

ICAR-CMFRI's Stock Enhancement Initiative Boosts Black Clam Production in Vembanad Lake



A stock enhancement initiative of the ICAR-Central Marine Fisheries Research Institute, Kochi, has yielded encouraging results in regenerating the declining black clam (*Villorita cyprinoides*) resource in Vembanad Lake, with production reaching up to eight times the quantity of the stocked seed. The success of the initiative was marked by a harvest festival held on 30 September 2026 following a 12-month culture period after five tonnes of black clam seed were relayed in a one-hectare area at Vadakkumkara in Alappuzha district.

The black clam, one of the most important fishery resources of Vembanad Lake, accounts for more than 80% of India's total clam resources and supports the livelihoods of more than 6,000 families directly, with nearly twice that number dependent on allied activities associated with the clam fishery.

The initiative assumes significance against the backdrop of a sustained decline in black clam resources in Vembanad Lake due to intensive exploitation and changing environmental conditions. According to ICAR-CMFRI estimates, black clam catches in the region declined from a peak of 75,592 tonnes in 2006 to 45,601 tonnes in 2024, registering a decline of nearly 40%.



Under the project, five tonnes of black clam seed were stocked in a one-hectare area in September 2025. After 12 months of culture, the clams recorded good growth and a survival rate of around 80–90%. The harvested stock was estimated at about seven to eight times the quantity of the initially stocked seed, with production from the one-hectare area expected to reach around 40 tonnes. The results demonstrate the potential of planned stock enhancement in strengthening the clam resource base.

The project was implemented with 100% subsidy for Scheduled Caste communities under the Scheduled Caste Sub Plan (SCSP), with technical guidance from ICAR-CMFRI and in collaboration with the Thaikkattussery Black Clam Co-operative Society. Inaugurating the harvest, Dr Grinson George, Director, ICAR-CMFRI, said that the stock enhancement initiative demonstrates the potential of scientific regeneration to replenish declining clam resources while providing sustained livelihood support to fishing communities.

The initiative is also expected to contribute to the ecological functioning and productivity of the estuarine ecosystem, as clams play an important role as filter-feeding organisms. The relaying site was identified through scientific assessment and had no existing clam stock. Standard sampling methods and an appropriate stocking density were adopted to ensure effective stock enhancement. The successful outcome highlights the potential of science-based clam stock enhancement to support resource regeneration, ecosystem recovery and sustainable livelihoods of local fishing communities.