

## Technology No. 11

### CIFE-ECO HATCHERY

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**Division:** Aquaculture

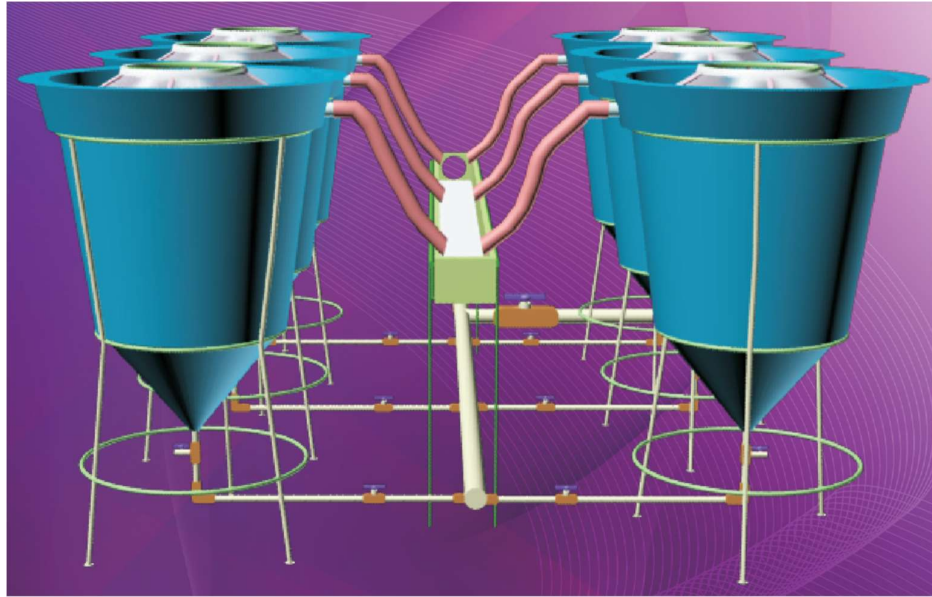
**Technical details:**

The need for development of hatcheries was emphasized so as to achieve maximum production of fish seed from the huge quantities of eggs produced by the hypophysation technique. The present prevalent practice for incubation and hatching of carp eggs is to use the circular hatchery but due to horizontal flow of water in the hatchery, sometimes, eggs do not get separated resulting into low survival rates of spawns. A hatchery unit was developed which includes 6 FRP Jars that have conical shape are connected by inlet and outlet pipes with control valves. Water enters the jars from the bottom and comes out through an outlet provided at the top maintaining vertical flow of water in the jar, which bobs up the eggs continuously to avoid settlement of eggs at the bottom; and finally leads to hatching of eggs. In order to prevent the escaping of eggs and hatchlings/ spawn from the jar, dispose off the dissolved waste and free flow of water, MS flat framed cone shaped skeleton fitted with fine cloth mesh (40 micron) fits in the groove on the inner wall of the jar at a depth of 44 cm from the top of the Jar.

**Salient features of the technology**

1. Low cost of establishment
2. Maintenance free long life due to FRP material
3. Low water requirement compared to circular concrete hatchery
4. Less man power requirement and negligible recurring expenditure
5. Ease in operation due to simple technology
6. Low mortality rate of hatchings at all stages of larval life of eggs, better water quality parameters, and control unforeseen hazards
7. Low water pollution and better aeration due to running water
8. Performance of hatchery is least affected due to Sun and rain as the hatchery unit is established under roof
9. Ease in establishment due to its portability (as FRP jars are light weighted) and also ease in handling and harvesting of spawn
10. The larvae will be collected automatically into the spawnery by gravity.
11. More than 90% hatching success and survival of spawn

**Cost/ Benefit ratio:** 2 – 2.5



**Commercialized to TEEWAVE Pvt. Ltd Andhra Pradesh**

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