

## **Collecting Clams at Vembanad Lake**

JANAL Team

**Summary -** Caught between the dynamics of farming and fisheries, the niche livelihood of clam collection along the lake finds ways to survive.

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Figure 1. Clams on the floor of a vanji (canoe) tied at Muhamma village quay. Image: JANAL Archives 2023.

"The main reason we are forced to make a livelihood from kakka (clams) is because there are so few fish left to meet our daily needs, and are not enough to sustain a living from fishing for Karimeen and other varieties anymore." - Ratheesh, Muhamma village.<sup>1</sup>

While black clams are native to the Vembanad Lake, fishing for clams in households of fishermen was a minor niche activity till less than a decade ago. As rice farming mechanised and coir production shrunk, unemployed workers began working as clam collectors. The annual monsoon carries silt and clay, burying clams in the southern part of the lake. Over centuries, this has created large deposits of clamshells. More than 90% of the clams collected from Vembanad Lake are black clams (Villorita cyprinoides), mainly used to manufacture cement, calcium carbide, and sand lime bricks. These clam shells also neutralise acidic soil in paddy fields and fish farms.

At Muhamma, between six in the morning and noon, one sees numerous men rowing their *vanjis* (canoes) across the width of the lake, fishing for black clams. The working day begins before dawn and

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continues till 4 pm most days. The houses of the clam collectors' families are located at a quay by the lake shore. They return to berth their canoe at the landing quays by the afternoon. These stone-lined quays are about 2 m (6–8 ft) wide and have steps so that a person can, if necessary, stand in knee-to-thigh-deep water.



Figure 2. The illustration shows how to harvest clams using a hand rake with a net and a pole attached ("kolli" or "varandi") while standing in the canoe. Image: JANAL Archives 2023.



Figure 3. Close up of rake with net showing teeth. Image: JANAL Archives 2023.

The teeth along the long edge of the metal frame of the rake are 7.5 cm (3 in) long. The 70 teeth are spaced far enough for silt and debris to go through while trapping the bottom-dwelling clam from the lake floor. The nylon mesh netting collecting the clams has holes 1.5 cm (0.5 in) wide; the pole is 5 m (16 ft) long.

Divers have observed that a rake obtains

<sup>&</sup>lt;sup>1</sup> Interview with Ratheesh, a fisherman from Muhamma by the JANAL Team

nearly all the clams in a lake floor trench and that new generations settle in the raked trenches. Silt and sediment are washed off the harvest by shaking the net with a rope and raising the clams onto a boat.

After their clam collection trip, the fishermen return to their homes and park their boats on the side of the canal. Upon arrival, the clam collectors rinse the clams again to wash out any remaining mud and carry it in baskets or a wagon to the processing site in their yards.



Figure 4. Boiling the clams to loosen the shell from meat. Image: JANAL Archives 2023.

The day's catch of black clams is boiled for about 45 minutes on a wood and dry coconut leaf fire. This cooking renders the clam meats loose from the shells, and the two can now be separated.

The cooked clams, about one pailful at a time, are lifted onto a sieve hung at hip level between trees or a wooden frame. The fishermen or women start shaking the sieve, releasing a lot of steam and, in the process, separating the clamshell from its meat. The separated meat falls between the mesh and onto a tarpaulin on the ground.



Figure 5. Shaking loose the separated shell from the meat that falls through the sieve. Image: JANAL Archives 2023.

The meat is put into plastic bags and returned to the fishermen's respective homes for sale to prospective buyers. The fishermen and their families also consume this meat. The clam shells are heaped and stored aside to be sold later to buyers from cement factories.



Figure 6. Ashokan, a clam collector from Muhamma. Image: JANAL Archives 2023.

"About ten years ago, I could collect enough clams in just 2–3 hours. Now I work the whole day to procure it," <sup>2</sup>

As many as 5,000 local people still earn

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<sup>&</sup>lt;sup>2</sup> Interview with Ashokan, a fisherman from Muhamma by the JANAL Team.

their livelihood collecting clams in the Vembanad wetland area, spread over 36,500 hectares and fed by six large rivers and seawater. However, the quality of clams has been affected over the last decade. Clam collectors believe that chemicals from reclaimed farmlands, illegally discharged effluents from tourism houseboats, and lakeside industries such as coconut husk retting have contributed to pollution and affected marine life in the lake.

To revive the clam deposit along Vembanad Lake, a relaying project was launched near Thanneermukkom Barrage. The project proposed by Ashoka Trust for Ecology and Environment (ATREE), a Bengaluru-based research group, was approved by the Fisheries Department in 2016. ATREE coordinator T.D. Jojo says the clam will be collected from the northern side of Thanneermukkom barrage and deposited in protected areas.<sup>3</sup>

By preventing entry of seawater, the Barrage reduces the salinity in the southern part of the lake to below 10 ppt. Since clams need more than 10 ppts of salinity to breed, there is a big possibility of clam deposits vanishing from this end.

"The project was introduced after the clam deposit was seen shrinking at times. The relaying project will be implemented by closely monitoring it for six months, by which time the clam will be allowed to multiply without interruption. The fall in salinity is the major factor in decreasing clam deposit". - T.D. Jojo of ATTREE, Alappuzha<sup>4</sup>.

The COVID-19 pandemic forced many people back to the village, increasing the number of fisher people dependent on

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this for livelihood. The high calcium content in their shells classifies clams as a mineral resource, regulated by the Mines and Minerals Act 1957. The collectors pay a membership fee to Clam collection societies and a royalty to the government for a harvesting licence.

## Conclusion



Figure 7. Collected Clams on a vanji at Muhamma. Image: JANAL Archives 2023.

"But most recently, during COVID-19, many people had nothing to do all day. So, everyone began going to the lake to fish to pass the time, leading to overfishing, leaving the lake barren with no fish to catch and sell in the market. Once again, the fish count is reduced, and we must rely on clam fishing as our main occupation." - Rateesh, Village Muhamma<sup>5</sup>.

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<sup>&</sup>lt;sup>3</sup> Interview with ATREE coordinator T.D. Jojo by the JANAL Team.

<sup>&</sup>lt;sup>4</sup> Interview with T.D. Jojo.

<sup>&</sup>lt;sup>5</sup> Interview with Ratheesh, a fisherman from Muhamma by the JANAL Team.

## References

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Interviews with the Villagers of Muhamma, Alappuzha by the JANAL Team

Interview with T.D. Jojo, Coordinator at ATREE by the JANAL Team

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