



## World Fisheries Day 2021 Best Marine State in India – Andhra Pradesh



Andhra Pradesh is one of the maritime states of India, endowed with second longest coastline of 974 Kms, 33,227 Sq. Kms of continental shelf area, 8 lakh hectares of inland water bodies, 2.12 lakh hectares of aquaculture area, river and canals stretching over 18.24 lakh hectares and mangrove area of 352 Sq Kms. The State has all required supporting infrastructure like State-of-the-art facilities for shipment at 3 ports at Visakhapatnam, Krishnapatnam & Kakinada,

92 processing plants with about 5,000 MT processing capacity / Day, 107 cold storages with 2.00 lakh MT storage capacity, 389 shrimp hatcheries with more than 60,000 million seed production capacity, 36 feed plants with 10,000 MT production capacity / Day and 225 aquaculture labs with all aqua input testing facilities. The fisheries sector's contribution to State GVA is 8.24 % and 27.91 % to agricultural GVA and providing livelihood opportunities to 20.15 lakh populations either directly or indirectly in the State.

The state is leading in the country in both fish and shrimp production with 46.23 Lakh MT and more than 30% share (2020-21). Despite of COVID-19 pandemic, the State continued its leading position in culture shrimp production during 2019-20 and 2020-21 and produced 6.40 lakh MT against the country production of 8.52 Lakh MT and had a share of 75.1% during 2020-21(MPEDA). The CAGR of culture shrimp of the State is 12.55% for the last 7 years against the country CAGR of 10.09%. The state is the largest fish supplier in the country and supplying about 20 lakh MT annually to other states such as North Eastern states, Bihar, West Bengal, Orissa, Uttar Pradesh, and Punjab etc. The Government of Andhra Pradesh has identified the Fisheries sector as one of the growth engines for socio-economic development of the state.



### Strategies adopted for promotion of fisheries sector

State is strictly implementing fishing closed seasons in reservoirs and rivers from 1<sup>st</sup> July to 31<sup>st</sup> August and Ban period on marine fishing from April 15<sup>th</sup> to June 14<sup>th</sup> during every year for conservation and sustainability of the natural fishery resources.



African catfish culture was banned with a concern to conserve the native species and protect the biodiversity. Promoting aquaculture with diversified species like GIFT Tilapia, Pangasius, Mud crab, Seabass, and Indian Pompano. Declared Aquaculture Zones in all 9 coastal districts and notified potential area for expansion of the aquaculture. Support for Ease of Doing Business through Online services for issuance of Licenses/ Endorsements for aquaculture farms and aquaculture business operations within prescribed time limit. Providing power tariff concession and supplying quality power to aquaculture farms for 24x7 to facilitate the aquaculture farmers to reduce their production cost and produce healthy crops. Strictly banned usage of antibiotics in aquaculture and enforcing effectively through District Level Taskforce teams. Regularising the aquaculture activities under AP State Aquaculture Development Authority (APSADA), Act, 2020 and ensuring production and supply of quality aquaculture inputs like seed, feed, and feed supplements as per legal provisions made under AP Fish Feed (Quality Control) Act, 2020 and AP Aquaculture Seed (Quality Control) Act, 2020. *Promoting domestic marketing through Hub-Spoke model across the state to enhance per capita fish consumption under the brand of “Fish Andhra- Fit Andhra”.*



### Welfare Programmes:



State in coordination with funding agencies of Govt. of India and External Aided Projects, NABARD etc., has been implementing various welfare schemes for the benefit of fishers, farmers and other stakeholders which mainly includes “Rebate on Diesel” for marine fishing boats, relief to coastal fishers during ban on marine fishing, revolving fund

assistance to fisherwomen cooperatives, ex-gratia to deceased fishermen families, power tariff to aquaculture farmers, fishing and aquaculture inputs under PMMSY and other GOI schemes, issuance of Kisan Credit Card (KCC), assistance to fishers and entrepreneurs for establishment of marketing outlets etc. stocking of quality fish seed in public water bodies, etc.,





## Infrastructure Projects:

To address the critical gaps, the State is focusing on establishment of necessary infrastructure in both, capture fisheries and aquaculture sector which mainly includes:

- 1) Establishment of 2 new fishing harbours, one at Juvvaladinne of Nellore District, another at Uppada of East Godavari District and Upgradation of existing 2 fishing harbours at Machilipatnam and Nizampatnam under Phase-I with total project cost of Rs. 1510 Crore. In Phase-II another five new Fishing harbours are planned for establishment at Budagatlapalem (Srikakulam), Pudimadaka (Visakhapatnam), Biyyaputippa (West Godavari), Vodarevu (Prakasam) Kothapatnam (Prakasam) with a project cost of Rs. 2000 crore with all facilities on par with international standards with funding support from FIDF, PMMSY, NABARD and State funds.
- 2) Establishment of Aquatic Quarantine Facility (AQF) Centre for *L. vannamei* in Visakhapatnam District to facilitate shrimp hatchery operators to quarantine their imported brood stock and hatcheries for seabass and mud crab in Guntur District with a total project cost of Rs. 75 Crore for production and supply of quality seed for promotion of alternate species culture with funding support from RKVY, State funds.
- 3) AP has well established aquaculture labs for testing, besides existing 225 labs, the Government is establishing integrated aquaculture labs at 35 locations in 9 coastal districts with all aquaculture input testing facilities with an estimated project cost of Rs. 50 Crore with funding support from RKVY, NABARD and State funds.
- 4) Establishing 70 Aqua hubs and about 14,000 units of retail outlets for the promotion of domestic marketing under the brand of "Fish Andhra- Fit Andhra" with a total project cost of Rs. 558 Crore across the state with funding support from PMMSY and State funds



## Interventions for Enhancing Fish/Shrimp Seed Production

The Department has prescribed quality standards of aquaculture seed of all commercial species and enforcing as per the provisions made under AP Aquaculture Seed (Quality Control) (Amendment) Act, 2020.

Extending seed quality testing facilities and disease diagnosis facilities through Departmental Regional and State Level Aqua labs across all the coastal districts.





Promoting for establishment of captive seed nurseries within the premises of large public water bodies for fish seed rearing and stocking through Inland Fishermen Cooperative Societies. So far assisted for 27 units of captive fish seed rearing nurseries with 247.4 million seed production capacity and 1268 units of Fish/Shrimp Seed Farms/Rearing units with 796.10 million seed production (including freshwater and brackish water).

Promoting for establishment of hatcheries for alternate species for promotion of diversification in aquaculture. So far assisted for 26 units of finfish/shrimp hatcheries with 670.00 million seed production capacity.

Extending support for establishment of nursery ponds for rearing of Post Larvae to Juveniles in shrimp farms and for establishment of Biofloc units for both brackish water and freshwater aquaculture units for producing healthy shrimp/ fish seed.

### **Implementation of Central & State Schemes/ Programmes for Fisheries Development**

The Department under various Central and State sponsored schemes like Blue Revolution, PMMSY, RKVY, RIDF, FDS etc., has been providing incentives to fishers, aqua farmers and other stakeholders which mainly includes subsidy on diesel, sea safety and navigational equipments for marine fishing crafts, relief to coastal fishermen during ban on marine fishing, fishing implements to both inland and marine fishers, stocking of advanced fish seed in public water bodies, subsidy for establishment of hatcheries, advanced aquaculture units (Biofloc, RAS, Captive seed nurseries), aqua labs, ornamental fish units, marine cage culture units, seaweed farming, retail fish outlets, mobile fish vending units, & etc., to support for the development of fisheries and aquaculture sectors and make the activities viable and sustainable.

### **Convergence & Collaborations**

the Department has convergence with MGNREGS, NABARD, FIDF, NFDB, PMMSY, External Aided Projects (APIIATP, JICA), Ministry of Shipping (Sagarmala) for grounding the various units such as captive seed rearing ponds in public water bodies, mariculture units, fish drying platforms, approach roads. Establishment of marine infrastructure such as fishing harbours, fish landing centres, floating jetties, fish retail outlets, mobile fish vending units etc., State also collaborated with ICAR institutions (CIFT, CMFRI, CIFA, CIFRI), MPEDA, RGCA, NaCSA, CAA, NBFGR, Ministry of Shipping etc., for technology transfer and to promote sustainable practices in fisheries and aquaculture sectors.

### **Policy Measures for the Development of the Fisheries Sector in the State**

AP Government has been enforcing several Acts and Policies for the sustainability of fisheries and aquaculture sector in the State which includes:

- AP State Aquaculture Development Authority (APSADA) Act, 2020, for regulation, monitoring, and development of the aquaculture sector in the State through AP State Aquaculture Development Authority under the Chairmanship of Hon'ble Chief Minister, Govt. of AP



- A.P. Feed (Quality Control) Act, 2020 to ensure production and supply of quality and antibiotic free aquaculture feeds on par with BIS/FAO Standards
- A.P. Aquaculture Seed (Quality Control) (Amendment) Act, 2020 for production and supply of quality and antibiotic free aquaculture seed to aqua farmers in the State
- Ensuring Coastal security through Registration of marine fishing vessels under APMFR Act, 1994 & MS Act, 1958, implementation of colour code and issuance of QR based Aadhaar cards to coastal fishers
- Ban on usage of antibiotics in aquaculture through District Level Task force teams and regular inspection of hatcheries, aqua farms, aqua input shops for collection of samples for testing for antibiotics with the support of MPEDA (National Residue Control Programme (NRCP), EIA (RASFF) and CAA.
- Ban on usage of poultry litter, poultry offal and slaughter wastages in aquaculture for curtailing the transmission of antibiotics and to regulate the environmental pollution.
- Aquaculture Zonation for regulating the unauthorised conversion of agriculture lands to aquaculture and promotion of area expansion in potential areas which are saline, low productive, barren, inundated land which are not fit for the agriculture.
- Extension of services through Rhythu Bharosa Kendra's (RBK's) to fishers and aqua farmers at village level through Village Fisheries Assistants (VFA's) which includes



- ✓ Facilitating for issuance of Kishan Credit Card (KCC) to fishers and farmers
- ✓ E-crop booking: Updating aquaculture area with crop details for facilitating the farmers to get remunerative price for their aqua produce



- ✓ Technical support to fishers and farmers at field level through Matsya Sagu Badi (MSB) programmes
- ✓ Supply of quality and certified inputs (fish feeds and feed supplements) to aqua farmers
- ✓ Extending aquaculture input testing facilities to farmers through integrated aquaculture labs.



## Institution & Capacity Building

The Department is giving more thrust to build up capacities of fishers & farmers and to strengthen the community-based organisations & institutions such as Fishermen Cooperative Societies, FFPOs, Aquaculture Societies and Aquaculture Farmer Societies with the support of Central and State institutions

To promote the Human Resource Development (HRD) in fisheries and aquaculture sectors, the Department is operating State level training institute i.e., State Institute of Fisheries Technology (SIFT), Kakinada and Regional training institutes at Badampudi (West Godavari), Machilipatnam (Krishna) and Kurnool

In addition to residential trainings, the Department in coordination with ICAR, KVK, CAA, MPEDA, NaCSA, RGCA, etc., has been conducting field level training programmes

During the last 4 years, the Department conducted 2,237 trainings including awareness programmes, exposure visits and developed Information Education Communication (IEC) material like brochures, pamphlets, training manuals, audio – visual aids, etc.

2.15 lakh Fishermen were organized into Fishermen Cooperatives Societies, 0.33 lakh fisherwomen organized into Fisherwomen Cooperative Societies, about 650 aquaculture societies were formed with the support of NaCSA in Coastal Districts, 437 Fishermen Cooperative Societies, 1771 Inland Fishermen Cooperative Societies, 19 under Domestic Marketing Cooperatives and 1 Fish Farmers Producers Organizations (FFPO's) were organised in the State.



## Innovations & New Technology Adoption– Pilot Projects

1. Promotion of cage culture of GIFT Tilapia (Genetically Improved Formed Tilapia) in reservoirs by the Department and “Fish-in” Company,
2. Establishment of Nursery ponds in shrimp culture ponds with central drainage system and adopting high bio-security measures
3. Establishment of Biofloc units for both freshwater and brackish water farms
4. Promotion for establishment of RAS units for GIFT Tilapia and Pangassius
5. E-crop booking with RS Numbers and aquaculture crop details

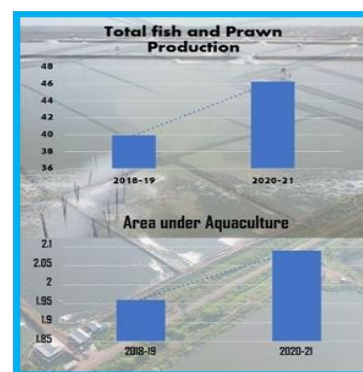




6. Monitoring the progress of various activities such as issuance of KCC, conducting of training programmes under MSB, issuance of Licenses and Endorsements for aquaculture farms and aquaculture business operations under APSADA Act, 2020. Analysed samples in Government Aqua labs through digital platform on Real Time Basis ([www.ematsyakar.com](http://www.ematsyakar.com))
7. Beneficiaries' selection for State and Central Govt. schemes through online process in transparent and accountable manner
8. Promotion of domestic marketing through HUB-SPOKE model with branding ("Fish Andhra- Fit Andhra") and with fresh, live, frozen, and value-added products (Ready to eat & Ready to cook).

### Key Impacts

Total fish and prawn production has been increased from 39.91 LMT (2018-19) to 46.23 LMT (2020-21) with increase of 16% fish production.



1. Area under aquaculture increased from 1.96 lakh ha (2018-19) to 2.09 lakh ha (2020-21) with 6% increase.
2. Identified and notified 48,778 hectares of potential area for expansion of Aquaculture under Aquaculture Zonation (Freshwater -20,744 ha, brackish water - 28031 ha).
3. Fisheries sector Contribution of GSDP is Rs.77588 Crore out of total GSDP of the State of Rs. 9,86,611 Crore, which is 7.86%.
4. Fisheries sector contribution to State GVA is 8.24 % and 27.91 % to agricultural GVA
5. The livelihood opportunities to rural folk in fisheries and aquaculture sector have been increased from 16.46 lakhs (2019-20) to 20.15 lakhs (2020-21), with increase of 22.4%.

### Specific achievements& Awards & Recognition

- 1) Established State Programme Unit (SPU) at H. O & 10 District Programme Units (DPUs) in 9 Coastal Districts, and one in Inland District i.e., Kurnool
- 2) Deployed 738 Village Fisheries Assistants and 308 Sagar Mitra's, to provide technical support to the fishers and aqua farmers at village level
- 3) Declared Aquaculture Zones for the first time in the country and notified about 0.49 lakh hectares of potential area in all 9 coastal districts for expansion of the aquaculture sector.





- 4) In the country, State stands first in total fish and prawn production with 46.23 LMT during 2020-21.
- 5) Highest extent of area brought under aquaculture (2.09 lakh hectares) and State stands as an Aqua hub of India.
- 6) State continued its leading position in seafood exports with 36% share in terms of value and 24% in terms of quantity during 2020-21
- 7) AP is the largest producer of the cultured shrimp with more than 75% share in the country
- 8) All aquaculture activities and business operation were brought under the purview of AP State Aquaculture Development Authority for regular monitoring, regulation, and development of the aquaculture sector
- 9) Ensuring the quality of aquaculture inputs like seed, feed and feed supplement through Seed and Feed Quality Control Acts for the sustainability of the aquaculture sector.



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