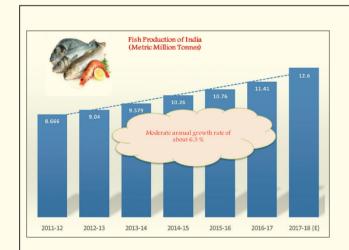
# BLUE REVOLUTION - AN OVERVIEW

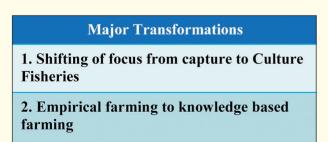
### Introduction

Fisheries and Aquaculture comprise an important sector of food production in India, contributing sizably to the food basket. It not only ensures nutritional security among the population but also significantly contributes to the agricultural exports and provides gainful employment and livelihood support to more than 14 million people engaged in different fisheries activities

In order to utilize the large untapped potential in fisheries and aquaculture

in the country, and in pursuance of the decision of the Government of India, National Fisheries Development Board (NFDB) was set up as a Registered Society at Hyderabad, under the administrative control of the Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India, on  $10^{th}$  July 2006. The main objective of establishment of NFDB is to enhance fish production and productivity and to strengthen infrastructure facilities for overall development of fisheries sector.

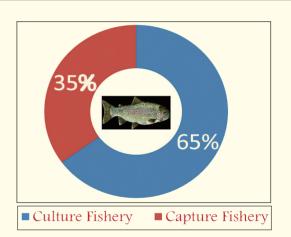




3. Sustenance farming to commercial

farming





#### Blue Revolution Vision

Creating an enabling environment for integrated development of the full potential of fisheries of the country, along with substantially improvement in the income status of fishers and fish farmers keeping in view the sustainability, bio-security and environmental concerns.

#### Implementing Agencies

- Central Government Institutes/ Agencies, NFDB, ICAR Institutes etc.
- State Governments and UT
- State Government Agencies, Corporations, Federations
- Fishers Cooperatives
- Individual Beneficiaries/ Entrepreneurs

## BR Strategies to Reach 15 MMT Fish Prodn.

#### **Ponds**

- Area Expansion
- Productivity
- 2.33 MT/ha to 3.90 MT/ha

#### Reservoir

- Production enhancement
- Cage culture
- 100 kg /ha to 170 kg/ha

#### **Brackish water**

- Infrastructure
- Seed production
- 3.52 MT /ha to 6.45 MT /ha

#### **Coastal Waters**

- Open Sea Cage culture
- Sea weeds
- Mariculture

#### Wetlands

- Community participation
- Increase utilization
- 220 kg/ha to 1000 kg/ha

#### Cold Water

- Conservation
- Rain bow Trout race way farming
- Mahseer,
- Sport fishing

#### Deep Sea

- Exploitation of deep sea resources
- Export of Sashimi grade tuna

#### Species

- Minor Carps
- Ornamental Fishes
- Tilapia, Pungassius
- P. *Indicus,* P. monodon
- Std. breeding Tech.

## Strategies for NFDB

Species Diversity Technology Adoption

Dissemination

## Development Strategies and Achievements during last 4 years (2014-15 to 2017-18)

### 1. Freshwater Aquaculture

- Adopting improved culture methods
- Creation of Infrastructure: Broodstock Multiplication Centres, Aquatic Quarantine Facilities, Hatcheries, Seed rearing space for Fingerling Production, Feed Mills
- > Diversification of Species
- Pangassius Seed Production and rearing
- Pangassius Cage Culture in reservoirs
- > Re-circulation Aquaculture,
- Setting up of Aquatic Animal Health
   & Environmental Management
   Laboratories in Farming areas.
- > Integrated Development of Reservoirs



#### Achievements

#### (i) Pond Aquaculture

 New ponds / tanks constructed -26751 ha.

- Renovation of ponds & tanks 1494
   ha.
- Rejuvenation of Ponds & Tanks -632 ha.
- Input cost for Freshwater Aquaculture 2656 ha.
- Establishment of fish hatcheries -374 no.
- Construction of ponds in Saline/ Alkaline soils - 523 ha. and provided input costs - 530 ha.
- Construction of fish seed rearing units - 1498 ha. and provided inputs - 741 ha.
- Establishment of Feed Mills 100 nos.

#### (ii) Intensive Systems

- Re-circulation Aquaculture
   Systems 207 units
- Assisted Installation of 7091 cages in reservoirs
- Supply of craft & gear to fishers -2868 units

#### (iii) Wetlands

- Stocking of fish fingerlings in beels / wetlands
- Promotion of culture based Fishery
- Restoring health of natural ecosystems

#### **Achievements**

- Stocked fingerlings in beels / wetlands in an area of 2538 ha.
- Constructed ponds in waterlogged areas in 395 ha and provided input costs in 533 ha.



#### 2. Brackishwater Aquaculture

- Construction of new ponds / tanks2306 ha.
- Established prawn / shrimp hatcheries - 22 nos.
- > Established nurseries 71 nos.

#### 3. Coldwater Fisheries

- Commercialization of rainbow trout aquaculture in raceways
- > Import of quality germplasm of rainbow trout for productivity increase



#### **Achievements**

 Assisted for Raceways for Coldwater Aquaculture in 1330 units

#### 4. Ornamental Fisheries

- Quality brood stock development, emphasis of captive breeding of indigenous ornamental fish species,
- > Promoting captive breeding and
- Production of marine ornamental species



#### Achievements

 Assisted setting up of Ornamental fisheries units - 659 nos.

#### 5. Marine Fisheries

- > Motorization of Traditional Craft
- > Safety of Fishermen at Sea
- Fishermen Development Rebate on HSD Oil
- ➤ Introduction of Intermediate

  Craft of Improved Design
- Establishment and operation of Vessel Monitoring System
- Promoting fuel efficient and environment friendly fishing practices

- Assistance to Traditional Artisanal fishermen
- Up-gradation of existing fishing vessels

#### **Achievements**

- Motorization of traditional craft -7441 nos.
- Safety of Fishermen at Sea -12262 kits
- Introduction of craft of Intermediate size - 7 nos.
- Assisted traditional / artisanal fishermen for procurement of FRP boats - 544 nos.

#### 6. Mariculture

- Promotion of Mariculture: Focus on candidate species like Cobia, Pompano and Sea bass for open sea cage culture
- > Emphasis on seed production & feed for open sea mariculture
- Involving women groups specially for bi-valve, pearl and seaweed culture





#### **Achievements**

- Sea Cage Farming in 705 nos. of cages
- Seaweed cultivation in 10110 nos. of rafts
- Bivalve culture in 4070 nos. of rafts

#### 7. Deep Sea Fishing

- On-board training of fishermen in deep sea Tuna catching & handling
- Emphasis on export of Sushimigrade Tuna from India
- Financial assistance for procurement of deep sea fishing vessels

#### **Achievements**

 Assistance provided for Procurement of 675 nos. Deep Sea Fishing Vessels by traditional fishers



# 8. Infrastructure and Postharvest Processing, Value Addition & Marketing

- Establishment of Fishing Harbours and Fish Landing Centres
- Creation of Cold chain facility
- Creation of Modern Hygienic fish Markets
- Micro and Small market infrastructure support for employment





#### **Achievements**

 Assisted establishment of 20 Fishing Harbours & Fish Landing Centres

- Construction of Ice Plants 85 nos., Cold Storages - 7 nos., Ice Plant-cum-Cold Storages-104 nos.,
- Modernization of existing ice plants - 124 nos and existing cold storages - 25 nos.
- Insulated trucks 165 nos.
- Refrigerated trucks 4 nos.
- Autorickshaws with ice boxes -446 nos.
- Establishment of wholesale / retail fish markets - 25 nos.
- Retail fish outlets 767 nos.
- Mobile fish outlets (Kiosks) 5997 nos.
- Solar Power System 88 nos.

#### 9. Welfare of Fishermen

- Creation of basic amenities such as housing, drinking water and community halls for fishermen.
- Providing insurance coverage to fishermen engaged actively in fishing
- Providing relief to fishermen during lean fishing season

#### **Achievements**

- Fishermen Houses approved -12430 nos.
- Fishers insured annually 46.80
   lakh
- Fishers covered annually under Saving-cum-Relief - 2.43 lakh

# 10. Training, Skill Development & Capacity Building

Training, skill development & capacity building for fish farmers & fishers and other stakeholders through State Governments, UTs, Central Government Organizations / Institutions such as KVKs, ICAR Institutes, ATMAs, ATARIs, Fisheries Institutes, State / UT owned organizations, State Agriculture / Veterinary / Fishery Universities, Fisheries Federations, Corporations etc.



#### **Achievements**

 During the past four years (2014-15 to 2017-18), 59131 beneficiaries were trained in various aspects of fisheries by different Fisheries Institutions through shortduration and long-duration training programmes in various States / UTs with a budget outlay of Rs. 12.55 crore.

# 11. Fisheries and Aquaculture Infrastructure Development Fund (FIDF)

Government in the budget 2018-19 has announced creation of a separate Fisheries and Aquaculture Infrastructure Development Fund of Rs. 8000 crore.

# 12. Pattern of Assistance under Blue Revolution Scheme

Category	Govt. Assistance	Beneficiary Share
I. Beneficiary-oriented Schemes		
General Class	40% (24% Central + 16% State)	60%
Weaker Sections	60% (36% Central + 24% State)	40%
II. State-oriented Schemes		
General States	50% Central + 50% State	
Hilly/NE States	80% Central + 20% State	
UTs	100% Central	

For availing Financial Assistance under the Blue Revolution Scheme, the Stakeholders may contact:

- 1. At District level Assistant Director of Fisheries
- 2. At State level Director/ Commissioner of Fisheries
- 3. At National level Chief Executive, NFDB, Hyderabad

# 'State Fish'- declared by some of the States with a Concept for the Conservation of Regionally Important & Threatened Fish Species

#### 1. West Bengal - Tenualosa ilisha



6. Odisha - Tor mahanadicus



2. Uttar Pradesh - Chitala chitala



7. Manipur - Osteobrama belangeri



3. J & K, H.P, UK, Arunachal - Tor putitora

o. o a k, m., ok, manachar Tor patriora



4. Kerala - Etroplus suratensis



5. Bihar - Clarias batrachus (Magur)



NFDB

# NATIONAL FISHERIES DEVELOPMENT BOARD

(Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India)

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