List of significant achievements of Socio Economic Evaluation and Technology Transfer Division (SEETTD) during the last five years

Valuation of fish landings

• The value of marine fish landings has registered an increase of 48.70 per cent over the last five years from Rs.19.50 crores in 2009-10 to Rs.29.37 crores in 2013-14

Economic performance of different fishing methods

• The economic performance of different fishing methods indicated that the capital productivity of all the fishing methods are on an average range from 0.60-0.65, which indicates that the fishers are getting about 35 to 40 % above the net operating income to meet the fixed cost and other unforeseen expenses.

Total factor productivity

- The total factor productivity growth in marine fisheries in India
- The labour employed in the marine fishing sector in India was almost stagnant at 100 million days.

Marketing and global seafood trade

- The fishermen's share in the consumer's rupee for non penaeid prawns (97.14% of the consumer rupee), pomfrets (96.42%) and penaeid prawns (90.32 %) gave more than 90% of the consumer rupee to the fishermen.
- The subsidies to fisheries development, infrastructure and post-harvest infrastructure and export subsidies which were considered as harmful in the WTO definition were Rs. 62.8 crores and Rs.34.22 crores respectively during 2010-11. The total amount of support to fisheries sector was Rs.259 crores only (including both beneficial and harmful subsidies) which was less than one per cent of the fisheries GDP in India.
- Ten dimensions of market structure information of over 100 fish markets (wholesale/retail) in the coastal states of Kerala, Karnataka Tamil Nadu, Gujarat and Maharashtra.
- The major constraints faced by the marketers were high marketing and transportation cost followed by lack of infrastructure and amenities.
- The global competitiveness of Indian seafood exports was analyzed and it was found that the recession hasn't created any bottlenecks in the exports.
- Anti-dumping duty had a major impact on shrimp exports to the US which plummeted from \$409 million in 2003 before the duty imposition to \$142 million in 2008.
- The analysis of the short run and long run gains on the SPS and compliance measures by the exporter's analysis indicated that with the huge cost of investment required for the compliance of EU approval and HACCP implementation the gains weren't significant due to non-capacity utilization of the processing plant and lack of raw materials.

- Developed the export policy framework with the value chain interventions/ strategies for efficient and sustainable seafood marketing.
- Even though the domestic prices were on an average 20-25 per cent more than the export prices, due to the export economies of scale the export flow continues to be on the higher side.
- The tradeoff between export and domestic trade was investigated by consumption studies across urban consumers in Calicut, Chennai and Mumbai. The results indicated that there exists considerable willingness to pay for the high value fishes.
- Awareness about ecosystem based responsible fisheries management was very limited and there is need for more awareness and knowledge on fisheries resource enhancement and conservation through audio-visual media like print or electronic media.
- EBRFM based Conservation Orientation Index done under the information needs assessment showed a perceptible gravitation towards responsible fishing practices across the states. Community based Sui generis institutions offer scope for contextualized capacity enhancement.
- The emergence of 'cash rich poverty', mostly owing to market driven asymmetries, has prevented its translation into socially inclusive developmental impact points at the grass root level.
- The FGT (Foster, Greer and Thorbecke) index was worked to have a preliminary idea on the poverty gap. The percentage of people below poverty line (BPL) belonging to the traditional sector was worked out based on the PPAR from the four states.

Assessment of literacy, income and health status of marine fishers in India

- The overall literacy rate for fishers was 79.37% and indicated that among the literates 32.85 per cent have primary level of education, 53.88per cent have secondary level of education and 13.10 per cent have collegiate level of education.
- The average birth weight of males was 2.72 kg and female was 2.67 kg. It was found that there exists no incidence of maternal mortality and was minimal at 0.20 per cent for maternal mortality rate and 1.88 per cent for infant mortality rate. The distance to access to primary health centre was 3.21 km and that hospital was 10.41 km.
- The highest average monthly income was noticed in marine capture sector at Rs 8742 and the least was noticed in inland capture sector. The results indicated that the average amount of indebtedness per person was Rs 39807 and the average amount repaid was Rs 9149.23. The average level of repayment was found to be 25.93. The per cent level of fishers indebted was found to 48.12 per cent. It was found that on an average only 34.99 per cent of the loans availed were used for the fisheries and aquaculture related activities

Capacity Development for Ecosystem Based Responsible Fisheries Management

• The Landing Centre intensity index was found to be the highest for the state of Goa (0.846) followed by Kerala (0.842) Tamil Nadu (0.710), Karnataka (0.666), Andhra Pradesh (0.636), Gujarat (0.489) and west Bengal (0.314). Odisha ranked the lowest (0.089).

Using the Safety at Sea Index it was found that in terms of capacity endowment for sea safety Tamil Nadu out-performs other states.

The Fishing gear Diversity index indicated that out of the most common 15 types of fishing gears gill net fishing is mostly used in majority of coastal states followed by cast net.

• Compliance to rules is hampered by low enforcement endowment, role conflict experienced by the officials and poor awareness expressed by stakeholders. The rationale of banning certain gears need to be reconciled with the spatio-temporal tactical advantages enjoyed by the fisherfolk (for eg. Ring seine in Kerala and Purse seine in Tamil Nadu)