

Self imposed ban by local fisherfolk for the conservation of brown mussel

P. Gomathi*, M. K. Anil, B. Raju, P. M. Krishna priya, O. Salini and Geetha Sasikumar
Vizhinjam Research Centre of ICAR-Central Marine Fisheries Research Institute, Vizhinjam P. O.,
Thiruvananthapuram-695 521, Kerala

*E-mail-gomathimfsc@gmail.com

Brown mussel, *Perna indica* is one of the important bivalve resources off Thiruvananthapuram coast and mussel beds located in the Vizhinjam-Kovalam region is the main area targetted by fishers. This organized bivalve

fishery supports the livelihoods around 300 fishermen. Fishing is carried out throughout the year except during monsoon season that starts early in the morning before 6 am and landing at shore by 9 am.

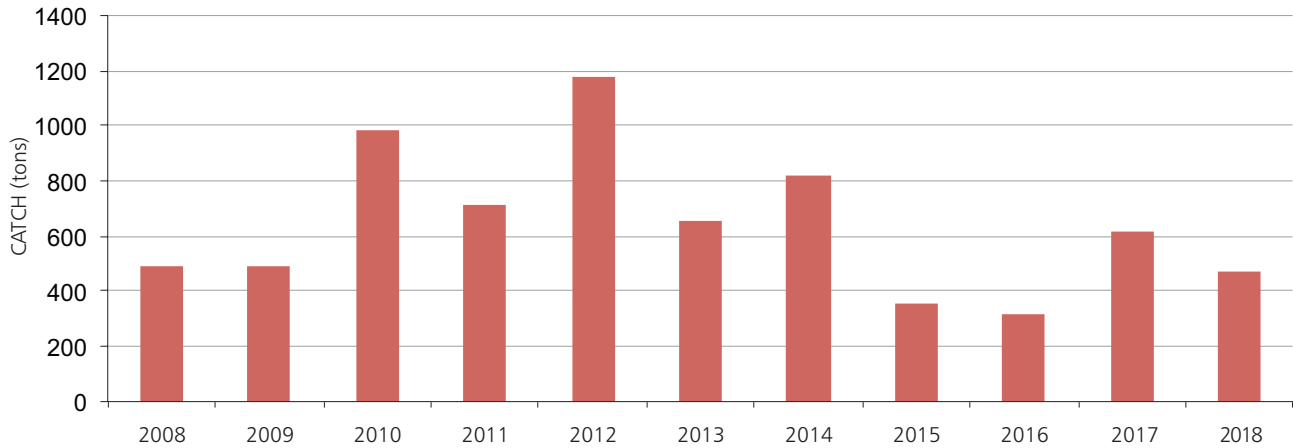


Fig.1. Brown mussel landings from 2008-2018 from mussel beds in Vizhinjam-Kovalam region

The mussel landing did not follow any definite pattern except the decadal highest landing of 1181 tons during the year 2012 and the lowest of 316 t in 2016 (Fig. 1). Because of the lower catches in recent years compared to the 2010-2014 period and higher prices fetched by larger mussels (*Muthuka chippi*) fishermen themselves came to a conclusion that collection of small mussels along with the adults during the peak fishing season could be the reason for reduction of mussel landings in last 2 to 3 years. Spawning season of brown mussel in Vizhinjam-Kovalam beds begins in May and extends till July. Since availability of small mussels coincides with the peak fishing season (September-November) highest number of small sized mussels were collected during the post-monsoon season. Spat of brown mussel of 2 mm size is observed from July onwards in the mussel beds.

Therefore the decision was taken by the fisherman group (Chippee committee) that fishermen should not harvest small size mussels in the Vizhinjam-Kovalam mussel beds and they also imposed penalties for those violating the restrictions. A poster with following rules imposed by the local body in vernacular was put up in advance in February, 2019 (Fig. 2). The following rules were put forward for all concerned fishers and stakeholders to follow.

1. Fishermen who collect small mussels should pay ₹10000 as penalty.
2. People who buy small mussels also have to pay ₹5000 as penalty.
3. Small mussels should not be harvested for consumption.
4. Canoes engaged in mussel fishing should carry the catch in the same fishing craft and catch should not be transferred to other fishing units, else they are

penalized for ₹2000

5. Fishermen who go for lobster fishing on Thursdays cannot engage in mussel fishery for one week.
6. Fishermen cannot engage in mussel fishing from any area on Friday, if they do so they will be prohibited from collecting mussels in this area.
7. Mussels collected from other areas should not be sold or kept here in the seawater at the landing centre for



Fig.2. Poster with self-imposed regulations of the mussel fishers

selling, if someone does so he/she will not be allowed to do the job here.

These rules should be followed and obeyed

Mussel committee: Reg.No.TVM/TC.1514/2014

Since it is a voluntary action by fisher folk, so far no single

violation of rules was registered and therefore no fine was collected from the fishermen. The ban on fishing small mussels increase the catches and improve the returns of the fisherfolk as the mussels are allowed to grow to larger sizes, fetching higher prices. It makes the fishery sustainable as it gives a chance for the mussel seeds to grow and spawn at least once and bring up the next generation of mussels.