Encouraging use of square mesh cod-ends in shrimp trawling

The deployment of square mesh cod-ends in shrimp trawling operations considerably reduces by-catch and improves sustainability of fishing operations, according to studies conducted by the MS Swaminathan Research Foundation (MSSRF) in association with the Central Institute of Fisheries Technology (CIFT), Cochin; Fisheries Department, Ramanathapuram; and the fishermen associations in Mandapam, Rameshwaram and Kottaipattinam fishing harbours.

Department, Ramanathapuram; and the fishermen associations in Mandapam, Rameshwaram and Kottaipattinam fishing harbours. A consultation on the 'Use of square mesh cod-end in shrimp trawling' was organised by MSSRF on October 21 at Thangachimadam Village Resource Centre, Rameswaram Island, to encourage promotion of square mesh cod-end in shrimp trawling so as to reduce by-catches. G. N. Hariharan, executive director, MSSRF, released a handbook on Voluntary Code of Practice (CoP) on Flower Shrimp Management in Palk Bay Region.

G. N. Hariharan, executive director, MSSRF, released a handbook on Voluntary Code of Practice (CoP) on Flower Shrimp Management in Palk Bay Region. The CoP on flower shrimp management was developed in Tamil to sensitise local fishers on sustainable harvesting of flower shrimp. Legal compliance and sustainable fishing practices is the base for developing the voluntary code of practice. By adopting the fishing practices described in the code, the fishermen contribute to sustainable fishing practices by securing a healthy shrimp stock, thereby minimising a degrading impact on the marine ecosystem.

contribute to sustainable fishing practices by securing a healthy shrimp stock, thereby minimising a degrading impact on the marine ecosystem. Hariharan highlighted what MSSRF is doing in natural resource management, using participatory bottom-up approach, and the need for such approaches in fisheries management that is vital for sustainable management of fishery resources in the region. The catch data from the fishers are significant for decisionmaking and additional strengthening of research. S. Velvizhi, head of MSSRF Fish for All Centre in Poompuhar, is the principal investigator of the project. She presented research outcomes of the study conducted in the Palk Bay Region by the Centre. She highlighted the square mesh cod-ends with a mesh size of 25 mm (12.5 mm bar length) as the most effective in the reduction of by-catch and the least reduction of commercial catch when compared to the control net in flower shrimp trawling. On average, the reduction in the by-catch was about 3-5 kg per hour of operation, which is incredibly significant. The fraction discarded comprises juveniles from commercially important species, which if allowed to grow can fetch nearly three/four times more than the price it fetches when released from the by-catch.



Tamilmani, scientist in-charge, CMFRI, Mandapam, and Kathavarayan, deputy director, Department of Fisheries, Ramanathapuram, spoke on the importance of sustainable fisheries and promoting square mesh codend in Rameswaram Region to protect the marine environment and securing the livelihoods of fishers in the areas. Fishermen association leaders from Mandapam and Rameshwaram, N.J. Bose, Jaheer Husain, Balasubramaniyam, Sultan, and other fishers took part in the event by sharing views and experiences in the research trails during the implementing of square mesh cod-end in trawlers and how their contribution helped to minimise by-catches in shrimp trawling. More than 100 fishers and fishermen association leaders participated in the event.

25mm square mesh cod-end suitable for flower shrimp trawling were distributed to 75 select master fishermen who voluntarily came forward to use square mesh cod-end and promote the concept in the region. They agreed to provide commercial catch data after using square mesh cod-end for further analysis and decision-making, a new milestone in the journey of research that involves fishers in participatory research, and in collecting commercial data for decision-making.