

Ashtamudi clam population shows signs of recovery





Following the launch of the ICAR-Central Marine Fisheries Research Institute's (CMFRI) ambitious stock enhancement programme Ashtamudi Lake one year ago, the short-neck clam (Paphia malabarica) population is showing early signs of recovery. Monitoring data confirms clear evidence of spatfall and a marginal increase in the overall standing stock. Given the resource's current spawning and crucial early growth phase, the CMFRI has recommended imposing a three-month fishery closure from December 1 to ensure maximum protection.

These positive indicators follow the release of three million hatchery-produced clam seeds from the CMFRI's Vizhinjam regional centre into the lake, a project led by Principal Scientist M. K. Anil. The stock of the clam had previously depleted significantly after the 2018 deluge and resulting environmental shifts in Ashtamudi. A parallel monitoring experiment showed a remarkably high survival rate of 80% for the ranched clams. Furthermore, these clams reached a marketable size of 34 mm in just seven months, conclusively proving that hatchery-based stock enhancement is a viable management tool for the lake's ecosystem.

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Year-round monitoring

The CMFRI's Shellfish Fisheries Division has maintained intensive, year-round monitoring of the clam beds. The recent resource-mapping survey, led by Principal Scientist Geetha Sasikumar, confirmed widespread spatfall in October, indicating successful natural recruitment. The survey also noted the smallest spat measured 2.38 mm last month and the multi-modal length distribution observed across the clam beds signifies a healthy, multi-cohort population, validating the overall resource health and recovery trajectory.

Since the spawning season began in October, the ensuing months are critical for juvenile clam survival. Therefore, the CMFRI recommended the continued enforcement of the December–February fishery closure. This measure is already supported by local fishers and is currently implemented each year by the State Fisheries department.

The institute also highlighted environmental threats, specifically unscientific sediment dredging and the widespread collection of broken shells within active spatfall areas, noting these practices can easily destroy the vulnerable seed clams before maturity. Consequently, the bar mouth region near the Neendakara bridge, already identified as a closed spot, has been strongly recommended for permanent designation as a no-take zone. The CMFRI emphasised that securing this resource is critically vital for the economic livelihood and food security of the hundreds of fishers depending upon Ashtamudi Lake.