

## A GOOD CATCH

## A Gopalakrishnan Director &

## K Sunil Mohamed

Principal Scientist and Head, Molluscan Fisheries Division, Central Marine Fisheries Research Institute, Kochi

he Ashtamudi estuary, covering an area of 61.4 sq km, is the second largest wetland ecosystem in Kerala. Paphia malabarica, the short-necked or yellow-foot clam, is the dominant clam species exploited in the Ashtamudi estuary. It is a benthic filter feeding, bivalve mollusc found in estuarine habitats on the east and west coasts of India. Up to 1.000 fishers in the area rely on this clam resource for livelihood. They paddle dug-out canoes from nearby villages to the shellfish beds. Divers dislodge the clams from the seabed with their hands and feet or a team of two or three fishermen use a hand-dredge from the canoe. On a good day, a fisherman can gather as much as 200kg over four-five hours. Another 3,000-4,000 people are involved in cleaning, processing and trading the clams. The fishery has sustained catches of around 10,000 tonnes a year for the past decade. The value of the clam fishery in the Ashtamudi estuary is close to US\$1 million, with the catch being in good demand in Southeast Asia and Japan.

The growth of Ashtamudi's commercial clam fishery was driven by demand from Japan, Vietnam, Thailand and Malaysia in the '80s and '90s. By 1991, the catch peaked at 15,000 tonnes a year, but declined 50% in 1993 due to unsustainable practices and overfishing. Scientists of Central Marine Fisheries Research Institute (CMFRI) carried out a study

and recommended a number of measures to rebuild clam stocks in the estuary. A closed season and mesh size restriction for nets were introduced, along with a minimum export size and a prohibition on mechanical clam fishing. These measures showed immediate effects, reviving the clam fishery. This development resulted in a sense of trust between fishermen and scientists.

## > CLAM SANCTUARY

Further, CMFRI came out with a clam fisheries management plan which recommended a clam sanctuary for protection of clam brooders and a council-based participatory governance system. This led to the creation of a 20-member Ashtamudi Clam Governance Council (ACGC) headed by the district collector and with adequate representation of all stakeholders and scientific representatives. Although initially the council was viewed with scepticism by fishers, it eventually became a body with teeth, taking collective decisions on managing a natural resource by the users themselves, with scientific advice. This process, an essential prerequisite for the Marine Stewardship Council (MSC) certification, was aided by the involvement of WWF-India. In India, fisheries are generally characterised by poor regulations and management as well as the lack of fisher involvement in the management



process, if any. The Ashtamudi estuary short-neck clam fishery proved to be an exception. This ultimately earned it the certificate and global recognition in November 2014.

In total, over 240 fisheries are MSC-certified and another 100 under full assessment across the world. Together, fisheries already certified or in full assessment record annual catches of close to 10 million metric tonnes of seafood. This represents over 11% of the annual global harvest of wild capture fisheries. Worldwide. more than 25,000 seafood products, which can be traced back to the certified sustainable fisheries, bear the blue MSC ecolabel. There is growing interest among global seafood consumers in choosing labelled fishery products. Invariably, these products are sold at a premium (estimated roughly as 20-30%). The benefits of this price premium are expected to reach the producer or the fisher. ultimately leading to higher living standards. Maintaining the label also means that fishing is done in a sustainable manner, which eventually leads to a steady income for them.

Going forward, the Ashtamudi estuary short-neck clam fishery will also undergo a chain-of-custody certification in early 2015, protecting it from trade malpractice or mislabelling. Ashtamudi not only leads the way for other fisheries in India, but also across the developing world, because it is only the third fishery in Asia to achieve the MSC certification. Worldwide, seafood is one of the most traded food commodities and has a greater economic importance in the developing world than other commodities such as coffee, tea, bananas, cocoa, rice and rubber.

CMFRI and WWF-India are jointly looking at other well- and self-managed small-scale fisheries such as the trap fishery for lobster in Kanyakumari, the gill-net fisheries for sardines in central Kerala, the blue crab fisheries in Tamil Nadu and pole-and-line skipjack tuna fisheries of Lakshadweep as potential places to go for certification. As a prelude, a fishery improvement programme (FIP) is already underway for some of these fisheries