

## **GUIDELINES FOR STATE SECTOR UMBRELLA SCHEME- "MMKY PROMOTION OF RESERVOIR FISHERY PRODUCTION" FOR THE FY 2023-24**

### **1. Introduction:**

Odisha State is endowed with immense fresh water resources like tanks, rivers, reservoirs and canals etc has tremendous scope for augmenting fish production for growing fish-eating population also generating rural employment. Reservoirs can contribute significantly to the State fish production if managed scientifically and by introducing conservation measures. The State has 2.00 lakh Ha. of reservoir fisheries resources out of which fishing rights of 1.41 lakh Ha. is vested with Fisheries Department under Odisha Reservoir Fishery Policy 2012 managed by Primary Fishermen Co-operative Societies/WSHGs. It is observed that fingerling stocking in the reservoir has augmented fish production and productivity and helped in uplifting economic condition of fishers.

### **Achieved Outcome of the Project:**

Outcome of fingerling stocking programme taken up under the state plan scheme promotion of reservoir fisheries production in last 5 years is given below:

<b>Year</b>	<b>Fish Production in MT</b>	<b>Annual Growth Rate</b>	<b>Productivity in Kg/Ha/Yr</b>
2018-19	37388	10.00	186.94
2019-20	41725	11.60	208.625
2020-21	45147	8.20	225.735
2021-22	66485	32.09	332.425
2022-23	78195	17.61	390.970

As revealed from the above table, the reservoir fish production and productivity has increased significantly due to stocking of fingerling in the reservoirs of the state.

### **2. Objectives:**

- To increase the fish production of reservoirs through stocking of advanced fingerling.
- To ensure additional income generation of active PFCS/ SHG fishermen from reservoir fisheries.
- To uplift socio-economic condition of reservoir-based fishermen.
- To enhance the productivity of the reservoir up to 410 kg/ha /year

### **3. Target Beneficiaries:**

- PFCS/ SHG who have taken lease of reservoirs under State Reservoir Fishery Policy-2012.
- Lessee PFCS/ SHG should have deposited all current/ outstanding lease value before stocking of fingerling in the reservoirs.

### **4. Quality and Quantity of fingerling to be stocked:**

- IMC fingerlings of size above 80 mm and above shall be stocked @1000 nos./ Ha. in small reservoirs below 1000 Ha., @ 500 nos./ Ha. in medium reservoirs below 5000 Ha. and @ 250 nos./ Ha. in large reservoirs above 5000 Ha as per prescribed stocking density . The quantity of stocking may be changed as per availability of fund.
- Species composition Catla: Rohu: Mrigal: 4:3:3 along with quality and quantity of fingerling as per reservoir stocking plan shall be maintained during stocking for better fish yield from reservoirs. Stocking of fresh water prawn, Scampi seed/ juvenile in reservoirs may be promoted in feasible reservoir. However, the cost towards prawn seed should not exceed 20% fund allocated to that reservoir.

- iii. Fingerling will be stocked in reservoirs as per stocking action plan prepared by Directorate.
- iv. Fingerlings may also be raised by PFCS members/ SHGs in captive nurseries/ Pen/ Cage/ by stocking spawn/ fry under the direct supervision of DFOs/ AFOs/ ICS (Fy) near the reservoir site.

**5. Procurement of fingerling:**

- I. OPDC shall be given responsibilities to stock required quantity of fingerlings in selected reservoirs of state as per action plan.
- II. Funds for stocking of fingerlings shall be placed with OPDC for implementation of stocking programme.
- III. The fingerling shall be procured from the nearby Govt. / OPDC fish farm. The GM OPDC shall chalk-out plan for lifting fingerling from Government/ OPDC farms as per actual availability. In case there is shortage of certain quantity of advanced fingerling from these above sources (Govt./ OPDC farms) transparent procedures shall be adopted for lifting fingerling from private hatcheries / seed growers covered under early breeding programmes since 21-22 of the state during September- November 2023.
- IV. The Zonal DDFs shall finalise the source of lifting of fingerlings and intimate the same to Directorate and OPDC.
- V. The OPDC shall provide transportation arrangements for carrying the fish seed by inviting tenders in transparent manner quoting the rate per KM for a particular type of transport vehicle.
- VI. The maximum admissible cost of advanced IMC fingerling size 80 – 100 mm shall be @Rs.1.50/pc {fingerling (Rs.0.94), packing, transport, documentation and other charges (Rs.0.56/Pc)}. However actual amount spent shall be within the approved cost.
- VII. The stocking to be made in presence of PRI members,
- VIII. Payment shall be made to the farm only after stocking of fingerling in live condition in the reservoir.

**6. Pre-stocking management:**

- I. One day awareness camp for PFCS/SHG members involving PRI members/ block administration etc. will be organised at district level or at the reservoir site on stocking and post stocking reservoir management.
- II. The PFCS members as well as local fishers to be aware about observation of no fishing just after stocking by zero net /small size net to allow the fish seed to survive and grow for better production/ livelihood of local fishers.

**7. Stocking Procedure:**

- i. Fingerling of recommended quality and quantity shall be stocked in reservoir wise action plan within the allotted amount.
- ii. Block level AFO/JFTA and ICS (Fy) will ensure the implementation of the scheme at the field level.
- iii. Stocking may be done in the intermediate zone of the reservoir away from waste weir and crest gates preferable in cool hours
- iv. Stocking should be done in presence of PFCS/ SHG members like the President/ Secretary/ AFO/ICS/ JFTA/ SFTA/PRI members/ representation of block administration if possible representation district administration.
- v. Geo tagged photographs to be kept as proof of stocking with certification of stocking from 2 representative (preferably president & secretary of PFCS/SHG /AFO/ /ICS (if posted) seed supplier at minimum requirement.
- vi. Stocking schedule should be intimated in advance to the Directorate of Fisheries for effective monitoring.

*Ch*



- vii. Proper sampling method shall be followed at the time of releasing fingerling in the reservoirs.
- viii. The date wise stocking of fingerlings with quantity in nos. shall be recorded in the register maintained by the PFCS/ SHG with signature of the PFCS/ SHG members and Fisheries officer attending the stocking programme.
- ix. Stocking is permissible only during day time with cool atmospheric temperature avoiding peak hot climate for better survival of stocked seed and complete darkness for transparency.

**8. Conservation Measures:**

- i. As per provision in the Odisha State Reservoir Fishery Policy-2012, DFOs shall ensure that Gill Nets of mesh-size of 100 mm and above only need to be permitted for fishing.
- ii. Fishermen may be enlightened from time to time about the conservation measures to support their livelihood.
- iii. PFCS/ SHG will have to give an undertaking for not catching fish of size below 500gm weight and observe fishing ban during breeding season i.e. 15<sup>th</sup> June to 31<sup>st</sup> July in the reservoirs where there is possibility of auto breeding.

**9. Outcome of the Project:**

**Proposed Fish Production during 2023-24:**

Item	Last year fish production in MT	Anticipated fish production during 2023-24 in MT
<i>Fish Production from reservoirs</i>	78195	82600

**Expected Income Generation from fingerling stocking programme of Reservoirs in 2023-24**

Item	Expected additional fish production	Expected additional income @ Rs. 150.00/Kg
<i>Fish Production</i>	4405	Rs. 66.07 Cr

**10. Monitoring & Supervision:**

- i. The zonal Dy. Director of Fisheries shall be the Nodal officer at zonal level and the Dy. Director of Fisheries (Reservoir), Directorate shall monitor and coordination of the stocking programme at state level.
- ii. The AFO and the DFO shall monitor the scheme at block and District level respectively.

*Ch*