

security, provide employment opportunities to improve the socio economic status of fishers and other people engaged in the sector. The main aim of the paper is to know the comparative socio-economic status of the fishers of different water bodies. Primary and secondary data were collected for this study. Multistage sampling method was used for selection of sample households. Altogether 300 fishers of different water bodies, who are earning money from fishing and fishery related activities were selected for this study. The results show that wide variations were noticed in incomes and living conditions among the river, canal and tank fishers. The socio-economic profile of tank fishers was very low comparing with other fishers. The study analysed various problems of fishers by different water bodies. There is need to focus more attention for improving the marketing facilities and enhance the incomes of the fishers.

**SE PO 08**

### **Science behind traditional knowledge: An analysis in marine fisheries sector of Kerala**

NIKITA GOPAL<sup>1\*</sup>, M.V. NEELIMA<sup>1</sup>, JISWIN JOSEPH<sup>1</sup>, K.M. MRUDULA<sup>1</sup>, P.K. SAJEENAMOL<sup>1</sup>, V.K. SAJESH<sup>1</sup>, J. BINDU<sup>1</sup>, S. SREEJITH<sup>1</sup>, VIVEKANANDA PAI<sup>2</sup>

<sup>1</sup>ICAR-Central Institute of Fisheries Technology, CIFT Junction, Willingdon Island, Matsyapuri., Kochi, Kerala, India; <sup>2</sup>Vijnana Bharati, New Delhi, India; \*[nikijith@gmail.com](mailto:nikijith@gmail.com)

Increasingly there is a relook are traditional streams of knowledge to understand the underlying science and to see if these can be used to further inquiry in various fields. Traditional knowledge of fishermen is based on their experiences and has undergone refinement through informal experimentations. The paper tries to explore the science behind some of the ITKs collected as a part of the ESSO-INCOIS

funded project 'Indigenous Traditional Knowledge (ITKs) in marine fisheries sector of Kerala: Documentation and Analysis' carried out in collaboration with Vijnana Bharati, New Delhi. The methods used for validation were expert consultation and review of published work. *Vavaruthy* is a local term used by the fishermen to denote the less fish availability during a few days ahead of new moon and full moon. This can be related to the rough water currents. Fish availability is high when low currents prevail and it can be associated to the fish behaviour that fishes tend to congregate in shoals in low water current area. Juvenile shark oil is used by the fishermen as a cure rheumatism. The presence of chondroitin and glucosamine in shark cartilage is responsible for curing osteoarthritis. Fishermen's knowledge about certain seasonal fish availability, beliefs about consumption of certain fishes, weather prediction and knowledge about physical oceanographic parameters and their effect on fisheries etc. need to be further explored.

**SE PO 09**

### **Impact of carp fish hatchery on fish production and livelihood of tribal communities of Raigad district, Maharashtra**

S.T. INDULKAR<sup>1\*</sup>, R. PAI<sup>1</sup>, A.S. NINAWA<sup>2</sup>, S.N. OGALE<sup>3</sup>, BALASAHEB KOLEKAR<sup>3</sup>, RAM AKHADE<sup>3</sup>

<sup>1</sup>College of Fisheries, Dr. Balasaheb Sawant Konkan Agriculture University, Ratnagiri, Maharashtra, India; <sup>2</sup>Department of Biotechnology, GOI, New Delhi, India; <sup>3</sup>Shramjivi Janata Sahayak Mandal (NGO), Satara, Maharashtra, India; \*[indulkarst@gmail.com](mailto:indulkarst@gmail.com)

After the disastrous floods in coastal area of Maharashtra in July 2005, a number of developmental interventions have been started after the complete relief and rehabilitation activities. The work was