Rs. 3000 + Beneficiary share Rs. 1500 = Rs. 4500/-year

The accumulated amount of Rs. 4500/- indicated above would be disbursed to enrolled beneficiary by the respective states/UTs at the rate of Rs. 1500/- per month for a period of 3 months every year during the fishing ban/lean period.

6. MAJOR IMPACT, INCLUDING EMPLOYMENT GENERATION POTENTIAL

An investment of Rs 20050 Crore under PMMSY is the highest ever in Fisheries and Aquaculture Sector. Therefore, the scheme sets an ambitious targets. The anticipated outcomes on account of implementation of Pradhan Mantri Matsya Sampada Yojana (PMMSY) in quantifiable terms are as below:

- The fish production is likely to be enhanced from 13.75 million metric tons (2018-19) to 22 million metric tons by 2024-25.
- A sustained average annual growth of about 9% in fish production is expected.
- An increase in the contribution of GVA of fisheries sector to the Agriculture GVA from 7.28% in 2018-19 to about 9% by 2024-25.
- Double export earnings from the present Rs.46,589 crore (2018-19) to about Rs.1,00,000 crore by 2024-25.
- Enhancement of productivity in aquaculture from the present national average of 3 tonnes to about 5 tonnes per hectare.
- Reduction of post-harvest losses from the reported 20-25% to about 10%.
- Doubling of incomes of fishers and fish farmers.
- Generation of about 15 lakhs direct gainful employment opportunities and thrice the number as indirect employment opportunities along the supply and value chain.
- Enhancement of the domestic fish consumption from about 5 kg to about 12 kg per capita.
- Encouragement of private investment and facilitation of growth of entrepreneurship in the fisheries sector.

7. BENEFICIARIES

The intended beneficiaries under the Pradhan Mantri Matsya Sampada Yojana(PMMSY) amongst the others include the following:

The intended beneficiaries under the Pradhan Mantri Matsya Sampada Yojana are:

- (i) Fishers
- (ii) Fish farmers
- (iii) Fish workers and Fish vendors
- (iv) Fisheries Development corporations
- (v) Self Help Groups (SHGs)/Joint Liability Groups (JLGs) in fisheries sector
- (vi) Fisheries cooperatives
- (vii) Fisheries Federations
- (viii) Entrepreneurs and private firms
- (ix) Fish Farmers Producer Organisations/Companies (FFPOs/Cs)
- (x) SCs/STs/Women/Differently abled persons

8. END IMPLEMENTING AGENCIES (EIAS)

- (i) Central Government and its entities including National Fisheries Development Board
- (ii) State/UT Governments and their entities
- (iii) State Fisheries Development Boards
- (iv) Any other End Implementing Agencies as notified by Department of Fisheries

9. LIST OF ACTIVITIES

BENEFICIARY ORIENTED SUB-COMPONENTS AND ACTIVITIES PROPOSED UNDER THE CENTRALLY SPONSORED COMPONENTS OF PRADHAN MANTRI MATSYA SAMPADA YOJANA

- A ENHANCEMENT OF PRODUCTION AND PRODUCTIVITY**
- 1 Development of Inland Fisheries And Aquaculture**
- 1.1 Establishment of New Freshwater Finfish Hatcheries
- 1.2 Establishment of New Freshwater Scampi Hatcheries
- 1.3 Construction of New Rearing ponds

- 1.4 Construction of New Grow-out ponds
- 1.5 Inputs for fresh water Aquaculture including Composite fish culture, Scampi, Pangasius, Tilapia etc.
- 1.6 Establishment of need based New Brackish Hatcheries(shell fish and fin fish)
- 1.7 Construction of New ponds for Brackish Water Aquaculture
- 1.8 Construction of New ponds for Saline /Alkaline areas
- 1.9 Inputs for Brackish Water Aquaculture
- 1.1 Inputs for Saline /Alkaline Water Aquaculture
- 1.11 Stocking of Fingerling (FL) in Wetlands @2000FL/ha
- 1.12 Stocking of Fingerlings in Reservoirs @1000FL/ha
- 2 Development of marine fisheries including mariculture and seaweed cultivation**
 - 2.1 Establishment of Small Marine Finfish Hatcheries
 - 2.2 Construction of large Marine Finfish Hatcheries
 - 2.3 Marine Finfish Nurseries
 - 2.4 Establishment of Open Sea cages (100-120 cubic meter volume)
 - 2.5 Establishment of Seaweed culture rafts including inputs
 - 2.6 Establishment of Seaweed culture with Monoline/tubenet Method including inputs (one unit is approximately equal to 25 ropes of 25m length)
 - 2.7 Bivalve cultivation (mussels, clams, pearl etc.)
- 3 Development of fisheries in North-eastern and Himalayan States/UTs (besides the below activities, the North-eastern and Himalayan States/UTs will also be assisted under other sub-components/activities envisaged under PMMSY that are common to all states/UTs).**
 - 3.1 Establishment of Trout Fish Hatcheries
 - 3.2 Construction of Raceways
 - 3.3 Inputs for Trout Rearing Units
 - 3.4 Construction of New Ponds in Himalayan Region.
 - 3.5 Establishment of Mini RAS for Cold water Fisheries
 - 3.6 Establishment of Medium RAS for cold water fisheries
 - 3.7 Input support for Integrated fish farming (paddy cum fish cultivation, livestock cum fish, etc)
 - 3.8 Establishment of Cages in cold water regions
- 4 Development of ornamental and recreational fisheries**
 - 4.1 Backyard Ornamental fish Rearing unit (both Marine and Fresh water)
 - 4.2 Medium Scale Ornamental fish Rearing Unit (Marine and Freshwater Fish)
 - 4.3 Integrated Ornamental fish unit (breeding and rearing for fresh water fish)
 - 4.4 Integrated Ornamental fish unit (breeding and rearing for marine fish)
 - 4.5 Establishment of Fresh water Ornamental Fish Brood Bank
 - 4.6 Promotion of Recreational Fisheries
- 5 Technology infusion and adaptation**
 - 5.1 Establishment of large RAS (with 8 tanks of minimum 90 m³/tank capacity 40 ton/crop)/Biofloc (50 tanks of 4m dia and 1.5 high) culture system.
 - 5.2 Establishment of Medium RAS (with 6 tank of minimum 30m³/tank capacity 10 ton/crop)/Biofloc culture system(25 tanks of 4m dia and 1.5 high)
 - 5.3 Establishment of small RAS (with 1 tank with 100m³ capacity/Biofloc (7 tanks of 4m dia and 1.5 high) culture system

- 5.4 Establishment of Backyard mini RAS units
- 5.5 Installation of Cages in Reservoirs
- 5.6 Pen culture in open water bodies

B INFRASTRUCTURE AND POST-HARVEST MANAGEMENT

6 Post harvest and cold chain infrastructure

- 6.1 Construction of Cold Storages/Ice Plants
- 6.2 Modernization of Cold storage /Ice Plant
- 6.3 Refrigerated vehicles
- 6.4 Insulated vehicles
- 6.5 Live fish vending Centres
- 6.6 Motor cycle with Ice Box
- 6.7 Cycle with Ice Boxes
- 6.8 Three wheeler with Ice Box including e-rickshaws for fish vending
- 6.9 Fish Feed Mills(mini)
- 6.1 Fish Feed Plants

7 Markets and marketing infrastructure

- 7.1 Construction of fish retail markets including ornamental fish/aquarium markets.
- 7.2 Construction of fish kiosks including kiosks of aquarium/ornamental fish
- 7.3 Fish Value Add Enterprises Units
- 7.4 E-platform for e-trading and e-marketing of fish and fisheries products

8 Development of deep sea fishing

- 8.1 Support for acquisition of Deep sea fishing vessels for traditional fishermen
- 8.2 Up gradation of existing fishing vessels for export Competency
- 8.3 Establishment of Bio-toilets in mechanised fishing vessels

9 Aquatic health management

- 9.1 Establishment of Disease diagnostic and quality testing labs
- 9.2 Disease diagnostic and quality testing Mobile labs/clinics

C FISHERIES MANAGEMENT AND REGULATORY FRAMEWORK

10 Monitoring, Control and Surveillance (MCS)

- 10.1 Communication and /or Tracking Devices for traditional and motorised vessels like VHF/DAT/NAVIC/Transponders etc.

11 Strengthening of safety and security of fishermen

- 11.1 Support for providing safety kits for fishermen of Traditional and motorized fishing vessels (other than Communication and/or Tracking Device mentioned at 10.1 above)
- 11.2 Providing boats (replacement) and nets for traditional fishermen
- 11.3 Support to Fishermen for PFZ devices and network including the cost of installation and maintenance etc.

12 Fisheries extension and support services

- 12.1 Extension and support Services

13 Livelihood and nutritional support for fishers for conservation of fisheries resources

- 13.1 Livelihood and nutritional support for socio-economically backward active traditional fishers' families for conservation of fisheries resources during fishing ban/lean period.
- 14 **Insurance of Fishing Vessels and Fishermen**
- 14.1 Insurance premium subvention for fishing vessels and Insurance premium for fishers

NON-BENEFICIARY ORIENTED ACTIVITIES PROPOSED UNDER THE CENTRALLY SPONSORED COMPONENTS OF PRADHAN MANTRI MATSYA SAMPADA YOJANA

A ENHANCEMENT OF FISH PRODUCTION AND PRODUCTIVITY

- 1 Development of inland fisheries and aquaculture
- 1.1 Establishment of Brood Banks (including seed banks for seaweeds)
- 1.2 Integrated Development of Reservoirs
- 1.3 Integrated Aqua Parks
- 2 **Development of fisheries in the Himalayan and North-Eastern States/UTs**
- 2.1 Support to states for import of germplasm

B INFRASTRUCTURE AND POST-HARVEST MANAGEMENT

- 3 Development of fishing harbours and fish landing centres
- 3.1 Construction/Expansion of Fishing Harbours.
- 3.2 Modernization/Up-gradation of existing Fishing Harbours
- 3.3 Modern Integrated Fish Landing Centres
- 3.4 Maintenance of Dredging of existing FHs
- 4 Markets and marketing infrastructure
- 4.1 Construction of state of art whole sale fish market.
- 4.2 Organic Aquaculture Promotion and Certification
- 4.3 Promotion of Domestic fish consumption, branding, Fish mark, GI in fish, Himalayan Trout-Tuna branding, Ornamental fishes promotion and branding etc.
- 5 **Development of deep sea fishing**
- 5.1 Promotion of technologically advanced vessels to marine fishermen/fishermen groups through State/UT Governments
- 6 **Integrated modern coastal fishing villages**
- 6.1 Integrated modern coastal fishing villages
- 7 **Aquatic health management**
- 7.1 Aquatic Referral Labs for Quality testing and Disease Diagnostics

C FISHERIES MANAGEMENT AND REGULATORY FRAMEWORK

- 8 **Monitoring, Control and Surveillance (MCS)**

- 8.1 Common Infrastructure for MCS including Hub stations, towers, IT based software, peripherals, networks and operations etc.
- 9 Fisheries extension and support services**
- 9.1 Multipurpose Support Services – Sagar Mitra (performance based incentives along with requisite IT/Communication support like Tablet/mobile telephony etc. would be provided to *Sagar Mitras*)

CENTRAL SECTOR SCHEME SUB-COMPONENTS/ ACTIVITIES WITH 100% CENTRAL FUNDING PROPOSED UNDER THE PMMSY

- 1 Genetic improvement programmes and Nucleus Breeding Centers (NBC)
- 2 Innovations and Innovative projects/activities, Technology demonstration including startups, incubators and pilot projects
- 3 Training, Awareness, Exposure and Capacity Building
- 4 Aquatic Quarantine Facilities
- 5 Modernization of Fishing Harbours of central government and its entities
- 6 Support to National Fisheries Development Board (NFDB), Fisheries Institutions and Regulatory Authorities of Department of Fisheries, Government of India and need based assistance to State Fisheries Development Boards.
- 7 Support for survey and training vessels for Fisheries Institutes including dredger TSD Sindhuraj owned by the DoF and Gol.
- 8 Disease Monitoring and Surveillance Network
- 9 Fish data collection, fishers' survey and strengthening of fisheries database
- 10 Support to security agencies to ensure safety and security of marine fishermen at sea
- 11 Fish Farmer Producer Organizations/Companies (FFPOs/Cs)
- 12 Certification, Accreditation, Traceability and Labeling