

# **GOVERNMENT OF ODISHA**

ACTIVITY REPORTS

FISHERIES & ANIMAL RESOURCES DEVELOPMENT
DEPARTMENT

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# FISHERIES SECTOR

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# Fisheries Sector











## **ANNUAL ACTIVITIES REPORT : 2017–18**

#### 1. INTRODUCTION:

Fish is recognized as a global super food. Fisheries and aquaculture is one of the fastest growing food sectors and has been playing a pertinent role in the economic development front on account of its contribution to food and nutritional security, national income, employment opportunities as well as generating livelihood options.

Odisha is one of the important maritime states of India having excellent scope for fisheries development. The state has 6.83 lakh ha. of freshwater resources, 4.18 lakh ha of Brackish water resources and 480 kms. of coastline for fisheries development of the state. In order to ameliorate these ample resources, Government have taken up a mission for doubling of inland fish production and increasing the present export to Rs.20,000 crores. The total fish production of the State during 2017-18 is 6.08 lakh MTs and export generation is around Rs.2204.78 crores. Accordingly, the Department proposes to take up massive horizontal expansion of culture areas and to enhance productivity to 5.00 tonnes/ha. The annual per capita fish consumption is 13.49 Kg. To achieve this ambitious goal, recently Government of Odisha have come up with :Odisha Fisheries Policy, 2015 during September, 2015.

The fisheries sector is one of the growing sectors and has been recognized by the State Government as one of the major sectors, apart from agriculture, to contribute towards rural economy. With vast and variety of aquatic resources in Odisha, the fisheries of Freshwater, Marine & Brackish water offer enormous scope in generating employment and promoting trade and many other associated commercial activities. The food security and livelihood support from fisheries for the rural poor is one of the major benefits.

#### 2. FISHERIES RESOURCES & POTENTIAL IN ODISHA

#### **Freshwater Fisheries Sector:**

Resources & Potentiality of Freshwater Aquaculture							
Resources Water area (In lakh ha.) Total production potentiality (In lakh MT) Present production potentiality (In lakh MT)							
Culture Fisheries (Tanks & Ponds)	1.32	3.9	3.31				
Culture based Capture Fisheries (Reservoirs)	2.00	0.20	0.30				
Capture Fisheries (Lakes/ Swamps/ Bheels)	1.80	0.36	0.05				
Rivers & Canals	1.71	0.14	0.28				
Total	6.83	4.6	3.94				

# **Brackish Water Fisheries Sector:**

Resources	Water area (In lakh ha.)	notontiality	Present production level (2016-17) (In lakh MT)
Area suitable for brackishwater tanks	0.330	0.33	0.29
Back Waters	0.081	0.02	-
Lakes (Chilika)	0.790	0.11	0.26
Estuaries	2.980	0.24	0.05
TOTAL	4.181	0.70	0.60

# **Marine Sector:**

Coast Line	480 Kms.
Continental Shelf Area	24,000 Sq. Km. (approx)
District-wise Coastal Length (in Kms.)	
Balasore	80
Bhadrak	50
Kendrapada	68
Jagatsinghpur	67
Puri	155
Ganjam	60
Total Coastal length	480

Maximum Sustainable Yield (MSY) (Continental Shelf Area)					
SPECIES	MSY (MT)				
Prawn	9,036.00				
Pomfret	9,602.00				
Hilsa	9,319.00				
Polynemids	4,749.00				
Clupeids	7,421.00				
Sciaenides	34,857.00				
Catfishes	10,276.00				
Elasmobranches	12,839.00				
Others	12,839.00				
Total	1,10,938.00				

OTHER FISHERIES RESOURCES					
FISH SEED HATCHERY:	Unit				
Freshwater:	No.	Fry Capacity (in millions)			
Government (R&D)	05	489.00			
Government hatchery	20				
Government rearing farm	89	121.70			
OPDC	05	210.00			
Private	86	520.00			
Freshwater prawn seed hatchery					
Government	03	80			
Private	07	125			
SHRIMP SEED HATCHERY:	L				
Brackish Water:	No.	Capacity (in millions)			
Government	2	75			
Private	12	292.5			
ICE PLANT AND COLD STORAGE:	No.	Capacity (in MT)			
Ice Plant	57	613.5			
Cold Storage	12	67			
MARINE FISH LANDING CENTRE					
1. Harbour	4				
2. Jetty	25				
3. Other Landing Centre	43				
Total	72				
5. Fish Drying Platform	10	3269			
CRAFTS (Marine) 2012-13: (In Nos.)					
A. Mechanized	1754				
B. Motorized	7408				
C. Country Crafts (Non-Motorized)	10913				
TOTAL	20,075				
Total Marine Fishermen families	114238	As per CMFRI Survey-			
Total Marine Fishermen Population	605514	2010			
Total Inland Fishermen Population	909926				
(Projected, 2017)					
(I) MARINE PRODUCTS EXPORT	(Nos.)	Capacity (in MT)			
DEVELOPMENT AGENCY 2013-14:					
(Registered under MPEDA)	2.1				
Seafood Exporters from Odisha	34				
2. Processing Plants	20	459.50			
3. Storage Premises	21				
4. Peeling Sheds	20	215.82			
5. Ice Plants	2	58.00			

#### 3. <u>Development of Fisheries Sector in Odisha:</u>

#### **OBJECTIVES:**

- Implementation of `Odisha Fisheries Policy, 2015\_ to double fish production of the State and to reach the export to Rs.20,000 crores.
- Maximum utilization of water bodies with stocking of quality seed.
- Generating employment & higher income in fisheries sector,
- Improving socio-economic conditions of traditional fisher folk & fish farmers and to double the income of fishers.
- To acquire self-sufficiency in Inland Sector,
- Conservation of aquatic resources & generic diversity.

#### MANDATE:

- Optimum utilization of Inland Water Resources for pisciculture,
- Maximizing utilization of Brackish water Resources,
- Harnessing marine resources in greater proportion keeping in mind the environmental issues
- Adapting scientific technology for enhancing productivity with greater emphasis to private entrepreneurs
- Improving professionalism through training/counseling of major stakeholders involved in fisheries sector
- Forming cooperative's and S.H.G.s for community participation and expanding market potentials,
- Dissemination of new technologies through its extension machinery,
- Providing livelihood support to unemployed youths through Self Employment Programme (SEP).

#### **ONGOING GOVERNMENT OF INDIA SCHEMES & PROGRAMMES:**

The following Government of India schemes and programs are being operated in the State under Fisheries Department:

#### **Centrally Sector Scheme Blue Revolution:**

- Development of Inland Fisheries & Aquaculture (With 50% subsidy)
- Welfare Schemes for Fishermen: (50:50)
  - ✓ Development of Model Fishermen Villages (Construction of low cost houses)
  - ✓ Saving-cum-relief
  - ✓ Group Accident Insurance for Active Fishermen,
  - ✓ Training & Extension.

- ➤ Development of Marine Fisheries, Infrastructures & Post-Harvest Operations:
  - ✓ Motorization of Traditional Crafts
  - ✓ Safety of fishermen at sea
  - ✓ Establishment of FH & FLCs
  - ✓ Development of Fishing Harbours, Fish Landing Centres & Jetties

#### **Central Plan:**

Strengthening of Database & Geographical Information System (GIS) of the Fisheries Sector

## **State Plan:**

- ➤ RIDF <sup>-</sup> Rural Infrastructure Development Fund
- ➤ NFDB <sup>-</sup> National Fisheries Development Board

#### Others:

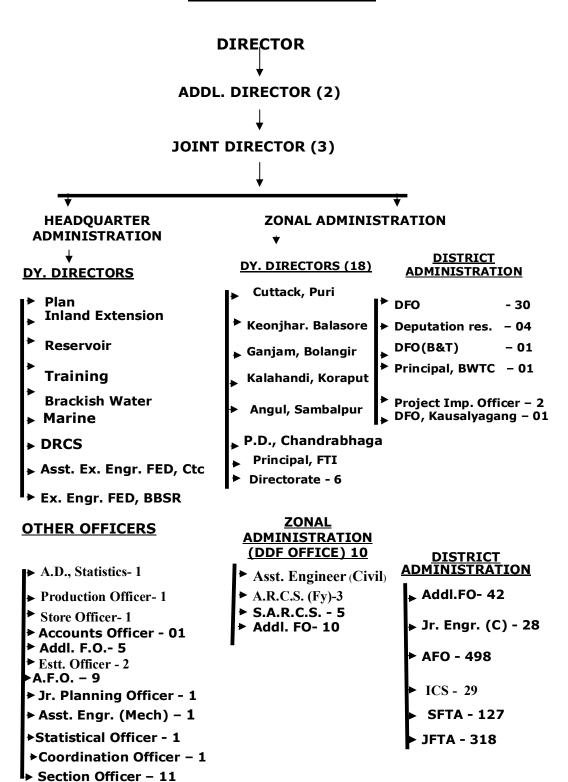
- 1. MGNREGS Mahatma Gandhi National Rural Employment Generation Scheme,
- 2. RKVY- Rastriya Krishi Vikas Yojana
- 3. MUY Matshyajibi Unnayan Yojana



Workshop on Doubling of Farmers' Income through Dairy and Allied Farming Practices & Hon'ble Chief Minister of Odisha Programme at Jaydev Bhawan, Bhubaneswar on 27<sup>th</sup> Nov, 2017

# **ORGANOGRAM**

#### **FISHERIES DEPARTMENT**



(Rs. in lakh)

NON-PLAN (2017-18 EOM Expenditure)									
YEAR	YEAR PROVISION EXPENDITURE								
2010-11	4162	3931							
2011-12	3819	3703							
2012-13	4675	4341							
2013-14	4402	4226							
2014-15	4823.38	4616.49							
2015-16	5345.53	5234.80							
2016-17	6361.46	5750.49							
2017-18	7722.07	5451.48 (not final)							

Ten Zones have already started functioning in the State.

# 4. Non-Plan Budget & Plan Budget

(Rs. in lakh)

	PLAN BUDGET (2017-18 Programme Expenditure)									
PROVISION, SANCTION AND EXPENDITURE										
Year STATE PLAN CENTRAL PLAN PLAN								ISORED		
	Prov.	Expr.	Prov.	Sanc.	Expr.	Prov.	Sanc.	Expr.		
2011-12	2958.00	1474.56	1469.83	602.92	0.00	-	2926.91	1165.20	1165.20	
2012-13	3367.44	1043.27	1043.27	120.28	0.00	-	4221.89	668.34	668.34	
2013-14	5711.92	5683.45	5673.99	200.05	0.00	-	3223.18	1865.61	1865.61	
2014-15	5682.31	5612.29	5612.29	85.29	0.00	-	3800.04	1819.61	1819.61	
2015-16	7350.00	7043.42	7043.42	73.40	20.00	20	3319.89	1124.22	1124.22	
2016-17	8776.66	5889.03	5889.03	73.40	0.00	0.00	3171.14	1354.78	1354.78	
2017-18 as on 15.3.18	10340.01	8742.95	8742.95	0.00	0.00	0.00	2243.00	438.44	438.44	

#### **ACTIVITIES OF 2017-18**

#### 5. Odisha Fisheries Policy, 2015:

Government of Odisha has come up with the :Odisha Fisheries Policy, 2015'; vide Gazette notification No. 1282, 2<sup>nd</sup> September, 2015. The Policy intends to be a pioneer in aquaculture Development and fisheries extension for ensuring food security, livelihood, welfare of fishers and employment generation.

The Policy aims to address sustainable utilization, protection/ promotion of nutritional security, livelihood security of fisher community, gaps in the legal and regulatory framework and their enforcement, gaps in the administrative structure and processes, financing mechanisms including subsidies, technology and extension support etc. as well as social and environmental implications. The highlight of the said Policy is as under:

- ➤ REALISTIC RESOURCE ASSESSMENT: For sustainable management of capture and culture fisheries, a detailed survey using Remote Sensing and Geographic Information System (GIS) for monitoring of plan & programs in fishery sector shall be undertaken.
- ➤ <u>CAPTURE FISHERIES:</u> Appropriate measures for developing, propagating, conserving and protecting riverine and other open water fisheries.
- CULTURE BASED FISHERIES IN LAKES/ RESERVOIRS: Regular stock enhancement in reservoirs with basic infrastructure facilities of captive hatcheries, nurseries, fry/advance fingerling raising centers, fish landing and handling sheds ice plants/Cage/ Pen culture programs shall be taken up for enhancing the reservoir fish productivity and production. 25% of reservoirs under the control of fisheries Department could be considered for leasing to private entrepreneurs for commercial pisciculture.
- ➤ AQUACULTURE IN TANKS & PONDS: Best practices being followed in the neighboring states of West Bengal, Andhra etc. shall be adopted for increasing the fish production. Government shall provide long term lease of the waterlogged areas/dead rivers to farmers/ entrepreneurs for aquaculture with incentives.
- FISH SEED PRODUCTION: The Government will augment the existing capacity of the fish seed hatcheries in private sector to meet the widening gap between the demand and supply of fish fingerlings/ yearlings.
- ORNAMENTAL FISH CULTURE: Freshwater ornamental fish breeding and rearing in backyard hatcheries will be popularized as a cottage industry, among the rural community and SHGs.
- SUSTAINABLE COASTAL AQUACULTURE: Development of coastal aquaculture clusters with basic infrastructure such as inlet and outlet channels, road connectivity, electricity, ice plants, cold storages, etc., in PPP mode will be encouraged and promoted, where the private entrepreneurs and small-scale Aquaculturists can coexist.

- ➤ MARINE FISHERIES: The guidelines and provisions of the Comprehensive Marine Fisheries Policy (2004) of the Government of India, which advocates protection and conservation of the resources, encouragement to subsistence level fishermen and technology transfer to small-scale sector, infrastructure support to industrial sector, ecosystem based fisheries management, etc., shall be adopted in letter and spirit.
- **DEEP SEA FISHING:** Deep sea fishing shall be promoted with incentives to marine fishermen and entrepreneurs, wherever necessary.
- ➤ <u>Post-Harvest Infrastructure Support & Marketing</u>: Development of Postharvest Infrastructure Support & Marketing shall be encouraged, both in inland and marine fisheries sector through suitable scheme/ projects.
- FISHING HARBOURS & FISH LANDING CENTERS: Efforts shall be made towards modernization of all fishing harbours/ Jetties/ fish landing centers along the Odisha coast with ongoing / new scheme through PPP mode.
- FISH MARKETING & TRADE: Odisha Pisciculture Development Corporation (OPDC)/ FISHFED will be strengthened to cater to the needs for fish preservation, transportation, distribution & marketing.
- > SAFETY OF FISHERMEN AT SEA AND WELFARE OF FISHERMEN: Efforts will be made to provide safety & welfare to the fisher community through various ongoing & new schemes.
- EAPACITY BUILDING AND OTHER SUPPORT FOR IMPLEMENTING THE POLICY: Capacity building of fisher/ extension personnel will be taken up through adequate training and exposure visit to successful sites within & outside the country. Consultants for different activities will be engaged for providing expertise, technology, capacity building and preparation of DPRs etc.
- > <u>Supplementary Nutrition:</u> A farmer-friendly policy under the broad name :social fishery will be initiated where farmers will grow these species of small fish along with other traditional carps without substantial investment for their economic as well as nutritional benefits.
- ➤ INFORMATION, EDUCATION & CAPACITY BUILDING (IEC) & AWARENESS: Comprehensive training, exposure visits, refresher courses, extension services, advisory and awareness programs will be promoted and implemented so as to build human resource capacity and to increase levels of knowledge, skill and expertise amongst the State fisheries officials, rural masses, fishers and in the public and private sectors, at district and village levels.
- ENTREPRENEURSHIP DEVELOPMENT & SELF EMPLOYMENT: Government will play a catalytic role in self-employment through developing private entrepreneurship in fisheries through various ongoing & new schemes

- FISCAL INCENTIVES: Declaration of aquaculture at par with agriculture for enabling easy credit flow/institutional finance, lower power tariffs, tax, excise/customs duty concessions/ waiver/ exemptions and water supply, will be considered in consultation with the authorities concerned. Necessary incentives and tax holidays will be provided to large-scale fish farmers who produce 10 tons/ha or more of fish.
- PLANNING & GOVERNANCE: There will be coherence between the policies within and outside the fisheries sector to ensure that all policies and schemes are in harmony with fisheries management objectives.
- FISHERY CO-OPERATIVES: Steps will be taken to strengthen the human resource base and improve the financial base of the existing Fisheries Co-operative Societies from Primary to apex level and to revive/ revitalize the ailing Marine PFCS/ PMFCS & Fisheries Federation (FISHFED). The activities of the apex cooperative federation will be re-oriented and re-structured.
- ORGANIZATIONAL ASPECTS: Fisheries Department will be strengthened with requisite technical and engineering personnel for smooth and successful implementation of fisheries programs and activities. Statistical wing in fisheries will be strengthened by developing proper data collection.
- ➤ <u>LEGAL FRAMEWORK:</u> The provisions of OMFRA shall be strictly enforced and a stringent fishery management system put in place. Odisha Inland Fisheries Act & Fish seed & hatchery certification will be framed on the lines of the Model Inland Fisheries & Aquaculture Act of the Ministry of Agriculture and that of other relevant States and notified, and the Rules there-under framed and implemented.
- FUNDING: Odisha Government will make extensive efforts to provide adequate funding to the fisheries sector through State and Central Plan schemes, as well as from external sources.



Paradeep fishing harbor in Jagatsinghpur District, Odisha

#### 6. Freshwater Aquaculture

#### **Water Area Development:**

Fish Farmers Development Agency (FFDAs) is set up in all the thirty districts of Odisha. Beneficiaries, irrespective of their economic status are being given technical and logistic supports through them for promotion of pisciculture in inland areas. After introduction of 'BLUE REVOLUTION\_ by the Government of India all the schemes were merged under one umbrella.

#### Matsya Pokhari Yojana (Mo Machha Pokhari):

A new State Plan Scheme has been implemented during 2017-18 namely `Matsya Pokhari Yojana\_ to create new additional water bodies of targeting for 1059 ha. with a 50% subsidy assistance & advanced fingerling production in 200.00 ha. of water area with unit cost of Rs.8.50 lakh/ha. for excavation of new tanks and with a unit cost of Rs.2.50 lakh/ha. under fingerling production under the scheme.



Logo of Matsya Pokhari Yojana (Mo Machha Pokhari)



HON'BLE CHIEF MINISTER OF ODISHA SHRI NAVEEN PATNAIK IS INAUGURATING THE ENGLISH LEAFLET "MATSYA POKHARI YOJANA (MO MACHHA POKHARI)" AT JAYADEV BHAWAN, BHUBANESWAR ON 27<sup>TH</sup> NOV, 2017



HON'BLE CHIEF MINISTER OF ODISHA SHRI NAVEEN PATNAIK IS INAUGURATING THE LOGO "MATSYA POKHARI YOJANA (MO MACHHA POKHARI)" AT JAYADEV BHAWAN, BHUBANESWAR ON 27<sup>TH</sup> NOV, 2017.

Blue Revolution: Blue Revolution, the Neel Kranti Mission has the vision to achieve economic prosperity of the country and the fishers and fish farmers as well as contribute towards food and nutritional security through full potential utilization of water resources for fisheries development in a sustainable manner, keeping in view the bio-security and environmental concerns. The Neel Kranti Mission, 2016 (NKM 16), being the year in which the Vision has been given by the Prime Minister will have multi-dimensional approach to all activities concerned with development of the fisheries sector as modern world class industry in India. It will focus on tapping the full production potential and enhance productivity substantially from aquaculture and fisheries resources, both inland and marine. Substantially increasing the share of Indian fisheries in the export area would be a key goal. It will ensure doubling the income of the fishers and fish farmers with inclusive participation of the socio-economically weaker sections and ensure sustainability with environment and bio-security.

#### **OBJECTIVES:**

- (i) To fully tap the total fish potential of the country both in the inland and the marine sector and triple the production by 2020
- (ii) To transform the fisheries sector as a modern industry with special focus on new technologies and processes
- (iii) To double the income of the fishers and fish farmers with special focus on increasing productivity and better marketing post-harvest infrastructure including e-commerce and other technologies and global best innovations
- (iv) To ensure inclusive participation of the fishers and fish farmers in the income enhancement
- (v) To triple the export earnings by 2020 with focus on benefits flow to the fishers and fish farmers including through institutional mechanisms in the cooperative, producer companies and other structures
- (vi) To enhance food and nutritional security of the country

#### STRATEGY - CENTRAL SECTOR ASSISTANCE SCHEMES

The Ministry of Agriculture and Farmers Welfare, Department of Animal Husbandry, Dairying & Fisheries has accordingly restructured the scheme by merging all the ongoing schemes under an umbrella of Blue Revolution. The restructured scheme provides focused development and management of fisheries, covering inland fisheries, aquaculture, and marine fisheries including deep sea fishing, Mariculture and all activities undertaken by the National Fisheries Development Board (NFDB).

The restructured Plan Scheme on *Blue Revolution*: *Integrated Development and Management of Fisheries*" has been approved at a total central outlay of Rs.3000 crore for implementation during a period of five years (2015-16 to 2019-20) with the following components:

- (i) National Fisheries Development Board (NFDB) and its activities,
- (ii) Development of Inland Fisheries and Aquaculture,
- (iii) Development of Marine Fisheries, Infrastructure and Post-Harvest Operations,
- (iv) Strengthening of Database & Geographical Information System of the Fisheries Sector,
- (v) Institutional Arrangement for Fisheries Sector
- (vi) Monitoring, Control and Surveillance (MCS) and other need-based Interventions
- (vii) National Scheme of Welfare of Fishermen

Under Blue Revolution targets have been communicated to all districts to take up different activities. 50% subsidy has been agreed for the states and the unit cost of all schemes has been increased by which the beneficiaries will be benefitted. 50% subsidy assistance was extended to all categories of beneficiaries with 100% Central assistance for the year 2016-17. But during 2017-18 the subsidy pattern has been modified and 40% assistance is being given to General category beneficiaries and 60% subsidy to ST/SC and women entrepreneur, with further sharing subsidy at 60:40 basis (60% CS+40% SS).

# POND DEVELOPMENT PROGRAMME UNDER BLUE REVOLUTION, MASTYA POKHARI YOJANA & RKVY

During the year 2017-18, 1757.48 ha. water spread an area (Blue Revolution/ Matsya Pokhari Yojana/ RKVY) has been targeted for development against which 605.05 ha has been achieved up to the end of 31/03/2018.

	စ		g Blue Revolution		MPY	MPY		RKVY		TOTAL	
SI. No.	District	No. Blocks	Target (in Ha.)	Ach	Target (in Ha.)	Ach	Target (in Ha.)	Ach	Target (in Ha.)	Ach.	
1	Cuttack	14	14.00	10.55	52.00	0	8.00	7.30	74.00	17.8	
2	Jagatsingpur	8	7.50	5.24	54.00	0	10.00	9.70	71.50	14.94	
3	Kendrapara	9	14.00	13.90	54.00	0	10.00	7.13	78.00	21.03	
4	Jajpur	10	14.00	3.88	24.00	0	5.00	3.48	43.00	7.36	
5	Puri	11	20.00	16.85	70.00	0	30.00	37.07	120.00	53.92	
6	Nayagarh	8	10.00	11.15	30.00	0	10.00	6.40	50	17.55	
7	Khurdha	10	7.50	1.60	40.00	0	10.00	13.78	57.50	15.38	
8	Balasore	12	23.00	35.60	100.00	0	26.00	46.63	149.00	82.23	
9	Bhadrak	7	14.00	6.52	52.00	0	25.00	23.10	91.00	29.62	
10	Mayurbhanja	26	15.00	24.00	70.00	0	40.00	30.40	125.00	54.4	
11	Ganjam	22	14.00	5.22	56.00	0	30.00	12.57	100.00	17.79	
12	Gajapati	7	6.50	3.52	20.00	0	5.00	5.00	31.50	8.52	
13	Kandhamal	12	5.19	2.80	10.00	0	1.00	0.00	16.19	2.80	
14	Kalahandi	13	5.50	0.00	50.00	0	40.00	38.72	95.50	38.72	
15	Nuapara	5	10.00	3.38	20.00	0	3.00	2.40	33.00	5.78	
16	Rayagada	11	7.50	1.00	50.00	0	50.00	48.98	107.50	49.98	
17	Koraput	14	5.50	6.70	20.00	0	4.00	2.00	29.50	8.70	
18	Nawarangpur	10	7.50	6.08	30.00	0	3.00	0.50	40.50	6.58	
19	Malkangiri	7	7.50	10.00	30.00	0	15.00	15.60	52.50	25.60	
20	Keonjhar	13	9.00	6.00	20.00	0	5.00	3.13	34.00	9.13	
21	Sundargarh	17	6.50	2.00	24.00	0	5.00	3.95	35.50	5.95	
22	Angul	8	7.50	0.80	26.00	0	0.00	0.00	33.50	0.80	
23	Deogarh	3	6.50	7.28	20.00	0	5.00	8.80	31.50	16.08	
24	Dhenkanal	8	9.50	2.38	20.00	0	5.00	6.54	34.50	8.92	
25	Sambalpur	9	6.50	10.34	20.00	0	5.00	3.60	31.50	13.94	
26	Jharsuguda	5	12.00	3.00	20.00	0	5.00	2.76	37.00	5.76	
27	Bargarh	12	5.50	5.10	20.00	0	10.00	19.59	35.50	25.09	
28	Bolangir	14	11.29	8.39	22.00	0	20.00	12.60	53.29	20.89	
29	Sonepur	6	7.50	9.87	20.00	0	5.00	3.00	32.50	12.87	
30	Boudh	3	9.50	3.37	15.00	0	10.00	3.80	34.50	7.17	
	Grand Total	314	298.48	226.52	1059.00	0	400.00	378.53	1757.48	605.05	

#### b) Development of Waterlogged Areas:

The scheme is designed for bringing barren waterlogged areas into the folds of pisciculture helping sustainable utilization of land, increase fish production of the state and create ample scope for employment generation opportunities for unemployed youths as well as economic up-liftmen of the rural poor. The FFDAs arrange bank finance for development of waterlogged areas and provide subsidy as per Government of India norms/ guidelines. During 2017-18, around 43.59 ha. have been given as target to Bhadrak, Balasore and Ganjam dist and 15.38 ha. has been achieved.

#### c) National Fisheries Development Board (NFDB):

Enormous potentials exist in the state to augment fish production from different resources, which spread across the length and breadth of the state. With concerted efforts to mobilize farmers for adopting fish farming, application of appropriate technologies for sustainable fish farming and fish seed production and availability of Institutional Finance, National Fisheries Development Board (NFDB) was set up in the country under the Ministry of Agriculture for development of Fisheries in the country. Subsidy is provided to farmers under various categories.

#### d) MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme):

Under MGNREGS funding support of Rs.1,62,500.00 to Rs.1,99,500.00 is being provided to beneficiaries for excavation of 0.50 acre of multipurpose ponds which provide 100 days employment to families with utilizing farm pond for multipurpose uses like water conservation, protective irrigation, horticulture plantation and Pisciculture etc. The ponds are constructed in the land of small and marginal farmers to enhance their livelihood. As on January, 2016, construction of 942 tanks is under progress. A total of 3079 nos. of tanks have already been completed since inception. Moreover, the beneficiaries coming under MGNREGS are provided with the facilities of Matshya Credit Cards (MCC), where the farmers get an advance of Rs.30,000.00 for fingerling raising and horticulture activities. Rs.15,000.00 is extended as subsidy for the purpose.

#### **CAPACITY BUILDING & EXPOSURE VISIT**

#### Training to fish farmers

Training under different programme is imparted to the fish farmers for development of skill on scientific aquaculture, diversification of species etc. The training is imparted at Fishery Training Institute, Balugaon, Brackish Water Training Institute, Paradeep and FISCOFED training Centre at Kausalyaganga. Training under different programme is imparted to the fish farmers for development of their skill on scientific aquaculture, diversification of species etc. Further trainings are imparted to newly recruited 114 Assistant Fisheries Officers (AFO) and 126 Jr. Fisheries Technical Assistants (JFTA) at different Training Centers of the State for their skill development to acquire knowledge on new technologies etc.

A team of 5 Senior Officers of the Department were deputed to Bangladesh on an Exposure Visit under the aegis of :WorldFish `

#### The target and achievements are furnished below:

Year	NFDB		SEP		Total Achievement	
I eai	Target	Ach	Target	Ach	Total Acilievellient	
2016-17	-	-	770	569	569	
2017-18 (up-to March,18)	1500	1350	1035	127	1477	

#### Release of subsidy:

#### **Development of Inland Fisheries & Aquaculture:**

World wide increasing demand of fish and fisheries products and fish being recognized as the source of cheap animal protein, aquaculture once a homestead activity has now transformed in to an organized farming activity. After introduction of top up subsidy under state plan and interest subvention expansion of new areas have been prioritized.

Subsidy under pond development programme is admissible to all categories of fish farmers for excavation and renovation of tanks with or without institutional finance under the CSP scheme `Blue Revolution .

(Amt. Rs. in lakh)

SI.	Name of the Programme	2017-18 (Up to December'17)					
No.	Name of the Programme	Funds received	Expenditure incurred				
1	Blue Revolution	0	0				
2	MPY	4799.96	0				
3	RKVY(Fresh water)	1750.00	1149.81				
4	RKVY(Brackish water)	905.00	0				

#### 7. Reservoir Fisheries:

These are open water bodies and highly suitable for capture based culture fisheries. The total available water area under reservoirs in the state is around 2, 00,379 hectares. For scientific management of such water bodies State Reservoir Fisheries Policy has been implemented in the State. Fishing rights of 138 reservoirs having Mean Water Spread Area (MWSA) of 40 Ha. And above have been vested with Fisheries & ARD Department. With successful implementation of State Reservoir Fisheries Policy and regular stocking of quality fingerlings, the production of reservoirs in the State has been increased significantly. Quality fingerlings are being stocked in selected reservoirs with financial support from National Fisheries Development Board (NFDB) and ST&SC Development Department and this has more than developed the [production of fish in these reservoirs. A few Cage Culture demonstration programmes have been initiated in some reservoirs of the State for augmenting additional fish production from reservoirs.

It is now widely accepted that reservoirs constitute one of the prime inland fisheries resources of Odisha. These manmade lakes offer ample scope for fish yield optimization through adoption of suitable management practices. The members of Primary Fishermen Co-operatives are engaged mostly in the fishing activity in reservoirs.

The total available reservoir water area in the State is around 2,00,379 hectares. During the year 2017-18, lease value collected from Societies as per the Odisha State Reservoir Fisheries Policy, 2012 is Rs. 43.86 lakh. 34177 kg fingerling has been stocked in 105 nos of reservoir of the State under State Plan Scheme 'Promotion of Reservoir Fishery Production\_during 2017-18.

As per the said Policy fishing rights of 138 reservoirs having Mean Water Spread Area (MWSA) of 40 hectares and above have been vested with the Fisheries & ARD Department. Due to successful implementation of State Reservoir Fishery Policy and continuous stocking of fingerlings, production from reservoirs in the state have been increased significantly as reported by CIFRI, Barrackpore.

Reservoirs	Water area in ha.	Vater area in ha. Production per ha. before NFDB stocking	
Small reservoirs	40-1000 ha	95 kg./ha.	175 kg./ha.
Medium reservoirs	1001-5000 ha	46 kg./ha	100 kg./ha
Major reservoirs	5001 ha. and above	8 kg/ha.	33 kg/ha.

#### <u>Infrastructure of Cage Culture</u>

An amount of Rs.50.00 lakh was received during 2017-18 under the State Plan scheme 'Infrastructure for Cage Culture\_ for installation of two (2) battery of cages in two(2) reservoirs. Each battery of cage will have 10 cage units of size 6m x 4mx 4m. Accordingly cage installation in 2 nos. of reservoirs is almost completed and shall be leased out to 2 nos. of entrepreneurs for taking pisciculture after signing of lease agreement and deposit of lease value. Action is being taken to install cage battery in these 2 nos. of reservoirs and lease out them to private entrepreneur selected though Eol procedure for taking up cage culture on PPP mode.

#### 8. Odisha-WorldFish Project:

WorldFish is an international organization and one of 15 CGIAR research centres with headquarters in Penang, Malaysia. The WorldFish mission is to strengthen livelihoods and enhance food and nutrition security by improving fisheries and aquaculture.

A Memorandum of Agreement (MoA) for technical collaboration between the Fisheries and Animal Resources Development Department, Government of Odisha and The WorldFish, Malaysia was signed on 28th June 2016. The project commenced on 1st July 2016 and will continue till 31st March 2022. The overall objective of the MoA is to technically support the F&ARD Department to implement the Odisha State Fisheries Policy-2015 and to achieve 'sustainable aquaculture and fisheries sector in Odisha State, India, creating employment, stimulating inward investment and contributing to State goals for reducing malnutrition among vulnerable and marginalized communities, particularly women and children. As per MoA the WorldFish is working on the following components:

- 1. Promotion of nutritionally sensitive Carp- Mola Production system
- 2. Carp Intensification and hatchery seed quality improvement
- 3. Introduction of Genetically Improved Farmed Tilapia (GIFT)
- 4. Reservoir Fish Productivity and Production Enhancement
- 5. GIS & Spatial planning for inland fisheries resources management

The Odisha-WorldFish Project office has been set up in the Directorate of Fisheries campus, Cuttack. The Joint Director of Fisheries, Inland is the Nodal Officer for the project. The project is managed by a Project Manager and assisted by other staff members hired by the project. Component leaders of national and International repute have been engaged to render guidance and technical support to the farmers. The programme is implemented in eleven pilot districts of the state, namely: Mayurbhanja, Balasore, Bargarh, Sambalpur, Kalahandi, Koraput, Cuttack, Kendrapara, Jagatsingpur, Bhadrak, Balasore and Ganjam. The Action Plan and modality of implementation for the Phase 1 of the project has been approved by the Government in F& ARD Department vide letter No:13290/ FARD Dated 14.11.17 basing on which the activities are implemented in coordination with the District Fisheries Officers. Proper orientation training and awareness is created among the Fisheries Officials posted in the pilot districts. The activities and implementation is regularly reviewed by the Director of Fisheries in the presence of Nodal Officer and project staff. Priority is given for selection of community water bodies, GP tanks and MIPs to encourage women SHGs and Primary Fishermen Cooperative Societies to actively take part in the programme and get benefitted by increased fish production.

#### 1. Promotion of Nutrition-sensitive Carp- Mola Polyculture system:

Odisha is one of the important states with excellent resources for fish production. The fish production is also low. Nutritional status of the state is also very poor. About 34% of the children below 5 are malnourished. Many farming households are facing health and economic risks because of problems in malnutrition as a result of lack of knowledge on improved technology for fish production. Carp-mola production technology is one of the most suitable and time demand technologies to increase fish production and overcome the malnutrition situation of the children of the state. Having the fruitful experience in carpmola production through working in Bangladesh and other countries, WorldFish has provided all the technical guidance to introduce the mola into Carp farms in Odisha. Mola popularly known as mahurali in Odisha has very good nutritional value hence called NutriFish. The mola auto-breeds 2-3 times in a year in the tank and increases its biomass by 7-10x within a year thus converting the ponds in to Akshayapatara of fish production. Under the component, water bodies are selected under the guidance of District Fisheries Officers. Source of mola is identified and stocked in the selected water body with technical support from WorldFish. In addition to mola, good quality carp seeds procured from Government Fish Hatcheries are stocked. Regular harvest of mola is done which gives nutritional food for the family and additional income to the farmers. It is targeted to cover 400 acres involving about 1500 beneficiaries under this programme during 207-18.

#### 2. Carp Intensification and hatchery seed quality improvement:

Indian Major Carps, Rohu, Catla and Mrigal have excellent consumer demand in the state. The present production level is 2.50 Metric Ton per Ha. It is required to double the production by adopting improved farming technology. The activity intends to stock of good quality fish seeds of >100 gram (advanced fingerlings) and use formulated pellet feeds of 24-28 % crude protein and 3-4% fat. The prgramme aims at regular stocking and harvesting thereby doubling the fish production. A target of 250 acres is fixed for the year 2017-18.

#### 3. Introduction of Genetically Improved Farmed Tilapia (GIFT):

Genetically Improved Farmed Tilapia (GIFT), a fast growing, high yielding and value buy variety of fish has been introduced in Odisha. GIFT variety of tilapia is developed by WorldFish, Malaysia over last 3 decades by employing selective breeding technology. Presently, it is the most widely farmed tilapia variety across the globe. GIFT can grow to market size (600-700 g) within 6 months of crop duration and can yield 3-4 tons/acre/crop. It has very good consumer acceptance qualities such as attractive light grey coloration, tasty white meat with single bone. According to the UN-FAO, tilapia is one of the fastest growing variety of farmed fish around the world, and along with carps and catfish, it will take a share of more than 60% of the total global farmed fish production.

During 2017-18, it is targeted to take up demonstration of GIFT in 33.00 acres of water tanks. The seed of All-male GIFT Tilapias procured from MPEDA-RGCA Tilapia Hatchery, Vijayawada by the orders of Directorate of Fisheries under the guidance of WorldFish. Selected farmers are provided handholding support for proper implementation of Better Management Practices (BMPs) and also, farmers will be assisted to market the tilapia in local fish markets. Proper bio-security measures are assured in the culture as per the guidelines of Government of India. Establishment of aGIFT tilapia Hatchery and Multiplication Centre has been planned in the Kausalyaganga Government Fish Farm for which clearance has been received from the Government of India.

#### 4. Reservoir Fish Production Enhancement:

The fish productivity from the Reservoirs of the state is very low<150 kg/ha. The production can be enhanced by stocking of good quality fish seeds and building awareness among the members of Primary Fishermen Co-operative Society. During the year total 14 nos. of selected reservoirs from the districts of Cuttack and Mayurbhanj are stocked with quality carp and freshwater prawn seeds.

#### 5. GIS & spatial planning for inland fisheries resources management:

Odisha have excellent freshwater fisheries and aquaculture resources. However, there is need to have a Geo-tagged master list of all these fisheries resources through utilization of Geographical Information System for proper planning and implementation of the various fisheries programs in the State. A GIS and Spatial planning cell will be established in the Directorate for GIS mapping of all types of water bodies and fisheries resources in the state.

Fish is the animal source food with the fastest growing production in the World. Fish is the cheapest and most accessible animal-origin food for poor consumers. Fish consumption has a critical role to play in boosting dietary diversity and reducing the number of people who suffer from micronutrient deficiencies, with lifelong benefits for health and productivity. The presence of WorldFish international organization in the state will not only help in enhancing fish production but the technical support will add a new chapter in the exposure and efficiency of the departmental officers.

## 6. WorldFish Photographs:



Hon ble minister Dr. Damodar Rout releasing Carp Mola Polyculture guide for Farmers



Sri. P.K. Senapati, IAS, Director of Fisheries is discussing with PFCS members of Bhandarikula MIP, Mayurbhani



Director of Fisheries releasing carp seeds in Jambhira reservoir of Mayurbhanj



Director of fisheries addressing the participants of ToT at Chilika Conference Hall, Cuttack



Project review by Director of Fisheries and WorldFish officials



Distribution of feed under carp intensification program of WorldFish



Mr. Pradosh Acharya, B.E., a progressive farmer accepted challenge of GIFT tilapia



Mr. Bharat Behera, farmer of Praharajpur, Cuttack happy with his product for carp intensification





Stocking of quality fish seeds under the reservoir stocking programme of WorldFish





Dr. Trilochan Swain, Component leader of project imparting training to the lead farmers

#### 9. Fish Seed Production

Quality fish seed in adequate quantity is the primary requisite for development and expansion of aquaculture in the State. The Department of Fisheries is having 28 fish breeding farms and 28 rearing farms besides 86 fish seed farms in private sector wherefrom fish seed is produced to meet the demands of fish farmers. Government and Private Hatcheries together produced around 325.35 Crores of spawn. Tanks developed under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and captive nurseries developed at reservoir sites also produced fish seeds required in the State. Diversification of native minor carp and barbs species have also been taken of under R&D programme. The species are used for inter-cropping with Indian Major Carps and found to be very compatible and suitable even for sectional ponds. During the current year a total of quality fish seed of 21.60 Crores of in Govt. Farms and 57.33 Crores in Private Farms respectively have been produced and distributed to the fish farmers of the State.

The spawn and fry production of the state in Government as well as private sector for last five years is as follows:-

Year	Government	OPDC	Private	TOTAL
2012-13	3037.00	11735.50	13904.00	28676.50
2013-14	3487.00	9680.00	14704.00	27871.00
2014-15	3602.50	9616.25	20635.00	33853.75
2015-16	3588.00	8062.50	15864.00	27514.50
2016-17	3596.50	7591.75	18347.00	29535.25
2017-18	6308.00	5681.00	2407.00	36065.00

#### FRY PRODUCTION IN ODISHA (IN LAKHS)

Year	Government	OPDC	PRIVATE	TOTAL
2012-13	738.85	2415.23	3865.28	7019.36
2013-14	1121.13	2388.27	3490.33	6999.73
2014-15	312.29	1172.41	4279.31	5764.01
2015-16	601.42	1612.309	5502.11	7715.839
2016-17	423.11	1484.06	5575.59	7782.76
2017-18	1139.20	1020.85	5733.58	7893.63

		10. STAT	US OF GOV	T.FIS	H FARM	1 IN F	ISHERI	ES DEPA	RTMEN	Γ	(Area in	AC.)
District	SI.No	Name of the farm	Presently operated by	S	г/вт	RT		N	IT	Total water area of the farm	Gross area of the farm	Remarks
			-	No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
	Ţ				1	С	UTTACK	ZONE	T	T	T	T
Cuttack	1	Kendupatna	Not Lease	1	8.6	0	0	5	1.55	10.15	11.42	Deptt.
	2	Nuapatna	FFDA	0	0	4	1	11	1.15	2.15	3.5	Under culture FFDA
	3	Narasinghpur	Deptt.	3	2.74	0	0	4	0.96	3.7	8.04	Deptt.
	4	Dry Dock	Defunct								5.72	Transferred by Revenue Deptt. to SCB Medical Public School
Jagatsin	5	Alaka,	OPDC	3	3	0	0	4	0.1	3.1	5	Under culture
ghpur	6	Alipingal	OPDC	0	0	0	0	8	2.76	2.76	3.89	Under culture
	7	Arakhapari	FFDA	0	0	0	0	3	0.5	0.5	0.6	Under culture
	8	Tritol	Laying Idle	0	0	0	0	9	1.1	1.1	2.71	Laying Idle
	9	Kulasahi	Deptt.	0	0	0	0	6	0.92	0.92	1.15	Deptt.
Kendrap	10	Derabis	Defunct	0	0	2	1.25	9	1.45	2.7	6	Defunct
ara	11	Barimula	Defunct	0	0	12	9.6	2	0.8	10.4	13.9	Defunct
Jajpur	12	Kalakala	Laying Idle	7	10.5	1	0.55	15	3.5	14.55	20	To be leased out
	13	Dharmasala	Defunct	0	0	0	0	2	0.5	0.5	0.7	Defunct
Tot	al Cutt	ack Zone	Total	14	24.84	19	12.4	78	15.29	52.53	82.63	

		10. STAT	US OF GOV	T.FISI	H FARM	1 IN I	FISHERIE	ES DEPA	RTMEN	Γ	(Area in	AC.)
District	SI.No	farm	Presently operated by	S1	Г/ВТ		RT	N	NT		Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
	1						PURI ZO	ONE	II.	T	T	T
Puri	14	Brick field	OPDC	10	8	8	3	16	2.04	13.04	23.94	Under culture OPDC
	15	K.Gang	Deptt./ NFDB	76	157.4	19	9	49	8.6	175	280	100 Ac. transferred to NFFBB for Brood Bank
	16	Nimapara	FFDA	0	0	3	1.05	4	0.6	1.65	3.27	Under culture
Khorda	17	Kiakani	Forest Dept.	0	0	0	0	0	0	0	38.945	Declared as Wild life sanctuary
	18	Lingipur	OPDC	0	0	0	0	0	0	0	6.35	Proposed for lease cancellation
	19	Balugaon	Deptt.	2	1.6	1	0.6	4	0.4	2.6	3.39	Under culture
	20	Laxmisagar	G.A. Deptt.	0	0	0	0	0	0	0	24.493	23.487 Ac. Occupied by GA Deptt. & 1.006 Ac. under Fisheries Deptt. No fish farm activities
Nayagar h	21	Nayagarh	Deptt.	0	0	0	0	6	0.9	0.9	1.92	Deptt.
To	otal Pu	ri Zone		88	167	31	13.65	79	12.54	193.19	382.308	
					1	BA	LASORE	ZONE	"		1	
Balasor e	22	Dighirahania	Deptt.	6	6	7	4	14	2.42	12.42	26.5	Under culture
Bhadrak	23	Bhadrak	Rev. Deptt	0	0	0	0	0	0	0	0	Not existing
	24	Rahandia	OPDC	3	2.5	2	1.2	9	2.25	2.5	13.2	Under culture
	25	Bonth	Pvt. Ent.	2	5.5	2	1.5	5	1.2	5.5	11.79	Leased out

		10. STAT	US OF GOV	T.FIS	H FARN	I IN I	FISHERIE	ES DEPA	RTMENT	7	(Area in	AC.)
District	SI.No	Name of the farm	Presently operated by	S	Г/ВТ		RT	N	т	Total water area of the farm	Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
Mayurb	26	Kathapal	OPDC	10	5.9	1	0.35	13	1.38	7.63	59.71	Under culture
hanj	27	Sirsa	Deptt.	1	5	0	0	7	0.75	5.75	9.21	Defunct
	28	Betanati	Leased	0	0	0	0	8	1.7	1.7	4.5	Leased
	29	Udala	Lease	1	3.47	1	0.4	10	1.95	4.87	9.55	To be leased
	30	Rairangpur	Leased	1	3.47	1	0.4	10	1	4.87	7.42	Leased
	31	Badadalima	Leased	1	5	0	0	11	1.9	6.9	11.12	Leased
	32	Karanjia	Deptt.	0	0	0	0	6	1.15	1.15	1.75	Defunct
	33	Badajore	FFDA	3	4	2	8.0	12	2	6.8	22.2	To be leased
	34	Amarda	Deptt.	1	22	0	0	12	1.3	23.3	53.37	Defunct
		Total Balas	ore Zone	29	62.84	16	8.65	117	19	83.39	230.32	
						KE	ONJHAF	R ZONE				
Sundarg	35	Sadar	OPDC	3	3.19	0	0.00	16	2.08	5.27	12.78	OPDC
arh	36	Bishra	Deptt.	0	0.00	1	0.64	10	1.05	1.69	5.39	Not Culture
	37	Bonei	Deptt.	0	0.00	1	0.16	7	0.59	0.75	4.60	Not Culture
	38	Tudalaga	Deptt.			1	0.64	10	1.05	1.69	5.39	Not Culture
	39	Mandira	Defunct	1	1.50	0	0.00	9	1.01	2.51	5.50	Defunct
Keonjha r	40	Digdan Fish Farm	OPDC	1	0.50	0	0.00	12	1.30	13/1.80	5.94	OPDC
	41	Musakhori	OPDC	1	0.50	0	0.00	2	0.40	1.75	3.77	OPDC
	42	Jhumpura	Defunct	1	1.50	1	0.60	15	3.30	5.40	11.28	Defunct due to construction of canal.
	43	Telkoi	FFDA	0	0.00	2	0.84	4	0.36	1.20	1.72	FFDA
	44	Machhalo	FFDA	1	0.50	0	0.00	5	1.19	1.69	4.92	FFDA
Tota	l Keon	jhar Zone		8	7.69	6	2.88	90	12.33	21.95	61.29	

		10. STAT	US OF GOV	T.FIS	H FARN	INI	FISHERIE	S DEPA	RTMEN	Γ	(Area in	AC.)
District	SI.No	farm	Presently operated by	Sī	г/вт		RT	N	т	Total water area of the farm	Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
	1	T			1		MBALPU	I	T			T
Sambal	45	Bomaloi	Dept (RD)	10	19.00	8	3.70	30	5.63	28.33	97.61	Culture under RD
pur	46	Kuchinda	FFDA	0	0.00	3	0.83	5	0.74	1.57	6.25	FFDA
	47	Rairakhol	Deptt.	2	1.30	4	0.76	4	0.28	2.34	4.58	To be leased
	48	Sangramal	Deptt.	2	2.00	0	0.00	6	1.40	3.40	5.00	To be leased
	49	Sambalpur	Defunct	11	24.26	8	1.97	22	6.25	32.48	51.36	Deptt. Control
	50	Burla	OPDC	1	1.80	0	0.00	50	3.59	5.39	20.89	OPDC
Baragar	51	Pipalmunda	OPDC	1	1.00	0	0.00	13	4.00	5.00	7.00	OPDC
h	52	Padmapur	FFDA	0	0.00	1	0.64	30	2.64	3.10	5.97	FFDA
	53	Barpali	FFDA	0	0.00	1	0.60	10	2.40	3.00	12.06	FFDA
Jharsug	54	Ekatali	Deptt.	0	0.00	0	0.00	10	1.50	1.50	7.72	Defunct
uda	55	Baghmunda	FFDA	0	0.00	0	0.00	11	2.75	2.75	8.00	FFDA
Total	Samba	alpur Zone		27	49.36	25	8.50	191	31.18	88.86	226.44	
						В	DLANGIR	ZONE				
Boudh	56	Boudh	OPDC	3	4.90	8	2.90	14	2.20	10.00	18.540	OPDC
Bolangir	57	Bolangir	Defunct	2	5.40	3	2.40	25	3.10	10.90	29.63	Defunct
	58	Dhamandanga	Lessee	2	5.42	4	2.00	8	1.52	8.94	22.24	Leased out
	59	Luisinga	FFDA	6	7.00	0	0.00	12	2.04	9.04	20.00	FFDA
	60	Titlagarh	Defunct	0	0.00	0	0.00	10	2.67	2.67	7.60	Defunct

		10. STAT	US OF GOV	T.FIS	H FARM	I IN I	FISHERIE	S DEPA	RTMENT	Γ	(Area in	AC.)
District	SI.No	Name of the farm	Presently operated by	Sī	Г/ВТ		RT	NT		Total water area of the farm	Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
	61	Patnagarh	Lessee	1	1.46	0	0.00	11	1.88	3.34	6.71	Subjudice
	62	Harishankar	Defunct	1	0.70	1	0.20	3	0.32	1.22	3.16	Defunct
Subarna pur	63	Sonepur	Deptt(RD)	16	37.35	10	4.69	25	3.57	45.61	76.67	RD activity
Tota	al Bola	ngir Zone		31	62.23	26	12.19	108	17.3	91.72	184.55	
					II.	Д	NUGUL	ZONE			1	
Deogar h	64	Barkot	FFDA	0	0.00	0	0.00	33.00	15.00	15.00	20.00	Culturable 12.99 Ac. Only seasonal pond.
Dhenka	65	Sadar	Lease	0	0.00	0	0.00	0	0.85	0.85	1.50	Lease
nal	66	Kamakshyan agar	Defunct	1	0.50	3	1.30	8	1.05	2.85	5.07	Defunct
	67	Hindol	FFDA	0	0.00	4	0.80	12	0.96	1.76	3.00	Defunct
Angul	68	Angul Part	OPDC	10	43.90	0	0.00	17	2.00	31.32	48.12	OPDC
	69	Angul (P) Part	Deptt.	15	13.25	0	0.00	0	0.00	13.25	16.50	To be leased out
	70	Bantala	Deptt.	1	1.25	0	0.00	11	1.30	2.55	7.91	To be leased out
	71	Khamara	Leased	1	2.00	3	1.30	5	0.75	4.07	4.27	Leased out
	72	Boinda	Deptt.	0	0.00	0	0.00	3	0.50	0.50	0.84	To be leased out
	73	Athhmalik	Deptt.	0	0.00	1	0.92	7	2.07	2.99	3.85	Lease cancelled
To	tal Ang	jul Zone		28	60.9	11	4.32	96	24.48	75.14	111.06	

		10. STAT	US OF GOV	T.FIS	H FARM	1 IN I	ISHERI	ES DEPA	RTMEN	Γ	(Area in	AC.)
District	SI.No	farm	Presently operated by	Sī	г/вт		RT	N	IT	Total water area of the farm	Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
						G	ANJAM	ZONE				
Ganjam	74	Digapahandi	OPDC	3	5.37	3	2.50	18	2.33	10.10	17.815	OPDC
	75	Humari (lease)	LEASED	4	5.25	4	1.80	33	5.80	12.85	35.000	Leased out
	76	Dhobabandha	Defunct	1	0.62	1	0.41	6	1.02	2.05	4.161	Defunct due to construction of Railway Over bridge
	77	Sagarabandha	Leased			4	1.55	16	3.85	5.40	7.217	Leased out
	78	Aska (Defunct)	Defunct					8	1.42	1.42	4.940	Defunct
	79	Malad	Leased	6	6.50	5	2.00	14	6.00	14.50	42.200	Leased out
	80	Bhanjanagar	Defunct					9	2.27	2.27	26.530	Defunct
Gajapati	81	Paralakhemu ndi	OPDC	3	3.40	8	3.00	23	3.40	11.80	12.330	OPDC
Kandha	82	Phulbani	OPDC	1	1.00			10	1.09	2.09	4.000	OPDC
mala	83	Tendrigaon	FFDA	1	0.05	2	0.05	7	0.75	1.75	3.500	FFDA
	84	Sirtiguda	FFDA					2	0.50	0.50	0.500	FFDA

		10. STAT	US OF GOV	T.FIS	H FARM	1 IN	FISHERI	ES DEPA	RTMEN	Γ	(Area in	AC.)
District	SI.No	Name of the farm	Presently operated by	SI	Г/ВТ		RT	N	т	Total water area of the farm	Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
Tota	Total Ganjam Zone			19	22.19	27	11.31	146.00	28.43	64.73	158.19	
						KA	LAHANI	DI ZONE				
	85	M. Rampur	OPDC	3	3.00	2	1.00	19	1.90	5.90	10.39	OPDC
Kalahan di	86	Golamunda	OPDC	3	4.80	5	3.20	11	1.80	9.80	29.85	OPDC
<u> </u>	87	Bhabanipatna	FFDA	1	1.10	4	2.10	18	3.50	6.70	13.29	FFDA
	88	Baladiamala	OPDC	0	0.00	3	0.92	24	2.64	3.56	8.56	OPDC
	89	Koksora	FFDA	2	2.00	3	1.50	9	1.50	5.00	8.94	FFDA
	90	Bhatrajore	LEASED	2	3.00	6	4.20	15	1.50	8.70	19.23	Leased and Subjudice
	91	Jodabandha	FFDA	2	2.00	1	0.75	9	1.35	4.10	7.82	FFDA
		TOTAL		13	15.90	24	13.67	105	14.19	43.76		
	92	Khariar	OPDC	5	6.50	5	1.60	12	2.25	11.60	24.31	OPDC
Nuapad	93	Saipala	DERELIC T	2	1.50	5	0.75	8	1.20	3.45	7.85	Defunct
а	94	Nuapada	Deptt.	1	1.50	1	0.75	11	1.10	3.35	6.65	Defunct
	95	Sunder	FFDA	1	0.60	1	0.30	12	1.80	3.10	3.71	FFDA
	96	Muchkipadar	OPDC	0	0.00	5	2.05	12	3.31	5.36	6.86	OPDC
Rayaga da	97	Bikrampur	FFDA	0	0.00	0	0.00	11	1.86	1.86	2.36	FFDA

		10. STAT	US OF GOV	T.FIS	H FARN	1 IN I	FISHERIE	S DEPA	RTMENT	Γ	(Area in	AC.)
District	SI.No	farm	Presently operated by	S	Г/ВТ		RT	N	ΙΤ	Total water area of the farm	Gross area of the farm	Remarks
				No	Area	No	Area	No	Area			
1	2	3	4	5	6	7	8	9	10	11	12	13
Total	Kalah	andi Zone		35	41.9	65	32.79	276	39.9	116.24	149.82	
						K	ORAPUT	ZONE				
Koraput	98	Joypure	Deptt. (R.D. activity)	4	4.97	6	4.82	39	7.78	17.57	22.750	RD activity
	99	Kotpad	Deptt.					8	1.28	1.28	1.660	Deptt.
Malkana	100	Malkanagiri	OPDC	3	3.50	2	1.00	10	2.00	6.50	13.020	OPDC
giri	101	Kalimela	OPDC	8	4.05	5	4.05	20	2.00	10.56	15.000	1.00 Ac in operation
	102	Koilipari	Deptt.					10	3.07	3.07	4.000	DEFUNCT
	103	M.V. 79	Deptt.					11	0.72	0.72	1.500	DEFUNCT
	104	Kadamguda	Deptt.					5	2.00	2.00	3.000	DEFUNCT
	105	Venchapalli	Deptt.					7	0.78	0.08	1.700	DEFUNCT
Nabaran gapur	106	Pujariguda	FFDA			3	3.00	10	5.00	8.00	12.000	FFDA
Tota	Total Koraput Zone			15	12.52	16	12.87	120	24.63	49.778	74.63	
	GRAND TOTAL			294	511.47	242	119.6	1301	225.08	837.528	1661.241	

#### 11. Rashtriya Krishi Vikash Yojana (RKVY)

Under Rashtriya Krishi Vikash Yojana (RKVY) programme, some new projects have been introduced during 2017-18 and some projects of previous years are going on in Fisheries Sector of the State. The highlights of the new projects/ ongoing projects/ Schemes are given below:-

#### Development of tanks/ponds for intensive aquaculture under RKVY

Under this Scheme, it was planned to develop 400.00 ha. water area to enhance the fish production @ 5 M.T./ha./annum. Rs.1750.00 lakh has been released to different Project Implementing Officers for implementation of the Scheme. Under the Scheme, unit cost for excavation of new tank is Rs.7.00 lakh per ha. and input cost of Rs.1.50 lakh per ha. The maximum subsidy ceiling is up to Rs.4,25,000/- per ha. Subsidy is admissible for development of maximum 2.00 ha. water area and minimum of 0.40 ha. water area for each farmer. 499 nos. of new tanks/ ponds has been excavated having 378.53 ha. water area as against the target of 400.00 ha. till date.

# Comprehensive plan for development of Fisheries Sector in Nawarangpur District under RKVY

Under this project, it has been planned to provide input subsidy for scientific pisciculture, reservoir fisheries development though stocking of fingerlings, establishment of laboratory-cum-training center (2 nos.) and provision of water testing kits etc. Rs.200.00 lakh has been released to the concerned Project Implementing Officers for implementation of the project. Till date, construction of one no. of laboratory-cum-training centre is under progress (roof level), 8.00 lakh fingerlings stocked in 200.00 ha. of GP tanks, 40.00 lakh fingerlings stocked in Reservoirs, Fish seed rearing in 2.30 ha. & demonstration on intensive pisciculture in 19.50 ha is going on.

## Comprehensive plan for development of Fisheries Sector in Malkangiri District under RKVY

Likewise, District Plan for development of fisheries in Malkangiri District has been prepared with provision for modernization of Govt. fish farms, establishment of fish seed hatchery, renovation of captive nursery, supply of boat and net to active fishermen of reservoir/rivers, establishment of laboratory-cum-training center and testing kit units etc. with a project cost of Rs.146.50 lakh. Out of which, Rs.146.50 lakh has been released to the Project Implementing Officers during 2016-17 & 17-18 for taking up the project works. Modernization of Govt. fish farm in Malkangiri is in progress. One Laboratory-cum-training center work is under progress (roof level), Fish seed hatchery in pvt. Sector-proposals obtained, boat and net is in progress, tender for testing kits completed and orders placed to supply to concerned Parties.

#### > Development of the heritage Govt. fish farm, Angul under RKVY assistance

Under this project, it has been planned to develop the Govt. fish farm, Angul with the components like ornamental fish culture demonstration unit, training hall, hostel, exhibition hall, aquarium, RCC nursery tanks, site peripheral development, renovation of stocking tank and nursery tank etc. with a project cost of Rs.645.00 lakh. Out of which Rs.400.00 lakh has been released to the Project Implementing Officer for taking up the project works. The boundary wall work is almost at the completion stage. Other developmental works were delayed due to some problems at the site. However, action is being taken to take up other works in phased manner.

# Improvement to Existing Approach from Main Road to Fish Market at Bahabalpur in the District of Balasore under RKVY Grant

Rs.100.00 lakh was earmarked for the aforesaid project and released to the Executive Engineer, FED, Bhubaneswar for the project work and the said work has been completed in the meanwhile.

#### Assistance for net and boat to inland and riverine fishermen

The nets and boats are provided to fishermen belonging to member of PFCS for reservoir fisheries and individual cases in case of riverine fisheries to improve the fishing efficiency and eradicate the role of money lenders. The unit cost for net and boat is Rs.40,000/- with 50% subsidy maximum to Rs.20,000/-. During the year, 2015-16 & 2016-17, Rs.244.00 lakh has been allotted to different District Level Officers for subsidy under the Scheme and 1449 nos. of units developed so far.

# > Assistance for fish marketing infrastructure to inland, marine and Chilika fishermen

In order to help fish folk to sell and transport harvested fish in fresh and hygienic condition from fish landing centers to marketing places the fishermen of both marine, inland and Chilika have been provided with fish marketing infrastructure like Bicycle with ice box, motor cycle with ice box and auto rickshaw with ice box with subsidy of Rs.2000/-, Rs.7500/- and Rs.35,000/- respectively. Till date, Rs.50.00 lakh has been allotted to different District Level Officers and against which 178 nos. of bicycle with ice box, 341 nos. moped with ice box and 1 no. of auto with ice box have been provided till date.

## Pilot project for demonstration of intensive pisciculture in potential blocks of Odisha

Under the Scheme, the unit cost for one ha. pond is Rs.2.00 lakh. The tanks should be of minimum 0.40 ha. and maximum 1.00 ha. size. There will be 50% contribution of owner of the demonstration tank on total input cost. The contribution may be from own source or institutional finance. The owner of the demonstration tank will bear 50 % of the input cost i.e. Rs.1.00 lakh per ha. from his own source/institutional

finance and balance 50 % of input cost will be met from RKVY assistance. Against the target of 200 ha. water area in 100 nos. of potential blocks in Odisha for demonstration of intensive aquaculture under RKVY during 2015-16, 2016-17 & 2017-18, Rs.260.00 lakh has been allotted to different District Level Officers and 161.00 ha. has been developed so far.

### Demonstration of feed based Aquaculture for enhancing inland fish production

This is applicable in all blocks of Odisha. Two tanks in 214 blocks and five tanks in 100 potential blocks will be taken for demonstration of feed based aquaculture. Assistance of Rs.10,000/- as incentive is being given to progressive fish farmers in the form of fish feed, lime, probiotics and medicine etc. having minimum 1 acre water area. Whenever 1 acre water area is not available, 0.50 acre water area is being taken up for consideration. Against the target of 1856.00 acre, 1123.15 acre has been developed and Rs.110.00 lakh has been allotted to the District Level Officers under the Scheme till date.

#### Demonstration for raising of advanced fingerling under RKVY

Under this Scheme, the tank should be minimum 0.20 ha. (0.50 acre) water area. The total unit cost for 0.40 ha. is Rs.50,000/- out of which subsidy @ 20% (Rs.10,000/-) will be given to the farmers/ SHGs and Rs.40,000/- as bank loan/own source. Against the target of 3072.00 acre for raising of fish fingerlings 1671.09 acre area has been developed and funds to the tune of Rs.175.00 lakh has been released to the District Level Officers till date.

### ➤ Enhancing inland fish production through Matsya Credit Card in MGNREGs tank

Under this Scheme, there is a provision of Rs.30,000/- as input cost for raising of fish fingerlings in the Multi-Purpose Farm ponds developed by farmers having 0.20 ha. water area under MGNREGS programme. Out of which Rs.15,000/- as loan and rest Rs.15,000/- as subsidy from RKVY under Matsya Credit Card through District Central Co-operative Bank. 180 nos. of cases have been covered so far & an amount of Rs.36.00 lakh has been allotted towards subsidy under the Scheme & the same is going on.

#### Matsyajibi Unnayana Yojana

Under Matsyajibi Unnayana Yojana during the year, 2017-18, funds to the tune of Rs.367.99 lakh has been released to the DLOs for providing Scholarship to the meritorious children of fishermen community with a target to cover 7560 nos. of children during 2017-18 and as against the same the achievement is 4390 as per the information available. Similarly, Rs.2.00 lakh has been provided to DLOs towards revolving funds of Fisher Women SHGs with a target to cover 40 nos. of Women SHGs and as against the same the achievement is 109 nos. (by utilizing funds of previous years & this year).

#### 12. Co-operative Sector:

- (1) Under Centrally sponsored Group Accident Insurance Scheme (GAIS), which has been merged with Pradhan Mantri Surakhya Bima Yojana (PMSBY) covered11,50,000 Fishers of Odisha state have been provided insurance cover during the Insurance period of 2017-18(1st June 17 to 31st May 18). Odisha state has been topping the lists of States and UTs interms of extending cover to highest nos of fishermen under the scheme since 2008-09. The important feature of the scheme includes thunder, electric shock, any accident, drowning, and death caused by any animal case. The premium amount of Rs.12.00 per fisher is shared by Govt. of India and State Govt. on a ratio of 50:50. The scheme provides cover for Rs.2 lakh in case of death /full permanent disability and Rs.1 lakh in case of partial permanent disability.
- (2) A Central Society in the name of Chilika Fishermen Central Co-operative society Ltd has been organized at Balugaon way back in 2010 for the sake of strengthening and stream lining the functioning of all PFCSs working under the administrative control of A.R.C.S (Financial year), Chilika Circle, Balugaon . In order to make the poor fishermen free from the clutches of money lenders, the Central Society has advanced soft loan to the tune of 5.90 crore to about 3710 fishermen of 53 PFCS over a period of time. That apart 5801 insulated Ice Box have been distributed to Fishermen for hygienic handling of fish.
- (3) Under State Plan Scheme 'Reactivation of Fisheries Cooperative Societies, Assistance to FISHFED, the Apex Society in Fishery Cooperative Sector and 92 Primary Fishermen Cooperative Societies have been given over last few years. During 2016-17, a sum of Rs.120.00 lakh was given to FISHFED to carry out economic activities earmarked for them. FISHFED has already initiated actions to undertake activities like playing of Specially Designed Mobile vans with the facilities of freezer to store fish, cooking platform, water sink and a foldable service Counter (Fish on Wheel)/Canteen Van) to serve hot ready to fish recipes in Bhubaneswar, Cuttack and other tourist places of importance installation of High speed Diesel outlet at 13 selected Fish landing Centers and LPG gas at Paradeep Port fishing harbor and its effects will be felt in the years to come.
- (4) For providing quality fish in hygienic condition at reasonable price to the fish eaters of Bhubaneswar, three modern hygienic fish selling Kiosks have started functioning under the brand name 'Chilika Fresh\_. Besides that, an MOU has been signed with M/S Falcon Exports Pvt. Ltd, Bhubaneswar for establishment of another 26 Modern Hygienic Fish Kiosks, under the same brand name 'Chilika Fresh\_ on BOOT basis. Out of 26 Kiosks 12 no Kiosks have commissioned in the Bhubaneswar Municipal Corporation Area for the fish eater of B.M.C. and rest are expected to be commissioned during the year 2017-18-19. Similarly, about 100 fish selling hygienic Retail outlets will be set up in various strategic locations of the state for which initiatives have been taken up by the District Fisheries Officers to acquire land. Another kiosks under the brand name 'Hirakud Fresh\_ at Sambalpur is already completed and will be opening shortly.

#### 13. BRACKISHWATER AQUACULTURE:

#### a) Brackishwater area development:

It has been decided to lease out the Government owned brackish water areas suitable for coastal aquaculture to fisheries co-operatives, SHGs, unemployed youth and private entrepreneurs, for a maximum period of 15 years. The total brackish water area of the State is around 4.181 lakh hectares including shrimp culture area, estuaries, brackish water lake & back waters out of which 32.587 hectares has been identified as suitable for prawn culture. Besides,24031.03 ha. of Government land has been identified. Around 19286.31 hectares have been developed for prawn culture by the end of January, 2018 since inception, which includes 351.33 ha. during 2017-18. Training is imparted to Brackishwater Fish farmers regularly to improve production level in this sector. During 2017-18 training has been imparted to 140 such farmers. Subsidy to the tune of Rs. 200.00 lakh has been released during 2016-17 & R.s166.912 lakh during 2017-18upto September, 2017.

- b) Chilika Lake: Chilika Lake is the brackish water lake of India with estuarine character which is highly productive and its ecosystem supports fisheries. Chilika Lake is with average water spread area of 906 sq. kms. in summer and 1165 sq. kms. in monsoon . There is island area of 223 sq. kms. There are 134 fishermen villages with 25028 families and 1,40,824 populations around the lake. The number of fishermen actively engaged in fishing in this lake for their livelihood is 40388. Out of 191 registered co-operative societies, 167 are functioning with 39957 fishermen. There are 28 landing centres in which about 26362.26 MT of fish/prawn/crab is produced during the year 2016-17.
- c) Coastal Aquaculture Authority (CAA): The person carrying on Coastal Aquaculture without Registration are punishable with imprisonment for a term, which may extend to three years or with fine, which may extend to one lakh rupees or with both. The Registration is valid for a period of 5 years and renewed for next 5 years after completion of the registration period. In the meantime, 7367 cases comprising an area of 6263.07 ha. have been sponsored to Coastal Aquaculture Authority, Chennai by different District Level Committees (DLC) and State Level Committee (SLC). Out of which, 8230 cases with an area of 6960.14 ha. have already been registered by CAA by now.
- d) Culture of L.vannamei (White shrimp): The persistent disease threat in Brackishwater shrimp culture has impelled the entrepreneurs to look for new avenues in coastal aquaculture. Diversification of culture species and system is highly essential to avoid dependence on a single species i.e. shrimp (P.monodon). Thus shrimp farmers are now interested to take up L. vannamei culture in the state and 3774 farms having an area of 2803.72 ha. have applied to CAAI to get permission to take up L. vannamei culture.

- e) Identification of suitable Govt. land for brackish water area development: Around 24031 ha. Suitable Govt. land has been indentified for development of Brackish water shrimp culture on long term lease in future. Govt. in Revenue & Disaster Management Department, vide their letter no. 16538 dt.03.06.2015 and letter no.23292 dated 13.8.15 have laid down principles for long-term lease of Brackish water Govt. land coming under the jurisdiction of the district by utilizing the services of Revenue and Fisheries Department. All available lands identified for Brackish water culture shall be leased out for 15 years. Till date 1705 nos. of applications received from beneficiaries measuring an area of 1606.57 Ha. has been sent to respective Tahasildars for verification. 343 nos. 185.90 Ha.) of cases have been approved by DLCs to give on Long Term Lease.
- f) Infrastructure facility to Brackish water clusters: Govt. is taking steps to provide separate electricity feeder to Brackish water clusters in order to increase productivity and 107 such clusters have been identified and provision of electricity is under progress. The infrastructure support like quality road is required for transporting inputs and harvested shrimp & Rs.16.38 corers has been sanctioned under RIDF for such development in Brackish water Aqua cluster of Balasore District.

#### **Dedicated Electricity Feeder**

Total no s pole erected till date 4685 nos. out of 8527 .11 KV line length drawn 19.53 km. Nood feeder energized (trunk part) 3 no s Inchudi, Langaleswar, Jagapur.

#### **Promotion of Vannamei Seed supply to the farmers**"

Government of Odisha is looking forward to enhance annual export to the tune of Rs.20,000.00 crores for coming five years by developing L.Vannnamei culture. So a newly created state plan scheme 'Promotion of Vannamei Seed supply to the farmers is now under implementation.

The objectives of new state plan schemes are to encourage the farmers for Scientific culture by stocking quality seed available @25% subsidy on seed cost & L.Vannamei culturing farmers with an ultimate aim for increasing Productivity, income & export. The scheme shall be applicable to all farmers in Brakish Water sector having approval of CAA. To take up culture of L.Vannaamei either or their own lands or in lease lands. The farmers are eligible to get subsidy only once limiting to one hectare culture area. The same farmer will be not be entitled for further subsidy on cost of seeds in the comings years. The same area which has been taken under the scheme & subsidy released cannot be considered for second time if some other farmer is taking or lease.

The calculation of subsidy shall be made as per quantity of seed stocked with a ceiling of or Rs.90,000.00 per ha.

#### **Export Promotion Cell:**

Government of Odisha is targeting annual Seafood exports to increase annual Sea food exports to 20,000.00 crores one export promotion call is functions in the Directorate of Fisheries ,Cuttack one expert/ specialist has been inducted as Consultant for promoting Brackish water aquaculture & export of Marine products of Odisha in Co-ordination with state Government of India/ MPEDA/ Export Promotion agencies.

Present of Rs.2000 Cr, In Order to promote the exports, an Export Promotion Cell has been created, which is 1<sup>st</sup> of its kind in India and now functioning at Cuttack in the Directorate of Fisheries, Odisha. A specialist/eminent personality has been engaged as Consultant to the Cell. The aim of the Cell is to increase the production in both horizontally and vertically.



State Level Workshop on Brackishwater Aquaculture & Guidelines at Maritime Museum, Cuttack on 20<sup>th</sup> Dec. 2017.

#### 14. MARINE SECTOR:

Having a coastline of 480 kms., Odisha is one of the important maritime states of the country having seven coastal districts, where 114,238 fishermen families reside making their livelihood from the open sea.

Marine fisheries in Odisha are a small scale enterprise and activity and the catch is mostly from traditional crafts and gears. In Odisha, around 102 species of fish are caught out of which, important dominant varieties include Hilsa, Pomfret, Seer fish, Cat fish, Sciaenides, Mackerel, Elasmobranches, etc. High value varieties of fishes and prawns are exported from Odisha. For the socio-economic development of fishermen and improvement of quality of life among fishers, living along the coast, several welfare measures are introduced.

#### **WELFARE SCHEMES:**

#### 1. Saving-cum-Relief:

The scheme provides assistance to the BPL category of sea going fishermen with financial assistance of Rs.3000 on 50:50 basis with Central & State share, to inculcate the habit of savings amongst the fishers during lean. The beneficiary contributes Rs.1500/ @ during the period from July to March for the purposes and total Rs.4500.00 per annum is distributed to the fishers during 3 lean months of the year April to June. 9743 nos. fishers were covered against the target of 10,000 during the year 2017-18. The funds for 2016-17 has not yet been received from Govt.. In the current financial year 2018-19, 10000 beneficiaries have been targeted to be covered under the scheme.

#### 2. Matshyajibi Basagruha Yojana:

Under this scheme poor active fisherman are assisted to construct a dwelling house worth of Rs 1,20,000/- in non-IAP districts and 1,30,000/- in IAP districts.

#### 3. Motorization of Traditional crafts:

More than 22,000 registered boats are engaged for marine fishing out of which 11000 nos. are traditional crafts which need to be motorised. To enable traditional fishermen to access to the potential fishing zone for more catch & profit and to bring the catch early and ensure greater safety, there is a provision of subsidizing the cost of engine fitted in the traditional crafts. Subsidy benefit is provided to traditional fishermen of coastal areas for motorization of their country crafts with 8-10 HP OBM. Subsidy for engine is Rs.30.000.00. 803 traditional crafts have been motorized during 2016-17. During 2017-18, 900 beneficiaries have been targeted to cover under the schemes. The funds under the scheme has not yet been released by Gol by 20th Feb, 2018.

#### 4. Biju Krushak Kalyan Yojana:

Health insurance up to Rs.1.00 lakh is provided to the fishermen families covering five members. Financial assistance up to Rs.30, 000.00 is provided for treatment purpose.

#### 5. Establishment of Fishing Harbour & FLCs:

The scheme aims for providing infrastructure facilities for safe landing, berthing, and unloading of fish catches of fishing vessels in a hygienic manner etc. Assistance is also provided for repair and renovation of the existing fishing harbour and fish landing centers. In two FHs i.e. at Paradeep & Dhamara, Management Societies have been formed for better management and revenue earnings. A FLC at Marhandi, Ganjam was developed with funds from RIDF at a cost of Rs.499.00 lakhs. In the current financial survey work by CICEF, Bangalore is under programme for development of alternate Fishery harbor at Gopalpur & FH at Astaranga, Puri.

#### 6. Implementation of Marine Fishing Regulation Act:

The Odisha Marine Fisheries Regulation Act, 1983 is being implemented in the State for safeguarding the territorial waters of the State. Registration, renewal & licensing of fishing crafts along with conservation of turtle species are being taken up through this Act. The amendment to the OMFRA Acts & Rules has been proposed Government. which is under active consideration. The processes of Registration & Renewal are taken up online as Single-Window system.

#### 7. Safety of Fishermen at Sea:

The scheme envisages to providing safety equipments like GPS, Communication equipment, life buoy life jacket, DAT etc. to the sea going fishers with 100% assistance. 1255 Distress Alert Transmitters (DAT) has been distributed to the selected marine fishermen of the state from since 2009. The safety implements will help Fishermen during the time of distress in the sea while fishing. Rs. 190.00 lakhs has been received during 2016-17. Programme at process of 1705 DAT has been computed and supply is under progress.

#### 8. Establishment of Fishing Harbour and Fish Landing Centre:

The work of modernization & up-gradation of Dhamara Fishing Harbour in Bhadrak District under TCP of FAO has been completed. Rs.1000.00 lakhs (CS-Rs.750.00 lakh + SS-Rs.250.00 lakh) have been received under CSP Scheme and the up to date utilization is Rs.912.50 lakhs.

## 9. Enumeration of Coastal Fishers for Issue of Biometric Identity Cards for security purposes:

A total of 3,06,050 cards have been received from the Electronics Corporation of India (ECIL), Hyderabad, out of which 3,02,358 cards have been distributed to fishers. Balance 392 cards are with different Marine DLOs out of which 919 are defective cards.

#### 10. On-Line Registration of Fishing Vessels & Colour Coding:

By end of January, 2018 total 11230 country crafts, 9410 motorized crafts and 1741 mechanized crafts have been registered on-line. 21942 nos. of vessels have been colour coded

#### Assistance to fishermen for dev. of livelihood under RKVY (Boat & Net):

To compensate the huge loss incurred by the fishermen during natural calamities, it has been proposed to provide assistances from RKVY for their livelihood support through rejuvenation of their traditional activity. The Phase <sup>-</sup>I has been completed with a subsidy assistance of Rs.75,000/boat & Rs.25,000/net given under RKVY & 5580 no. of beneficiaries have been covered under the scheme. The project period for Phase-II is 2 years i.e. 2016-17 & 2017-18 with a subsidy assistance of Rs.40,000/boat & Rs.10,000/net shared on 50:50 basis under RKVY & State Plan Scheme. Rs.253.00 lakhs has been released under the state plan scheme by the State Govt. & RKVY for the year 2016-17. In the current financial year Rs.253.00lakh has been released by the State Government. 30 nos. of boat builders have been empanelled to supply the boat under the scheme.

#### 12. Paradeep Fishing Harbour (Website: <a href="www.msfhparadeep.com">www.msfhparadeep.com</a>):

Paradeep Fishing Harbour is one of the important and major fishing harbours of the country constructed in the year 1996. The fishing harbour is now being managed by a Management Society which is responsible for the management of the harbour and for facilitating berthing, handling of catches, auctioning and repair of crafts. Priority is given to maintain sanitation and hygiene as per European Union (EU) norms and of International standards in handling of marine catches.

The Harbour is constructed in an area of 39.00 Acres with one landing jetty and four finger jetties. Facilities such as Auction hall, Auction yard, Diesel out let, Ice godown, Shopping units and Gear shed facilities have been provided to the fishermen in the harbour. Totally 649 mechanised fishing boats and 190 motorized crafts are in operation.

#### 13. Dhamara Fishing Harbour (Website: <a href="www.dhamarafishingharbour@org">www.dhamarafishingharbour@org</a>):

The Harbour is located on the North bank of Dhamara River. It is an UNDP assisted and FAO executed project commissioned in 1978. The Harbour is managed by a Management Society one similar to Paradeep Fishing harbour. 260 Mechanised Vessels, 239 Motorised boats and 157 traditional boats are operating from the Harbour. The Harbour has been certified by the Indian Export Inspection Agency (EIA).

#### 14. Marine Fish export from Odisha:

Odisha is having State of art fish and shrimp processing units, which are conforming to all international standards including that of European Union. There is a well-developed cold chain system. There are about 20 high quality fish processing facilities. Varieties of products in chilled block frozen, and IQF are processed and exported by the export units.

The total export value and volume of fish and fisheries products exported during last five years is as follows:

	Export of Fish and Fishery products to overseas countries							
Year	Qty. in MTs	Value (Rs. in Millions)	Value (In million US\$)	Value (In million Euro)				
2012-13	23,691.00	9,084.80	144.20	129.78				
2013-14	30,980.00	18,170.70	300.39	280.00				
2014-15	34767.00	20,691.72	342.27	311.49				
2015-16	35,612.00	17,918.10	270.18	237.41				
2016-17	41,828.00	22,047.80	332.25	318.79				

# 15. <u>Integrated Coastal Zone Management Project, Odisha (ICZMP) "Alternative Livelihood Option for Fisher Folk"</u>

The Project aims at providing best alternative livelihood support to 7531 fishermen family in 80 fishing villages in the priority of Chilika Lake and Gahirmatha Wildlife Sanctuary by the Fisheries Department.

To encourage the fishers to take up best possible and location specific alternative livelihood, 600 SHGs have been formed and their capacity has been built to improve for adapting to various activities. The components for farming activities are as per the interest and resources available in the locality. The Project provides required infrastructure for particular activity as well as required input for the activity.

By January, 2018 a total of 600 SHGs have been assisted with an amount of Rs. 1906.15 Lakhs for development of 211 Pisciculture units, 99 Hygienic Dry Fish preparation unit, 63 Dairy units, 88 Poultry units and 139 other allied activity units for their livelihood. The cumulative expenditure including advance to the SHGs for the Project is Rs.2745.65 lakhs.

#### 16. Other Important Schemes:

Fisheries equipments & Agri-enterprises in Fisheries sector under Odisha Agriculture Policy, 2013: Aerators /Fish feed mills for aquaculture unit/ Fisheries equipment like net, water testing kit, water pump, transportation taxi, oxygen equipments/ bore-well at 50% subsidy. Ice boxes for preservation of fish/ Setting up of ice plants/ Flake ice plants, cold storages and insulated van/ Establishment of Aqua shop at 50% subsidy and Rs.1.00 crore have been received for subsidy distribution to farmers. In the meantime 500 aerators have been supplied to fish farmers. "Empowering Fishermen through Mobile Advisory Services" & Establishment of Toll Free Call Centre for Fisheries Extension Service: Fisheries Extension services are rendered to fishermen and fish farmers through helpline managed by a team of fisheries experts. One lakh SIM cards were distributed to fishers every year from the year 2013-14. Four lakh SIM cards have been distributed to the fishermen and fish farmers in four years. Five voice messages in Odia language on areas of immediate importance related to fisheries, Potential fishing zone, market price, weather, Government schemes etc. is given every day to the SIM card holders. Further Phone-in and mobile quiz programmes are also being arranged. The SIM card holders are getting free advice from the experts through the helpline No: 534351. A recharge of Rs.30/- is given in every month for the first year. The Programme was awarded as a best entry under Sansad Adarsh Gram Yojana.

#### 17. Publicity in Fisheries:

Information on various developments and activities taken up in the Department. The aim is to reach the population living in various corners of the state to make effective delivery of social sector schemes to the targeted beneficiaries.

**Print media:** Three issues of Odia Quarterly Fisheries Newsletter `Matsya Darpan\_ which portrays different fisheries activities of the Department and the ongoing schemes etc. for distribution to the public as well as other line Department. The Department has also published Leaflets, books/technical manual and regularly publishes advertisement on various developmental schemes and sending weekly technical guidelines to the farmers. Wall writing of various schemes were made at important places of districts.

**All India Radio & Doordarsan Programmes:** 98 Fisheries programmes have been broadcasted by the All India Radio and 102 Doordarsan programmes have been telecasted during 2017-18. The programmes were very popular. Fisheries development programmes are also telecasted through some new important channels like OTV and KAMYAM TV.

**Production of Video Programme & Documentary Films:** Many success stories have been produced and telecasted through Developmental news programmes. Special fisheries programmes and Phone-in programmes have been telecasted through `Krushi Darshan\_programme of Doordarsan and AIR.

**Melas & Fairs:** Various exhibitions, workshops, awareness programmes & Buyers Sellers Meets at Block/District level and State level are being organized to demonstrate different activities of Department. The Department has participated in state level functions like - Krushi Mahotsav at Puri, Adibasi Mela at Bhubaneswar, and Historic Baliyatra at Cuttack. Awareness on empowering Fishermen through Mobile advisory Services and other new schemes was done in all districts. It has been finalized to organize Fish Festival Odisha-2017 along with State Agricultural Fair(Krushi Mahotsav-2017.

**Celebration of Fish Farmers Day:** Fish farmers Day was celebrated on 10<sup>th</sup> July in all the 30 districts with farmers meet. The day was celebrated to remember first hypophysation of carps by eminent scientists like Dr. K.H. Alikunni and Dr Hiralal Choudhury on 10.7.1957 in the Narayan Sagar Government fish farm of Angul. The day is celebrated by all fish lovers every day.

**World Fisheries Day:** World Fisheries Day was celebrated on 21.11.2017 in all the districts. The DFOs organized farmers meets on the occasion.

Matsya Vikash Gosthi Pakhwada: Matsya Vikash Gosthi Pakhwada was observed from 10th of November 2017 to 20th of November 2017 both in the district and block level. The participant regarding importance of observing Matsya Vikash Gosthi Pakhwada in which he also emphasized to adopt latest BMP Fisheries Sector and how to mobilise the technology in the grass root through field functionaries of the department. Matsya Vikash Gosthi Pakhwada inviting leading farmers and PRI members where they aware the participating farmers regarding schemes of Blue Revolution and other ongoing activities of the Department and the Best Culture Management Practices.





Observed Matsya Vikash Gosthi Pakhwada at District Fisheries Office, Cuttack





Observed Matsya Vikash Gosthi Pakhwada at District Fisheries Office, Kendrapara





Observed Matsya Vikash Gosthi Pakhwada at District Fisheries Office, Nawarangpur

#### 18. ODISHA STATE FISHERMEN'S COOPERATIVE FEDERATION LTD. (FISHFED):

#### **Launching of Fish on Wheel Vehicles**

10 nos. of `Fish on Wheel\_ vehicles were launched by FISHFED with an aim to cater `ready to eat\_ fisheries product to the fish loving people of Bhubaneswar. The project costs Rs.100 lakhs and has been inaugurated by Hon'ble Chief Minister, Odisha on 25.10.17. The vehicles will be operated and managed through Pvt. Organization, Datum Marketing Ltd.

#### Setting up of Modern Fish Selling retail Outlets

12 nos. of Modern Hygienic outlets named 'Falcon Chilika Fresh\_ have been built and are being run by Falcon Marine Export Ltd. inside BMC area. The project costs around 4.00 crore, where FISHFED has provided lands and Falcon group has invested the capital cost in a PPP mode. The project was also inaugurated by Hon'ble Chief Minister, Odisha on 25.10.18.

#### Observation of 64th All India Co-operative Week

FISHFED being the Apex Fisheries Co-operative organization celebrated the 64th Co-operative week from 14th to 20th Nov, 2017 like previous year. The main function was organized at Rabindra Mandap, Bhubaneswar with one exhibition cum workshop. A new scheme namely, 'Kanya Ratna Yojana\_ was launched by FISHFED in which 30 nos girl children of members of affiliated Co-operative Societies, who have taken admission in higher studies after completing +2 course awarded with one time Scholarship of Rs.10,000/- each on merit basis.

### **PHOTOGRAPHS**



Inauguration of Chilika Fresh by Hon'ble Chief Minister, Odisha



Hon'ble Chief Minister Inanugurates the "Fish on Wheel" Vehicle of FISHFED.





Celebration of 64th All India Co-operative Week at Rabindramandap, Bhubaneswar & distribution of scholarship under "Kanya Ratna Yojana"

- **19.** Odisha Pisciculture Development Corporation (OPDC) was incorporated in the year 1998 with taken over of two erstwhile corporations i.e. OMCAD & OFSDC. The corporation is having its Head Quarter at Bhubaneswar It's main function are as follows:
  - (1) To produce quality fish seed & supply to the Fish farmers throughout the State of Odisha both in Govt. & private sector.
  - (2) To sale quality Fuel & Lubricants to the Fishermen having Trawlers and Motorized crafts and surface transports.
  - (3) To produce & sale the quality Nylon & HDPE Fishnet webbing for fish farmers and Fishermen. (NET Manufacturing unit of OPDC has been awarded ISO-9001/2008 standard on July 2009)

#### Target & achievements of OPDC for last 3 years

#### 1. Production of Quality Fish Seed (Spawn) and sale

SI.	Year	Target	Achievement	Revenue generated	% of
No.	Teal	(nos in Crore)	(nos in Crore)	(Rs. In Crore)	Achievement
1	2014-15	80.00	61.12		76.4
'	2014-15	39.40	35.04		88.93
2	2015-16	58.00	52.15		89.91
4	2015-10	44.30	28.09		63.40
3	2016-17	70.00	50.28	2.26	71.82
4	2017-18	70.00	56.81	0.241	81.15
4	(as on 31.01.18)	70.00	30.61	0.241	01.13

#### 1. Production of Quality Fish seed (Fry) and Sale

SI.	Year	Target	Achievement	Revenue generated	% of
No.	real	(nos in Crore)	(nos in Crore) (Rs. In Crore)		Achievement
1	2015-16	26.36	15.76	3.53	60.0
2	2016-17	17.91	11.04	2.13	61.6
3	2016-18 (as on 31.01.18)	18.1	10.86	2.009	60.00

#### 2. Production and Sale of Fish Net Webbing

SI.	Voor	Target in MT	Achievement	Revenue generated	% of
No.	Year	Target in MT	in MT	(Rs. in Crore)	Achievement
1	2015-16	75.00	43.00	1.93	57.0
2	2016-17	70.00	27.92	1.54	40.00
3	2017-18 (up to 31.01.18)	50.00	23.00	1.12	46.00

#### 3. Sale of HSD, MS & Lubricants

SI.	Year	Target in KI	Achievement	Revenue generated	% of
No.	real	Target in KL	in KL	(Rs. in Crore)	Achievement
1	2015-16	17,120	10,747	60.10	63.0
2	2016-17	12,634	11,201	71.67	88.6
3	2017-18 (as on 31.01.18)	13,560	9,682	64.13	71.4

### 20. FISHERIES STATISTICS

FISH PRODUCTION IN ODISHA (IN MT)							
Year	Freshwater	Brackish water	Total Inland	Marine	Grand Total		
2012-13	261919	29914	291833	118311	410144		
2013-14	263862	30007	293869	120020	413889		
2014-15	300964	35373	336337	133211	469548		
2015-16	336216	40307	376523	144755	521278		
2016-17	393730	61268	454998	153102	608100		
2017-18 (P) (up to Dec.2017)	318600	65436	384036	116170	500206		

YEAR-WISE RESOURCE-WISE FRESHWATER FISH PRODUCTION (IN MT)								
Year	Tanks/ Ponds	Reservoirs	Lakes/ Swamps/ Bheels	Rivers/ Canals	Total			
2012-13	230430	18570	2407	10512	261919			
2013-14	230939	18940	2803	11180	263862			
2014-15	261845	21831	2943	14345	300964			
2015-16	289666	22761	4245	19544	336216			
2016-17	331187	300689	4881	27594	393730			
2017-18(P) (up to Dec.2017)	267990	2433	3950	22329	318600			

YEAR-WISE RESOURCE-WISE BRACKISH FISH PRODUCTION (IN MT)								
Year	Culture Shrimp	Estuaries	Chilika	Total				
2012-13	13227	4220	12467	29914				
2013-14	12610	4461	12936	30007				
2014-15	19254	4066	12054	35374				
2015-16	23343	4729	12235	40307				
2016-17	29409	5497	26362	61268				
2017-18(P) (up to Dec. 2017)	44262	8273	12901	65436				

FISH PRODUCTION FROM CHILIKA LAKE (IN MT)								
Year	Fish	Shrimp / Prawn	Crab	Total				
2012-13	7114.30	5034.05	318.58	12466.93				
2013-14	7699.71	4927.66	308.97	12936.34				
2014-15 (P)	7146.77	4572.32	334.58	12053.67				
2015-16	7271.95	4564.54	398.77	12235.26				
2016-17	12714.95	13295.39	351.37	26361.71				
2017-18(P) (up to Dec. 2017)	7667.63	4812.90	420.47	12901.00				

YEAR-W	YEAR-WISE DISTRICT-WISE MARINE FISH PRODUCTION (IN MT)								
Year	Balasore	Bhadrak	Jagatsin- ghpur	Kendra- para	Puri	Ganjam	Total		
2012-13	27234	11086	32971	4898	30774	11348	118311		
2013-14	29819	11076	30395	7474	30938	10319	120020		
2014-15	35201	11721	36632	7009	11659	30989	133211		
2015-16	39327	12006	34503	9059	37979	11881	144754		
2016-17	39490	12001	40284	9409	39598	12320	153102		
2017-18(P) (up to Dec. 2017)	32167	9887	30897	6822	17686	18170	116170		

EXPORT OF MARINE PRODUCTS FROM ODISHA TO FOREIGN COUNTRIES							
YEAR	VALUE (IN Rs. Crores)						
2012-13	23196	889.76					
2013-14	29479	1769.45					
2014-15	32468	1963.85					
2015-16	35612	1791.81					
2016-17(P)	41828	2204.78					

	ITEM-WISE EXPORT OF FISH PRODUCTS FROM ODISHA TO FOREIGN COUNTRIES (Q. Quantity in Tons. / V. Value in lakhs / \$ USD Million.)									
Item Name		2012-13	2013-14	2014-15	2015-16	2016-17(P)				
Frozen Shrimp	Q	19698	24852	28889	32515	38007				
	V	85756.05	171227.25	192295.12	174685.91	214325.61				
	\$	158.97	283.26	318.19	270.57	323.08				
Frozen Fish	Q	2646	3766	2659	2248	2871				
	V	2442.99	5003.87	3131.62	3117.35	4461.64				
	\$	4.55	8.15	5.11	4.77	6.72				
FR Cuttle Fish	Q	800	715	813	667	811				
	V	703.17	544.24	695.65	855.64	1431.60				
	\$	1.31	0.90	1.14	1.31	2.16				
FR Squid	Q	0	110	38	95	91				
	٧	0.00	79.73	25.88	111.24	143.53				
	\$	0.00	0.13	0.04	0.17	0.22				
Live Items	Q	0	0	0	0	0				
	٧	0.00	0.00	0.00	0.00	0				
	\$	0.00	0.00	0.00	0.00	0				
Chilled Items	Q	0	6	48	65	14				
	V	0.00	29.48	205.39	361.77	58.04				
	\$	0.00	0.05	0.33	0.56	0.09				

Dried Item	Q	0	0	0	0	0
	V	0.00	0.00	0.00	0.00	0
	\$	0.00	0.00	0.00	0.00	0
Others	Q	52	30	21	21	35
	V	73.92	60.74	31.26	49.05	58.00
	\$	0.14	0.10	0.05	0.07	0.09
<b>Grand Total</b>	Q	23196	29479	32468	35612	41828
	V	88976.12	176945.31	196384.92	179180.96	220478.43
	\$	164.97	292.58	324.87	277.45	332.35

(Source MPEDA, Kochhi)

FISH DISPOSITION (IN MT)							
Year	Marketing Fresh	Freezing	Drying	Salting	Total		
2012-13	345959	33266	24294	6624	410145		
2013-14	349843	30814	22799	10434	413889		
2014-15	404822	29480	25167	10078	469548		
2015-16	445510	34714	29266	11788	521278		
2016-17(P)	509827	53033	32219	13021	608100		

IMPORT OF FRESHWATER FISH FROM NEIGHBOURING STATES				
Year	Qty. (in MT)			
2012-13	21217			
2013-14	26501			
2014-15	38118			
2015-16	46275			
2016-17(P)	35156			

YEAR-WISE ANNUAL PER-CAPITA CONSUMPTION OF FISH				
Year	Annual Per-capita Consumption (In Kg/ Annum)			
2012-13	9.13			
2013-14	9.66			
2014-15	11.06			
2015-16	12.24			
2016-17(P)	13.49			