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 10th 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.

Major Transformations
1. Shifting of focus from capture to Culture Fisheries
2. Empirical farming to knowledge based farming
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

<table>
<thead>
<tr>
<th>BR Strategies to Reach 15 MMT Fish Prodn.</th>
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<tbody>
<tr>
<td><strong>Ponds</strong></td>
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<tr>
<td>- Area Expansion</td>
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<tr>
<td>- Productivity</td>
</tr>
<tr>
<td>- 2.33 MT/ha to 3.90 MT/ha</td>
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<tr>
<td><strong>Reservoir</strong></td>
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<tr>
<td>- Production enhancement</td>
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<tr>
<td>- Cage culture</td>
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<tr>
<td>- 100 kg/ha to 170 kg/ha</td>
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<tr>
<td><strong>Brackish water</strong></td>
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<tr>
<td>- Infrastructure</td>
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<tr>
<td>- Seed production</td>
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<tr>
<td>- 3.52 MT/ha to 6.45 MT/ha</td>
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<tr>
<td><strong>Coastal Waters</strong></td>
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<tr>
<td>- Open Sea Cage culture</td>
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<tr>
<td>- Sea weeds</td>
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<tr>
<td>- Mariculture</td>
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<tr>
<td><strong>Wetlands</strong></td>
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<tr>
<td>- Community participation</td>
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<tr>
<td>- Increase utilization</td>
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<tr>
<td>- 220 kg/ha to 1000 kg/ha</td>
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<tr>
<td><strong>Cold Water</strong></td>
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<tr>
<td>- Conservation</td>
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<tr>
<td>- Rain bow Trout race way farming</td>
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<td>- Mahseer,</td>
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<tr>
<td>- Sport fishing</td>
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<tr>
<td><strong>Deep Sea</strong></td>
</tr>
<tr>
<td>- Exploitation of deep sea resources</td>
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<tr>
<td>- Export of Sashimi grade tuna</td>
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<tr>
<td><strong>Species</strong></td>
</tr>
<tr>
<td>- Minor Carps</td>
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<tr>
<td>- Ornamental Fishes</td>
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<tr>
<td>- Tilapia, Pungassius</td>
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<tr>
<td>- P. Indicus, P. monodon</td>
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<tr>
<td>- Std. breeding Tech.</td>
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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 / tanks - 2306 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
5. 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 Sushimi-grade 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

- 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.

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 short-duration 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

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

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

2. Uttar Pradesh - Chitala chitala


4. Kerala - Etroplus suratensis

5. Bihar - Clarias batrachus (Magur)

6. Odisha - Tor mahanadicus

7. Manipur - Osteobrama belangeri