Odisha is one of the important maritime states of India having excellent scope for fisheries development. The state has 6.85 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 utilize these ample resources, State Government has taken up a mission for doubling of inland fish production and increasing the present export to Rs.20,000 Crores.

In order to achieve this, the State Government on its own has initiated various activities for increasing the fish production of the State as well as for the welfare of fishermen along with the implementation of various Centrally Sponsored Schemes and Central Plan. Odisha has witnessed tremendous growth in fish production during the last 5years. Fish production has steeply increased with 11.87% CAGR. The per-capita fish consumption in the State has increased from 7.71 kg in 2000 to 16.24 kg in 2019-20. Odisha has been effectively utilizing the funds allocated under the CSS-Blue Revolution Scheme.

STRATEGIES ADOPTED BY ODISHA FOR ENHANCED PRODUCTION:

The Fisheries Department, Odisha strictly enforced uniform ban and turtle ban as conservation measures in the marine sector as per the directives given by the DoF, GOI. This helped in effective management of fisheries resources and conservation of Olive Ridley breeding ground in Gahirmatha Marine Sanctuary and Rushikulya & Devi river mouth. The State also imposed fishing ban in reservoirs to allow fish breeding. Apart from this, it has also imposed ban on catching Indian Major Carp below 250 mm, use of nets below 100 mm and use of destructive fishing methods. There is a strict ban on cultivation of exotic fish species like Clarias gariepinus (African catfish) in inland waters.

For marketing of fish produce, the State has established hygienic fish vending kiosks under the brand name “Chilika Fresh”, constructed hygienic dry fish markets, provided fish transportation vehicles and also promoted mobile canteen vans under brand name ‘Fish on Wheels’ serving varieties of “ready to eat seafood cuisines”.

The department has taken up Amur Common Carp, GIFT strain of Tilapia, mola carplet (Amblyparyngodon mola, a small indigenous fish species), Pangasius as important diversification species in freshwater aquaculture. Through these farming practices the fish productivity can be doubled by fast growth and high stocking densities with same farming efforts and infrastructure facilities.

The department has prepared “Road Map and Action Plan” to Increase Seafood Exports from the State in collaboration with NITTE University, Mangalore. The plan is being implemented by the department.
IMPLEMENTATION OF CENTRAL AND STATE SPONSORED SCHEMES IN THE STATE:

The department under various central and State sponsored schemes, has provided infrastructure and other benefits to fish farmers. It has provided fish transport vehicles, fibre reinforced plastic boats, inland fishing boats & nets to the fishermen and developed fish landing sheds under "Blue Revolution Scheme. Provided insulated vans under the state plan scheme of "Promotion of Reservoir Fisheries" and registered majority of its fishing vessels under the Marine Capture Fisheries scheme.

The fisheries department collaborated with 3 line departments envisaging a great opportunity to produce fish in the Gram Panchayat tanks by the Women Self Help Groups (WSHGs). To provide them additional income opportunities and ensure social and gender equity and their empowerment, the state government has brought out a long term leasing policy for scientific farming in 62,000 unused Gram Panchayat tanks.

To meet the local market demand, horizontal expansion and scientific fish farming methods are being promoted for sustainable fish production in technical collaboration with WorldFish. The Department has envisaged use of 138 major reservoirs for optimal fish production by stocking advanced fingerlings and by adopting advanced fish farming technologies such as cage culture and pen culture in collaboration with WorldFish and ICAR-CIFRI.

INTERVENTIONS FOR ENHANCED PRODUCTION:

The Fisheries Department of Odisha has taken up several initiatives in the last 3 years for enhancing fish seed production. It has established 24 fin fish hatcheries with production capacity of 1465.11 crore spawn and fry and 8 shrimp hatcheries with the production capacity of 629.44 crore fry.

The State has constructed fish/shrimp seed rearing units in 200 hectares with production capacity of 80 crores fry and also constructed captive fish seed rearing ponds in 36 hectares with production capacity of 1.30 crore fingerlings. For the GIFT tilapia mono-sex seed production, the State has constructed one production unit with the production capacity of 4 lakh fry.

For increasing fish/shrimp production, the State has constructed tanks and rearing ponds in 2,564.36 hectares, 4 Re-Circulatory Aquaculture System/Bio floc systems and developed 10 open ponds. 22.60 lakh tonnes of table fish was produced in the total water spread area of 11.02 lakh hectares (Inland and Brackish water) in the districts during the last 3 years.
**WELFARE & EMPLOYMENT GENERATION INITIATIVES:**

The State has implemented a number of State and central schemes during the last 3 years for employment generation through fisheries. The department has provided employment opportunities through Matsya Pokhari Yojana, provided input assistance to Women SHGs for pisciculture in Gram Panchayat tanks and provided additional income and employment through cage culture program to Primary Fisheries Cooperative Societies. The State has also created employment for the youth in fisheries related activities like fish seed production, development of brackish water fisheries, motorization of traditional crafts, etc.

Under various special schemes, the State has insured 11,50,000 fishermen under Pradhan Mantri Suraksha Bima Yojana (PMSBY), provided savings cum relief fund to 19,664 fishermen, Kisan Credit Card to 22,709 fishers and ban period relief measures to 15,000 fishers.

**ADOPTION OF NEW TECHNOLOGIES:**

For the successful intensive production of Indian Major Carps in large circular cages in Hirakud Reservoir in collaboration with World Fish and ICAR–CIFRI, the Government of Odisha has developed guidelines for taking up cage culture in reservoirs by Primary Fishermen Cooperative Societies (PFCS), Individuals, Entrepreneurs, companies. The State has also promoted GIFT strain of Tilapia in collaboration with WorldFish, which was adopted by 139 farmers and a Government fish seed farm.

The State has promoted Carp Mola Polyculture in collaboration with WorldFish. WSHGs and individuals having backyard tanks are taking up this farming system, since there are both economic and nutritional benefits. It has also installed 90 Pen nurseries in the reservoirs for augmentation of reservoir production in collaboration with WorldFish and ICAR-CIFRI. Also, GIS maps are being developed for all 138 reservoirs in the State in collaboration with ICAR-CIFRI. The State is encouraging early seed production and making them available to farmers by stocking them in department hatcheries.

**INSTITUTION AND CAPACITY BUILDING PROGRAMMES:**

The department has organised several trainings and orientation programmes as listed below:

- Organized 1,52,877 fishermen into fishers cooperative societies and promoted 46 fisherwomen cooperative Societies.
- 243 Fishermen & Fisherwomen Cooperative Societies were audited until 2019-20.
- Organised 87 training and awareness programmes in the last 4 years including exposure visits.
- Developed the Information, Education and Communication (IEC) material on different subjects.
- 3,008 fishermen & fisherwomen, project staff, line department staff, elected representatives have undergone capacity building training in the last 4 years.
- Created awareness on usage of Potential Fishing Zones dissemination device, sea safety measures and disaster management measures to 20,676 fishers.
IMPACT OF THE NEW SCHEMES AND TECHNOLOGIES:

Through the intervention of new technologies and the implementation of various State and Central government schemes, the State has reported 19.32% increase in the water spread area for fish culture and 11.87% increase in fish production. The sector has also contributed to State GDP by 2.19%. It has created employment opportunities for the youth in the fisheries sector.

BEST FISHERIES PRACTICES IN THE DISTRICT:

- Odisha has received the ‘Agriculture Leadership Award’ (2019) for fish production. The award instituted by the Agriculture Today Group was conferred to Odisha for being the best State in the country in fish production.
- Introduced new technology in fisheries sector, i.e. Bio-Floc system of Pisciculture, Poly lining system in Shrimp culture, circular cage in Reservoir for IMC production, early breeding of IMC in Government Farm, etc.
- Tagging of Gram Panchayat Tanks with WSHGs has not only augmented fish production in the State, but also improved the socio-economic conditions for rural women.
- Coastal area mapping has been completed through Odisha Space Applications Centre (ORSAC) to promote brackish water aquaculture within the Coastal Regulation Zones (CRZ) and check unauthorised/illegal farming outside permissible CRZ.
- Road connecting Gudupahi cluster of Balasore district was laid where more than 500 beneficiaries practicing brackish water aquaculture got benefitted.
- Under Group Accident Insurance Scheme, every year, more than 11 lakh fishermen were covered over the last 3 years. In the entire country, the highest number of beneficiaries were covered from Odisha.
- 4 lakh SIM cards have been provided to fishers & fish farmers to empower them through Mobile Advisory Services with financial assistance. Every day 5 voice messages related to the weather, potential fishing zones, govt programmes, etc are disseminated to all the beneficiaries.

Odisha State bagged the “Best Marine State” award on World Fisheries Day-2020 from the Ministry of Fisheries, Animal Husbandry & Dairying