**Baseline study for Fisheries Development in Telangana state**

**ANN – 5.9**

Fish seed rearing practices

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| * **Fish seed rearing** |  |
| Species | Mostly mixed species rearing of IMC  **Gap:** identification of species at fry level may be difficult  **Suggestions:** species specific rearing |
| Rearing type | Rearing in earthen ponds/ cement tanks; Source of water: bore well/ canal fed; rearing system : spawn to fry, fry to fingerlings, spawn to fingerlings, stunted fingerlings/ yearlings  **Gap:** Non adoption of two stage rearing-Spawn to fry in nursery and fry to fingerlings in rearing tanks  **Suggestions:** Thinning out at fry stage and rearing them separately to fingerlings with adoption of BMP will result in better performance (survival and growth) |
| Pre- stocking practices | **Govt. farm**: Drying of ponds, lime application, manure application  **Private owned farms**: Use more inputs like cow urine, jaggery etc., inorganic fertilizers to promote sustained availability of plankton  **Gaps:** Practice not based on Soil and water testing or based on recommended technology package  **Suggestions:** Need intensive training of seed growers on improved methods of seed rearing with special focus on scientific nursery and rearing practices |
| Stocking practice | **Govt. farm**: Spawn stocked at 5 million/ha and **Private**: 8 million/ha based on target size of seed planned /in demand, rearing duration is varied  **Gaps:** More based on empirical experience; seed varieties mainly based on availability and seed demand  **Suggestions:** species specific rearing to reduce stress and mortality while segregation of seed and easy handling of seed at fry stage |
| Post stocking practices | **Govt. seed farms**: normally follow feeding with conventional feed viz., rice bran and oil cake;  **private farms**: apart from conventional feed, use of additional inputs viz., soil probiotics, vit. & mineral supplements, water conditioners and DO enhancers etc in support better seed survival and growth  **Suggestions:** Inputs used must be based on scientific recommendations on proven effect to minimize factor cost of production and also avoid use of unwanted inputs |
| Survival | **Govt. farms:** survival of spawn to fry around 40%; fry to fingerlings (35-40mm):50%; and spawn to fingerlings (35-40mm) : 20-25%  **Private farms:** survival of spawn to fry around 60%; fry to fingerlings (35-40 mm) 70-80% and spawn to fingerlings (35-40 mm) around 30-40%  **Gaps:** Low survival in Govt. farms attributed to lack of timely management |
| General observations | Use of inputs - manures and fertilizers not in accordance to soil test  Water quality and plankton are not monitored before using water quality enhancing inputs and growth promoters  No organized seed supply chain and seed hubs  Inadequate knowledge on latest developments |
| *In situ* fish seed rearing | At present, there is no non conventional seed rearing activity like seed rearing in pens, cages, peripheral tanks adjacent to reservoirs/tanks in the state although there is feasibility for such activities in short seasonal tanks where water is retained only for 3-4 months and *in situ* rearing in perennial tanks (in pools separated from main water body) and pen/cage rearing in some of the reservoirs. |