A 19.75 m multi-purpose fishing vessel, named FV Sagar Harita, built under the project "Green Fishing Systems for the Tropical Seas" (GFSTS) funded by National Agricultural Science Fund (ICAR-NASF) was officially launched by Dr. Trilochan Mohapatra, Secretary (DARE) and Director General (ICAR), New Delhi in a function organized by ICAR-CIFT at CIFNET auditorium on 18 April, 2016. In his address, Dr. Mohapatra stressed the need for responsible harvest of natural resources and added that status of each potential resource should be appraised in the context of threat to diversity, changes with respect to climate issues and economic value. He congratulated the whole team for bringing out the green fishing vessel in time and told that the new vessel, as its name evokes, is expected to pollute less and address the environmental issues related to fuel use and generation of greenhouse gases in the fishing industry. He also exhorted that this vessel will help in research and to train fisherfolk in modern methods of fishing.

Dr. Joykrushna Jena, Deputy Director General (Fisheries Science), ICAR, New Delhi presided over the function and Rear Adm. Shekhar Mital, NM, IN...
Launching of the vessel by Mrs. Kalpana Mohapatra (Retd.), Chairman & Managing Director, Goa Shipyard Ltd., Goa, Ms. Leena Nair, IAS, Chairperson, Marine Products Export Development Authority (MPEDA), Kochi, Dr. K. Gopakumar, Former DDG (Fisheries), ICAR and Shri Chhabilendra Rouli, IAS, Additional Secretary (DARE) & Secretary (ICAR), New Delhi addressed the gathering.

Dr. P. Pravin, Assistant Director General (Marine Fisheries), ICAR, New Delhi, Dr. A. Gopalakrishnan, Director, ICAR-CMFRI, Kochi, Dr. Pawan Kumar Agrawal, Assistant Director General (National Agricultural Science Fund), ICAR, Dr. Trilochan Mohapatra, Secretary, DARE and Director General, ICAR, New Delhi visited ICAR-CIFT, Kochi on 18 April, 2016. He was accompanied by Shri Chhabilendra Rouli, IAS, Additional Secretary (DARE) and Secretary (ICAR), Dr. Joykrushna Jena, Deputy Director General (Fisheries Science), ICAR and Dr. P. Pravin, Assistant Director General (Marine Fisheries), ICAR. The formal function was held in the roof top auditorium of the Institute. Dr. Mohapatra in his address lauded the remarkable achievements of the Institute. He also emphasized the need for giving more respects to the women employees of the Institute. Shri Rouli, Dr. Jena and Dr. Pravin also addressed the august audience Dr. Ravishankar, C.N., Director, ICAR-CIFT welcomed the gathering while Dr. Suseela Mathew, Head, Biochemistry & Nutrition Division proposed vote of thanks. The dignitaries also visited the various research laboratories of the Institute.
As a part of the ESSO-INCOIS Project, "Indigenous Traditional Knowledge (ITK) in Marine Fisheries Sector of Kerala: Documentation and Analysis", two data validation workshops were conducted at ICAR-CIFT, Kochi during 29-30 June, 2016. Ten fishermen from Alappuzha district and nine fishermen from Thrissur district of Kerala participated in the workshops. Dr. Nikita Gopal, Principal Investigator of the project, gave a brief on the project and explained the objectives of the workshop. During the workshops, data on traditional knowledge collected from the marine fishers of Alappuzha and Thrissur districts were validated through different participatory approaches such as preparation of seasonal calendar and lunar calendar related to fishing and participatory mapping of fishing grounds. Vernacular names of different fishes in both the districts were also documented during the workshop. The workshops were organized in collaboration with an NGO, Vijnana Bharati, New Delhi.

Preparation of seasonal calendar of fishing activity
Training Programmes Held at the Institute

Kochi
1. Post harvest processing and value addition (20 April - 20 May)
2. Preparation of value added fishery products (22-23 April)
3. HACCP concepts (2-6 May)
4. Freezing and canning of fish (13-15 June)
5. Industrial training in fish processing (13-27 June)
6. Food processing technology (13-30 June)

Visakhapatnam
1. Hygienic handling of fish and preparation of value added fish products (16-18 June)

Veraval
1. Hygienic handling of fish and development of value added fishery products (13-18 April)

Mumbai
1. Preparation of value added fishery products (5-7 May)
2. Total quality assurance in seafoods (14-18 June)

Participation of the Institute in Exhibitions

1. 'Punjab Fish Festival - 2016', GADVASU Punjab Agricultural University, Ludhiana during 24-25 April, 2016.
2. Exhibition held in connection with International Day for Biological Diversity held at ICAR - CIFE, Mumbai on 22 May, 2016.
Outreach Programmes

1. Training cum demonstration programme on ‘Harvest and post harvest technologies’ at Pedderu reservoir, Visakhapatnam on 22 April, 2016.
2. Training cum transfer of technology programme for tribal fisherfolk at Usgaon, Thane district, Maharashtra during 25-27 April, 2016.
3. Training programme on ‘Responsible fisheries and post harvest technologies’ at Chepalakancheru and Mukka, Visakhapatnam on 2 June, 2016.
4. Training programme on ‘Responsible fisheries and post harvest technologies’ at Tippalavalasa, Visakhapatnam on 4 June, 2016.
5. Training programme on ‘Responsible fisheries and post harvest technologies’ at Pedduru reservoir, Visakhapatnam on 9 June, 2016.

Research Papers

Veraval Research Centre of ICAR-CIFT organized a skill development programme on "Hygienic handling of fish and development of value added fishery products" during 13-18 April, 2016. The beneficiaries of the training were tribal fisher folks from "Bharat Adim Juth Matsyaudhyog Sahakari Mandali", a registered society formed for the welfare of "Siddi tribes" from Jambur near Veraval, Gujarat.

In the inaugural session, Dr. G.K. Sivaraman, SIC of the Centre welcomed the gathering and briefed the technologies available with ICAR-CIFT and the utility of training for their welfare. The Chief Guest Shri M. Sasi, Deputy Director, EIA, Veraval emphasized the importance of value added fishery products for the economic growth of seafood industry in India. Shri Jeyabal, Deputy Director, MPEDA and Shri Mohammad Koya, SIC, ICAR-CMFR Regional Stations, Veraval offered felicitations. Dr. A.K. Jha, Scientist, proposed the vote of thanks. During the technical session, the faculty of ICAR-CIFT, Dr. G.K. Sivaraman, Dr. A.K. Jha and Smt. V. Renuka took classes on Hygienic handling, Nutritional importance and Microbial quality of fish and fishery products, respectively. Later, Smt. V. Renuka, Dr. A.K. Jha, Scientists and Smt. Pushpaben P. Chudasama, Skilled Support Staff gave hands on training on preparation of value added fishery products like fish pickle, fish ball, fish roll and good manufacturing practice for salted dried fish and operational procedure of solar drier for good quality dried fish.

In the valedictory session, Dr. G.K. Sivaraman welcomed the gathering. Shri M. Sasi was the Chief Guest. Shri Mohammad Koya, SIC, ICAR-CMFR Regional Station, Veraval and Shri Hasam Bhai Jummabhai, President, Bharat Adim Juth Matsyaudhyog Sahakari Mandali also graced the occasion with their presence. Dr. A.K. Jha proposed the vote of thanks. At the end of the training programme, aprons, knives and cutting boards were also distributed to the beneficiaries.

Popular Articles

Tribal Sub Plan Programme by ICAR-CIFT at Veraval

Veraval Research Centre of ICAR-CIFT organized a skill development programme on "Hygienic handling of fish and development of value added fishery products" during 13-18 April, 2016. The beneficiaries of the training were tribal fisher folks from "Bharat Adim Juth Matsyaudhyog Sahakari Mandali", a registered society formed for the welfare of "Siddi tribes" from Jambur near Veraval, Gujarat.

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Practical session in progress

Participants and faculty of the programme
Mumbai Research Centre of ICAR-CIFT conducted a three days Training cum Transfer of Technology programme to distribute coracles and FRP canoes and to demonstrate value added products for tribal fisherfolk at Usgaon, an inland fishing village in Thane district of Maharashtra during 25-27 April, 2016. Representatives of four tribal fishermen cooperative societies in Thane district viz. Usgaon, Kothare, Shirvanje and Vasai and Tribal women members from three self help groups from Usgaon viz. Bhartiya SHG, Savita SHG and Kranti SHG attended the programme.

The programme started by distribution and demonstration of the FRP canoes and coracles to the representatives of the four tribal fishermen societies by Dr. L.N. Murthy, SIC of the Centre and his team. A total of six FRP canoes and 10 coracles were distributed to them. This was followed by demonstration of hygienic fish handling practices. The hygienic way of deheading, descaling and fin removal was demonstrated to the participants. Filleting operation in order to get higher filleting yield was also shown to the tribal fisherwomen. Headgears, aprons, mouth pieces, cutting boards and knives were also provided to the fisherwomen. Hands on training in preparation and packing of shrimp pickle in pouches was given up to the fisherwomen. All the participants tasted the product and gave their feedback based on sensory characteristics.

The next session was on preparation of battered and breaded fish products. Hands on training for preparation of battered and breaded products viz. fish fingers, fish cutlets and butterfly shrimp (Nobashi style) was also given to the participants. All the participants evaluated the products and gave feed back. Fish processing and packing equipment such as insulated fish bags, sealing machines, hand operated meat mincers, fish cutting boards, knives etc. were distributed to the beneficiaries by Dr. Murthy along with other team members. During the feedback session on insulated fish bags, fisherwomen told that they prefer rectangular shape
A one day awareness and training cum demonstration programme was conducted at Porbandar Harbour, Gujarat on “Conversion of diamond codend to square mesh codend” on 29 June, 2016. The programme was organized in collaboration with NETFISH-MPEDA, Department of Fisheries, Gujarat and ICAR-CIFT. In the inaugural session Shri Jignesh Gohel, NETFISH, MEPDA delivered welcome address and highlighted the schedule of the programme on fabrication of square mesh. Shri R.B. Vajpai, Asst. Director of Fisheries talked on economic prospects of square mesh and diamond mesh codend. Shri A. Sakthiwel, Asst. Director, MPEDA, stressed on current important situation and role of MPEDA to convert diamond to square mesh codend. Shri Ashok Jungi and Shri Hiralal Hodar, representatives of Seafood Supplier Group and Net Maker Group talked on the importance of replacing diamond mesh in place of square mesh for the benefit of fishermen of Gujarat.

In the programme Shri G. Kamei, Scientist, explained the advantages and disadvantages of 40 mm square mesh and 20 mm diamond mesh codend presently being operated along Gujarat coast. He also stressed on global juvenile fish catch, bycatch and discard in the country and the world. During the practical session Shri H.V. Pungeera, Sr. Technical Asst. and Shri J.B. Paradva, ACTO demonstrated the designing and fabrication of square mesh codend for commercial trawl nets. Later, the trainees fabricated square mesh codend by themselves. Vote of thanks was proposed by Shri Jignesh Gohel, NETFISH-MPEDA.

A technology outreach programme was conducted by ICAR-CIFT, Visakhapatnam Research Centre at Pedderu reservoir, V. Madugula (Mandal), Visakhapatnam District, Andhra Pradesh on 22 April, 2016 under the TSP programme. The Pedderu reservoir has a water spread area of 110 hectares. Rohu and Catla are the main fish species available in the Pedderu reservoir. Shri Kooti Kondamma Girijan Matsyakara Society with 90 members is associated with the Pedderu reservoir fisheries. Recently the State Fisheries Department has introduced cage culture of Tilapia in the Pedderu reservoir.

Dr. R. Raghu Prakash and Dr. B. Madhusudana Rao, Principal Scientists conducted the outreach programme in collaboration with Andhra Pradesh Fisheries Department. Dr. Raghu Prakash explained the advances in fishing techniques that can be adopted in Pedderu reservoir for sustainable fishery and for enhancement of livelihood of the fishers. Dr. Raghu Prakash and Shri B.K. Pradhan, ACTO demonstrated the use of foldable fish traps. Dr. Madhusudana Rao explained the importance of icing and hygienic handling. He also briefed on the value added fish products as an additional source of income. Sixty five tribal
At Munambam, Ernakulam

As a part of "Mera Gaon Mera Gaurav" programme, ICAR-CIFT, Kochi celebrated National Technology Day at Munambam, Ernakulam district on 6 May, 2016. The programme was sponsored by Kerala State Council for Science, Technology and Environment, Thiruvananthapuram.

Dr. Nikita Gopal, HOD I/c, EIS and Nodal Officer, Mera Gaon Mera Gaurav programme welcomed the gathering and explained the concept of the programme and the interventions of ICAR-CIFT in the fisheries sector in general and for the fishermen of Munambam in particular. Shri K.K. Joshi, Block Panchayath President, Vypeen inaugurated the programme. During his inaugural address he stressed on the significance of scientific interventions for fishery development in India and the contributions of Munambam fishermen in the national fisheries development. Dr. Suseela Mathew, Director in charge, ICAR-CIFT in her presidential address outlined the activities and the technologies developed by the Institute that have brought out changes in fisheries sector. She also stressed on focused need-based approach in fisheries research and requested the participants to take maximum benefit from the research carried out by the Institute for the sector.

The presidential address was followed by a talk by Dr. Leela Edwin, Head, Fishing Technology Division on 'Responsible fishing methods'. She detailed the present status of fishing and the consequences of non-judicious increase in size and power of fishing fleet which will deplete the fishery resources. The advantages of using square mesh codend and other conservation measures in fishing were also highlighted. She also told that ICAR-CIFT is ready to extend any technological help in the area of fishing craft and gear. Dr. A.A. Zynudheen, Principal Scientist addressed the participants on 'Fish value addition and fishery waste utilization'. He noted that the processing infrastructure at Munambam is very minimal compared to production. He pointed out that ICAR-CIFT has done pioneering work in developing various types of industrial and pharmaceutical products and also invited the stakeholders to register at the Incubation Facility at ICAR-CIFT for commercialization of fishery-based technologies. A video film on technologies developed at ICAR-CIFT was also screened for the participants. An interactive session was held at the end of the programme which was coordinated by Dr. V. Geethalakshmi, Principal Scientist and the stakeholders.

Fishers attended the programme. Inputs for responsible fishing such as gillnets, foldable traps and insulated fish bags for maintaining the quality of fish were distributed to the tribal fishers. Shri G. Rajesh, Fisheries Development Officer, Pedderu, Andhra Pradesh in his concluding remarks stressed the need to adopt modern practices of harvest and post harvest technologies.

Mera Gaon Mera Gaurav Programme

Shri K.K. Joshi inaugurating the programme

A section of the participants

April - June, 2016
expressed their training needs. A total of fishermen and fisherwomen participated in the programme in addition to 22 officials from various state departments and the local panchayaths.

**At Thakazhi, Alappuzha**

On 11 May, 2016, on the National Technology Day, a training programme on 'Preparation of fish cutlets, fish fingers and fish balls from the meat of low value fish' was arranged for the benefit of 30 participants at Thakazhi, Alappuzha District, Kerala as a part of "Mera Gaon Mera Gaurav" programme. The participants included members from 'Kudumbasree' (SHG), Panchayat officials, officials from Krishi Bhavan and local villagers. The participants showed great enthusiasm in learning the technology and expressed their willingness to take up the technology at Kudumbasree units. The team from ICAR-CIFT included Dr. Suseela Mathew, Principal Scientist and Head, Biochemistry and Nutrition Division, Smt. H. Mandakini Devi, Scientist, Smt. K.B Beena, Asst. Chief Technical Officer, Shri K.A. Noby Varghese, Senior Tech. Asst., Shri V.T. Sadanandan, Tech. Asst. and Shri C. Mohanan, Driver. The programme was well appreciated by everyone who participated.

**Meeting of Beneficiary Fishermen**

Under the project Green Fishing System for Tropical Seas funded by the National Agriculture Science Fund in operation at ICAR-CIFT, Kochi an interaction meet for conducting experimental operations using advanced long lines was conducted with the members of South Asian Fishermen Fraternity (SAFF), a Fishermen Society on 26 April, 2016. The South Asian Fishermen Fraternity is a fishermen Society in Muttam village of Kanyakumari district. More than 3000 long line fishermen are registered with the Society and are engaged in deep sea mono filament long lining.

The meeting was organized by SAFF for the interaction with beneficiary fishermen groups of Muttam, Thuthoor and Enayam on experimental long line operation. Thirty long line fishermen participated in the meeting. Fr. Churchil, General Secretary of the Society welcomed the gathering. Dr. Leela Edwin, PI of the project and Head, Fishing Technology Division spoke on the objectives of the project and advantages of long line fishing. Shri Julius, fishermen leader and long line boat owner also spoke. The fishermen raised the issues like detrimental effects of bottom trawling when compared to the line fishing and said that line fishing should be promoted. They also suggested introduction of more Fish Aggregating Devices (FAD’s) for enhancing fish catch and ensuring environmental protection. Shri V.T. Antony, SRF under the project collected the information on juvenile fish landing at Muttam harbour from the fishermen.

**Consultancy Agreement Signed**

The Visakhapatnam Research Centre of ICAR-CIFT signed a consultancy agreement with M/s Sree Vishakha Deepsea Fishing Technocrats Co-operative Marketing Society Ltd., Visakhapatnam for providing expertise for setting up of a fish processing unit for production of value added fish products. The consultancy agreement document was handed over to Capt. Venkateswarlu, President of the Society on 21 June, 2016.
**Hindi Workshop on Noting and Drafting**

30 June, 2016. The workshop was inaugurated by Dr. G.K. Sivaraman, SIC of the Centre. Dr. K.K. Prajith, Scientist welcomed the gathering while Shri G. Kamei, Scientist gave the felicitation speech. The workshop was very interactive and Smt. Nimmy S. Kumar, Hindi Translator created awareness among staff members about the importance of Official Language in our official work. There were 23 participants in the workshop. During the workshop, prizes for the winners of Hindi Essay Competition were given which was conducted on International Yoga Day on the topic "Importance of Yoga in daily life". Kum. Chandini Vaja, Shri Yogesh D. Kriplani and Kum. K. Vadher Kiran won the first, second and third prize, respectively. The workshop concluded with an inspirational decision by the staff to give their best for the progressive Official Language Implementation.

**Institute Foundation Day**

The Institute celebrated its 59th Foundation Day on 29 April, 2016, Dr. K. Gopakumar, former Deputy Director General (Fisheries), ICAR, New Delhi was the Chief Guest of the day. Dr. C.N. Ravishankar, Director presided over the function. Representatives of the different categories of the retired staff of the Institute, namely Shri Krishna Iyer (Scientific), Shri Subramanian (Technical), Shri Shanmughan (Administrative) and Shri Kunjan (Skilled Support) were also honoured on the occasion. Dr. Suseela Mathew, Head, Biochemistry and Nutrition Division welcomed the...
gathering while Shri P.J. Davis, Senior Administrative Officer proposed the vote of thanks. The function ended with a variety entertainment programme staged by the staff.

'Swachh Pakhwara'

The 'Swachh Pakhwara' was observed during the period 16-30 May, 2016. The fortnight-long celebrations started with taking pledge on 17 May, 2016. A quiz programme was organized in this connection on 19 May, 2016. Eminent social activist and environmentalist Prof. (Dr.) S. Sitaraman, delivered a guest lecture on 23 May, 2016 at the Institute on 'Role of public and government in conserving environment'. A cleanliness drive at General Hospital, Karuvelipady was conducted on 26 May, 2016. An awareness programme for fishermen was also conducted at Cochin Fisheries Harbor on 28 May, 2016.

Anti Terrorism Day

Anti Terrorism Day was observed on 20 May 2016. The Director and staff of the Institute assembled together and took Anti Terrorism Day Pledge.

International Yoga Day

As per the directive of the Govt. of India and ICAR, the International Day of Yoga was celebrated on 21 June, 2016 at the ICAR-CIFT headquarters and its Research Centres.

At ICAR-CIFT, Kochi: The Yoga celebrations at the headquarters included a talk on "The significance and importance of Yoga in our daily life" by Shri Kaithapram Vasudevan Namboothiri, Director, Patanjali Yoga Research and Training Centre, Kochi. Shri Namboothiri described the different types of Yoga and its power to improve concentration, memory power and physical fitness. Dr. Suseela Mathew, Director Incharge presided over the meeting. In her address she emphasized on the benefits of Yoga and its importance to control lifestyle diseases and maintaining health and happiness. The talk was followed by a Mass Yoga Performance by staff based on the Common Yoga Protocol of the Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH), New Delhi. The Yoga demonstration was lead by Shri Sreejith, Yoga Instructor at Patanjali Yoga Research and Training Centre, Kochi. Dr. J. Bindu, Principal Scientist and Nodal Officer for arranging various activities to commemorate the day proposed vote of thanks.

At Veravel Research Centre of ICAR-CIFT: Different programmes were organized during 17- 21 June, 2016. On 17 June, the celebration was officially inaugurated by Dr. G.K. Sivaraman, Scientist Incharge of the Centre. He pointed out the importance of Yoga in the modern stressful life. Dr. K.K. Prajith, Scientist and Nodal Officer briefed the background, origin of International Yoga Day and the action plan. Dr. A.K. Jha, Smt. V. Renuka and Shri G. Kamei, Scientists offered felicitations followed by the screening of a short film on Yoga entitled "Yoga - Harmony with nature" (In Hindi). On 18 June an essay competition was arranged on the subject "Importance of Yoga in our daily life". Smt. Chandini Vaja, Shri Yogesh D. Kripalani and Kum. V. Kiran bagged first, second and third positions, respectively. A theory session on Yoga was arranged on 20 June to get an over view of the practical session on 21 June. Shri M. Thakar Abhay Kumar, Shree Somanth Sanskrit University, Veraval was the resource person for the session. He started the session with the origin of Yoga and covered the importance, health benefits, types of Yoga, major subdivisions etc. On 21 June demonstrations on basic Asanas and different Pranayama techniques were held. Dr. Prajith proposed the vote of thanks.
At Mumbai Research Centre of ICAR-CIFT: At the Centre, for the celebration on 21 June, 2016, Dr. (Captain) P. Chatterjee, Physician and Yoga Practitioner and Smt. Rekha Chatterjee, a trained Yoga teacher were the Chief Guests. Dr. L.N. Murthy, Scientist Incharge of the Centre welcomed the gathering and gave a brief introduction about the relevance of Yoga. Dr. Chatterjee and Smt. Rekha Chatterjee conducted classes on Yoga followed by demonstration on different Yoga techniques like Asanas and breathing exercises. Dr. Chatterjee explained the significance of practicing Yoga in day to day life for maintaining good health. Smt. Rekha Chatterjee gave a general outline on Yoga and its effect on physical and mental well being. The classes were followed by Yoga demonstration explaining specifically which technique is helpful in relieving different diseases like arthritis, diabetes, hormonal problems etc. The staff of the Centre actively participated in the programme.

At Visakapatnamam Research Centre of ICAR-CIFT: On 20 June, 2016 an introductory session on Yoga was conducted at CIFT-CMFRI complex, Visakhapatnam. As part of this, a video on Yoga was also screened. A Yoga session of around 60 minutes was organized on 21 June with the theme "Yoga for Harmony and Peace". All the officers and staff of the Centre took part enthusiastically and practiced various Asanas of Yoga and Pranayama. Yoga trainers Shri Kalyan Chakravarthy, Kum. K.S. Sushma and Shri Shiva Satya Sai Varma from Yoga Village, Andhra University demonstrated various Yoga postures and explained the correct way of doing Asanas. Prayers were recited after the programme. Special demonstration of Asanas useful for controlling diabetes, asthma, back pain and high blood pressure was given by the trainers. Dr. U. Sreedhar and Dr. B. Madhusudana Rao, Principal Scientists coordinated the celebrations.

Smt. Rekha Chatterjee giving lecture

Staff attending class on Yoga

Smt. Rekha Chatterjee giving lecture

Yoga session in progress

Shri Chakravarthy giving instructions

Radio Talk

Dr. M.S. Kumar, Chief Tech. Officer, Visakhapatnam Research Centre of ICAR-CIFT gave an Interview on "Interesting facts about marine mammals" (In Telugu) through All India Radio, Visakhapatnam on 29 May, 2016.

Invited Talk

Prof. (Dr.) S. Sitharaman, Social Activist & Environmentalist gave a talk on "Role of public and government in conserving environment" at ICAR-CIFT, Kochi on 23 May, 2016.
Visit of Parliamentary Committee on Official Language Implementation

The Second Sub Committee of Parliament on Official Language (Hindi) inspected ICAR-CIFT office on 8 April, 2016. Dr. Satyanarayan Jatiya, M.P. (Rajya Sabha) was the Deputy Chairman of the Committee. The other members were Dr. Prasanna Kumar Patsani, M.P. (Lok Sabha), Shri Tarun Vijay, M.P. (Rajya Sabha), Shri Laxminarayan Yadav, M.P. (Lok Sabha), Dr. Sunil Baliram Gaikwad, M.P. (Lok Sabha), Shri Vashishta Narain Singh, M.P. (Rajya Sabha), Kum. Abhilasha Misra, Hindi Officer and Shri Nikhil Arora, Senior Translator from OL Implementation Cell.

The Institute received a letter of appreciation from Shri Tarun Vijay, M.P. for the exceptional work done in implementing Official Language. The letter also praised about ‘Jaladhi’ - the in-house publication in Official Language.

Deputation Abroad

Dr. Leela Edwin, Principal Scientist and Head, Fishing Technology Division, ICAR-CIFT, Kochi attended the Expert Consultation on Marking of Fishing Gear, organized by the Food and Agricultural Organization (FAO), Rome during 4-7 April, 2016. The consultation was opened by Mr. Arni M. Mathiesen, Assistant Director General, Fisheries and Aquaculture Department, FAO, Rome. During the Expert Consultation, guidelines were developed to assist countries in implementing FAO Code of Conduct for Responsible Fisheries by developing and applying a system for the marking of fishing gear. This was for providing a practical means of locating and identifying the ownership of fishing gear, enabling administrators, owners and users of fishing gear with a reference and a means of providing information.
and guidance to the appropriate marking technologies. It will also provide a basis for the preparation of recommendations and regulations developed to minimize the abandonment and discarding of fishing gear for the management of fishery resources in the long run. The Expert Consultation was attended by 18 experts in their personal capacity and four resource persons from different countries. Dr. Leela Edwin presented inputs on fishing gear and marking in India.

Dr. Tom C. Joseph, Principal Scientist, Microbiology, Fermentation and Biotechnology Division, ICAR-CIFT, Kochi was deputed to attend the BBSRC Newton Global Research Partnership Aquaculture Project Meeting and workshop for IMAQualate project at Scotland, UK held during 19-21 June, 2016.

Personnel News

Participation in Seminars/Symposia/Workshops etc.

- **Dr. C.N. Ravishankar**, Director – 23rd Annual General Body Meeting of National Academy of Agricultural Sciences (NAAS), New Delhi (5 May)
- **Dr. C.N. Ravishankar**, Director – Interface meeting between ICAR and DAHD&F, ICAR, New Delhi (10 June)
- **Dr. C.N. Ravishankar**, Director, **Dr. Suseela Mathew**, Principal Scientist and HOD, B&N and **Dr. Saly N. Thomas**, Principal Scientist – Interactive meeting of Directors and PME Cell Incharges of Fisheries Institutes with DDG(Fy.), ICAR, New Delhi (9 June)
- **Dr. Suseela Mathew**, Principal Scientist and HOD, B&N – National consultation on NFDB out reach programme, NFDB, Hyderabad (12 April). Dr. Suseela Mathew also made a presentation on ‘Entrepreneur ready technologies from CIFT’ in the Meeting.
- **Dr. K. Ashok Kumar**, Principal Scientist and HOD, FP – 9th Meeting of FSSAI Scientific panel on Fish and fishery products, New Delhi (6 June)
- **Dr. K. Ashok Kumar**, Principal Scientist and HOD, FP – 47th Meeting of Institute Management Committee, ICAR-CIBA, Chennai (18 June)
- **Dr. Leela Edwin**, Principal Scientist and HOD, FT – Expert consultation on Marking of fishing gear, FAO, Rome (4-7 April)
- **Dr. Leela Edwin**, Principal Scientist and HOD, FT – Meeting on Fisheries conservation, Seafood Exporters Association, Kochi (22 April)
- **Dr. Leela Edwin**, Principal Scientist and HOD, FT – World Ocean Day celebrations, SH College, Thevara, Kochi (8 June). Dr. Leela Edwin also delivered a talk on “Green fishing for healthy ocean”.
- **Dr. A.A. Zynudheen**, Principal Scientist and HOD I/c, Engg. – Punjab Fish Festival, Chandigarh (23 April). Dr. Zynudheen also delivered a talk on ‘Value added fish products’ in the Meeting.
- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam – ‘Nava Nirmana Deeksha’ Andhra University, Visakhapatnam (5 June). Dr. Rajeswari also delivered a lecture on “Opportunities in fisheries sector” in the function.
- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam – Meeting on Addressing fisheries
related turtle mortality, New Delhi (22 June)

- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam – 23rd Meeting of ICAR Regional Committee No. II, ICAR-NAARM, Hyderabad (24-25 June)

- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam and **Dr. R. Raghu Prakash**, Principal Scientist – Marine stakeholders consultation on formulation of national policy on marine fisheries, CIFNET, Visakhapatnam (20 April)

- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam, **Dr. R. Raghu Prakash** and **Dr. U. Sreedhar**, Principal Scientists – National seminar on Conservation, restoration and sustainable management of mangrove forests in India, Visakhapatnam (15-17 June). They also presented a paper entitled, “Bycatch reduction devices in stake nets for conservation and sustainable management of mangrove based fisheries in inter-tidal waters of Andhra Pradesh, India” in the Seminar.

- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam, **Dr. R. Raghu Prakash** and **Dr. U. Sreedhar**, Principal Scientists – National Seminar on Conservation, restoration and sustainable management of mangrove forests in India, Visakhapatnam (15-17 June). They also presented a paper entitled, “Bycatch reduction devices in stake nets for conservation and sustainable management of mangrove based fisheries in inter-tidal waters of Andhra Pradesh, India” in the Seminar.

- **Dr. G. Rajeswari**, Principal Scientist and SIC, Visakhapatnam, **Dr. R. Raghu Prakash**, **Dr. B. Madhusudana Rao**, Principal Scientists and **Kum. Jesmi Debbarma**, Scientist – Stakeholder meeting on Ocean partnership for sustainable fisheries and biodiversity conservation models for innovation and reforms: Bay of Bengal project 3rd scoping consultation on sustainable development of tuna and tuna like fisheries in India, Visakhapatnam (30-31 May)

- **Dr. G.K. Sivaraman**, Senior Scientist and SIC, Veraval – National symposium on One health initiative to foster inter-sectoral collaboration for human and animal health, G.B. Pant University of Agriculture and Technology, Pantnagar (26-28 April). Dr. Sivaraman also presented the following research papers in the Symposium:

- **Dr. G.K. Sivaraman**, Senior Scientist and SIC, Veraval – Meeting of the Lokvani Radio Advisory Committee, Kodinar (26 April)

- **Dr. L.N. Murthy**, Senior Scientist and SIC, Mumbai – Conference on Technology Vision 2035, Mumbai (18 April)

- **Dr. Nikita Gopal**, Principal Scientist and **Shri G. Jayesh**, SRF - 3rd Congress on Social entrepreneurship in aquaculture, ICAR-CIFE, Mumbai (27-29 April). Dr. Nikita Gopal also presented a research paper entitled, “Prospects of promoting social entrepreneurship in Pookkali farming in Kerala” by G. Jayesh, P. Sruthi and Nikita Gopal in the Congress.

- **Dr. Nikita Gopal**, Principal Scientist and **Kum. Diana Benjamin**, RA – Annual meeting of ESSO-INCOIS project on Indigenous traditional knowledge (ITKs) in marine fisheries sector of Kerala: Documentation and analysis, INCOIS, Hyderabad (12 May)

- **Dr. V.R. Madhu**, Senior Scientist – Meeting of Officers of UNDP, GEF and UN, Indian Institute of Scuba, Malwan (2 April). Dr. Madhu also made a presentation on “Introduction of square mesh codend along Sindhudurg district” in the Meeting.

- **Shri M.V. Baiju**, Senior Scientist – Meeting convened by the Secretary, DAHDF, Ministry of Agriculture and Farmers Welfare to discuss the modalities for financial assistance to traditional fishers, New Delhi (13 May)

- **Shri M.V. Baiju**, Senior Scientist – Training on how to inspect a newly built fishing vessel and machinery including cold storage and refrigerated sea water plant, Nagercoil, Tamil Nadu (22 June) (As resource person)

- **Shri RK. Renjith**, Scientist – Training on Taxonomy of bivalves (Pelicpoda), CUSAT, Kochi (11-14 May)

- **Dr. M.S. Kumar**, Chief Tech. Officer – Farm and Home Unit Rural Programme Committee Meeting, AIR, Visakhapatnam (22 June)

- **Dr. B. Ganesan**, Senior Tech. Officer – Training for CPCSEA nominees, NIAW, Haryana (24-26 May)

- **Shri K.S. Sreekumaran**, F&ACO – MDP on Public procurement, NIFM, Faridabad (30 May – 4 June)

- **Smt. Christina Joseph**, Admn. Officer, Shri K.B.
Appointments

1. Dr. A.K. Mohanty, Principal Scientist, ICAR Res. Complex for NEH Region, Umaim as Head, Extension Information and Statistics Division, ICAR-CIFT, Kochi
2. Dr. S. Murali, Scientist, ICAR-CIFT, Kochi
3. Shri Abhay Kumar, Scientist, ICAR-CIFT, Kochi
4. Shri K.K. Anas, Scientist, ICAR-CIFT, Kochi
5. Shri S. Ezhil Nilavan, Scientist, ICAR-CIFT, Kochi
6. Smt. V.A. Minimol, Scientist, ICAR-CIFT, Kochi

Promotions

1. Dr. George Ninan, Senior Scientist, ICAR-CIFT, Kochi as Principal Scientist
2. Dr. B. Madhusudana Rao, Senior Scientist, Visakhapatnam Research Centre of ICAR-CIFT as Principal Scientist
3. Dr. Toms C. Joseph, Senior Scientist, ICAR-CIFT, Kochi as Principal Scientist
4. Shri T.V. Bhaskaran, Senior Tech. Officer, ICAR-CIFT, Kochi as Asst. Chief Tech. Officer
5. Shri M. Prasanna Kumar, Tech. Asst., Visakhapatnam Research Centre of ICAR-CIFT as Senior Tech. Asst.
6. Shri M.N. Vinodh Kumar, Asst., ICAR-CIFT, Kochi as AAO at Visakhapatnam Research Centre of ICAR-CIFT
7. Shri Santhosh Mohan, Upper Division Clerk, ICAR-CIFT, Kochi as Assistant
8. Shri T.D. Bijoy, Lower Division Clerk, ICAR-CIFT, Kochi as Upper Division Clerk

Transfers

1. Smt. V. Sushmitha, Tech. Asst., Veraval Research Centre of ICAR-CIFT to Kochi
2. Shri K. Ajeesh, Senior Technician, Veraval Research Centre of ICAR-CIFT to Kochi

Retirements

1. Shri B. K. Panda, Asst. Chief Tech. Officer, Visakhapatnam Research Centre of ICAR-CIFT
2. Shri K.U. Sheikh, Senior Tech. Officer, Veraval Research Centre of ICAR-CIFT
3. Shri E. Damodaran, Skilled Support Staff, ICAR-CIFT, Kochi
4. Shri K.J. Damor, Skilled Support Staff, Veraval Research Centre of ICAR-CIFT

Voluntary Retirements

1. Shri L.N. Badi, AAO, Visakhapatnam Research Centre of ICAR-CIFT

Testing facilities available at ICAR-CIFT, Kochi

**ANALYTICAL CHARGES - FISH PROCESSING**

<table>
<thead>
<tr>
<th>Test</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gel Strength</td>
<td>₹ 750</td>
</tr>
<tr>
<td>2. Degree of Deacetylation</td>
<td>₹ 1000</td>
</tr>
<tr>
<td>3. Viscosity</td>
<td>₹ 700</td>
</tr>
<tr>
<td>4. Ash</td>
<td>₹ 600</td>
</tr>
<tr>
<td>5. Insoluble Ash</td>
<td>₹ 600</td>
</tr>
<tr>
<td>6. pH</td>
<td>₹ 250</td>
</tr>
<tr>
<td>7. Protein/Total Nitrogen</td>
<td>₹ 700</td>
</tr>
<tr>
<td>8. Fat</td>
<td>₹ 750</td>
</tr>
<tr>
<td>9. α-Amino nitrogen</td>
<td>₹ 750</td>
</tr>
<tr>
<td>10. Digestable protein</td>
<td>₹ 800</td>
</tr>
<tr>
<td>11. Fibre</td>
<td>₹ 600</td>
</tr>
<tr>
<td>12. Carbohydrate</td>
<td>₹ 600</td>
</tr>
<tr>
<td>13. Moisture</td>
<td>₹ 500</td>
</tr>
<tr>
<td>14. Sodium, Ca, K (Flame Photometer)</td>
<td>₹ 700</td>
</tr>
<tr>
<td>15. Phosphorous</td>
<td>₹ 700</td>
</tr>
<tr>
<td>16. Free fatty acids</td>
<td>₹ 700</td>
</tr>
<tr>
<td>17. Peroxide value</td>
<td>₹ 700</td>
</tr>
<tr>
<td>18. Sand silica</td>
<td>₹ 500</td>
</tr>
<tr>
<td>19. L<em>a</em>b* values by Hunter Colorimeter</td>
<td>₹ 400</td>
</tr>
<tr>
<td>20. Energy</td>
<td>₹ 1500</td>
</tr>
<tr>
<td>21. Specific gravity of oil</td>
<td>₹ 500</td>
</tr>
<tr>
<td>22. Flash point</td>
<td>₹ 500</td>
</tr>
<tr>
<td>23. Bulk Density</td>
<td>₹ 300</td>
</tr>
</tbody>
</table>
24. Fat Absorption - ₹300
25. Solubility - ₹300
26. Histamine by HPLC - ₹4000
27. Histamine content by Spectroscopic method - ₹1200
28. Total Volatile Base Nitrogen (TVBN) analysis - ₹600
29. Burst factor of paper board IS 1060 30* 30 cm (10 Nos.)
   (Per paper) - ₹1300
   (3 ply board) - ₹1900
   (5 ply board) - ₹2500
30. Ring stiffness of paper and paper board ASTM 1164 30*30 cm (10 Nos.) - ₹500
31. Flat crush resistance (upto 3 ply of CFB) IS 4006 30*30 cm (5 Nos.) - ₹500
32. Tensile strength and percentage elongation IS 1060 30* 30 cm (10 Nos.) - ₹1000
33. Breaking length of paper IS 1060 30*30 cm (10 Nos.) - ₹1000
34. Tearing strength IS 1060 30*30 cm (10 Nos.) - ₹500
35. Tear factor IS 1060 30*30 cm (10 Nos.) - ₹800
36. Water resistance (Cobb/value) IS 1006 30*30 cm (10 Nos.) - ₹500
37. Density of plastic films IS 2508 (1984) 50*50 cm - ₹500
38. Vibration test IS 72028(1973) (3 Nos.) - ₹1000
39. Tearing strength of plastic films - ₹500
40. Puncture resistance for plastic films - ₹500
41. Heat seal strength - ₹1000
42. Thickness/Caliper - ₹200
43. Basic weight (grammage) of paper and CFB per ply - ₹300
44. Gas composition of packages - ₹500
45. Puncture Resistance - ₹1000
46. Edge crush test - ₹400
47. Box compression - ₹1000
48. Drop test - ₹500
49. Gas transmission rate - ₹1500
50. Water vapour transmission rate - ₹1500
51. Impact strength - ₹500
52. Thermal efficiency of insulated boxes - ₹2000
53. Moisture content of CFB - ₹400
54. Overall migration Residue Test
   a) Water extraction - ₹400
   b) N-Heptane extraction - ₹600
   c) Acetic Acid extraction - ₹500
   d) Alcohol extraction - ₹600
55. Thermal validation for blanched/cooked/pasteurized/retort pouching and canned products at factory - ₹20000
56. Thermal validation of cooker/blanching machine/pasteurization/retort etc. - ₹10000

ANALYTICAL CHARGES - FISHING CRAFT AND GEAR MATERIALS AND ACCESSORIES

I Testing Twin/Yarn
1. Designation - ₹400
2. Nominal Diameter/Thickness - ₹400
3. Linear density - ₹400
4. Runnage - ₹500
5. Turns per meter - ₹400
6. Tenacity - ₹500
7. Identification of fibre - ₹400
8. Tensile break load/Tensile strength (Dry and wet) - ₹500
9. Elongation at break - ₹500
10. Knot break load (Dry and wet) - ₹500
11. Quality testing consisting of Runnage, Twist per meter, Tensile break load (Dry and wet), Elongation at break tests - ₹2000

II Webbing
1. Mesh size - ₹300
2. Mesh depth - ₹300
3. Mesh break load - ₹500
4. Quality testing consisting of Mesh size, Mesh depth, Mesh break load - ₹1000

III ROPE
1. Nominal Diameter - ₹300
2. Mass per coil - ₹ 500
3. Pitch/Length of lay - ₹ 300
4. Linear density/K tex - ₹ 500
5. Break load - ₹ 2000
6. Quality testing, consisting of Nominal Diameter, Mass per coil, linear density, Pitch, Length of lay, Break load and elongation - ₹ 3500

IV Wood, FRP, Metal Wire, Metal sheets
1. Compression test - ₹ 1500
2. Bending test - ₹ 1500
3. Tensile test - ₹ 1500

V Float
1. Physical parameters - ₹ 500
2. Extra buoyancy - ₹ 500
3. Pressure tolerance limit - ₹ 5000

VI Dyed Materials in Xenotest
1. Colour fastness of textile materials to Weathering by xenon arc lamp - ₹ 5000

VII Miscellaneous
1. Cyclic Voltammetry Linear Polarisation - ₹ 800
2. Electrochemical Impedance Analysis - ₹ 800
3. Cyclic Voltammetry upto 100 cycles - ₹ 1000

ANALYTICAL CHARGES - B&N Division

I Water/Ice
1. Heavy metals (Pb, cd, Hg, As, Zn, Fe, Co, Mg, Mn, Se, Cu, Cr, Sn) by AAS - ₹ 750
2. Sodium, Potassium, Calcium by Flame Photo meter - ₹ 1000
3. Polycyclic Aromatic Hydrocarbon - ₹ 6000
4. Organochlorine Pesticides - ₹ 6000
5. Volatiles - ₹ 6000

II Fish and Fishery Products
1. Heavy metals (Pb, Cd, Hg, As, Zn, Fe, Mg, Mn, Se, Cu, Cr, Sn) by AAS - ₹ 750
2. Sodium, Potassium, Calcium by Flame Photo meter - ₹ 1000
3. Moisture content - ₹ 500
4. Protein content - ₹ 700
5. Crude fat - ₹ 500
6. Organochlorine Pesticides - ₹ 6000
7. Polycyclic Aromatic Hydrocarbon - ₹ 6000
8. Benzopyrene - ₹ 6000
9. Amino acid composition - ₹ 7000
10. Cholesterol - ₹ 2000
11. Fatty acid composition - ₹ 7000
12. Saturated, monounsaturated and polyunsaturated fatty acids - ₹ 7000
13. PUFA (Omega-3, Omega-6, EPA,DHA) - ₹ 7000
14. Chloramphenicol (LCMS MS) - ₹ 6000
15. Nitrofuran metabolites (LCMS MS) - ₹ 6000
16. Nutritional facts - ₹ 20000
17. Vitamins (fat soluble) - ₹ 6000
18. Vitamins (water soluble) - ₹ 6000

ANALYTICAL CHARGES - MFB Division

I. Bacteriology
1. Suitability of agar, peptone etc. for bacteriological work - ₹ 1000
2. Identification of bacterial culture by biochemical test - ₹ 1500
3. Identification of bacterial culture by 16SrRNA sequencing - ₹ 2500
4. Bacteriological count of fish/commercial products - ₹ 1500
5. Bacteriological composition of products/ feed/probiotics etc. - ₹ 5000
6. Detection of Salmonella by PCR - ₹ 1800
7. Detection of Listeria monocytogenes by PCR - ₹ 1800
8. Detection of pathogenic Vibrios like V. parahaemolyticus, V. cholerae etc. by PCR - ₹ 1800

II. Viruses
1. Detection of WSSV (DNA) (PCR) - ₹ 1200
2. Detection of IHHNV (PCR) - ₹ 1200
3. Detection of HPV (PCR) - ₹ 1200
4. Detection of TSV (PCR) - ₹ 2000
5. Detection of MBV (Microscopy) - ₹ 200
6. Detection of MBV (PCR) - ₹ 1200
7. Detection of Yellow Head Virus (PCR) - ₹ 2000

III Bacterial Toxins
1. *Clostridium botulinum* toxin (Animal bioassay) - ₹ 1500

**ANALYTICAL CHARGES - QAM Division**

I Water/ICE
1. Normal physical and chemical (21 parameters) well waters etc. - ₹ 2000
2. Bacteriology (TPC, Coliforms, *E. coli*, Staphylococcus, Streptococcus) - ₹ 1000
3. Water for potability (physical, chemical and biological parameters) - ₹ 2500
4. 98/83 EEC process water (16 parameters/once in six months) - ₹ 10000
5. 98/83 EEC process water (yearly) except bacteriology - 49 parameters/once in two years - ₹ 20000

6. IS-4251 Water (Microbiology) - ₹ 2500
7. IS-4251 Water - ₹ 10000
8. IS-14543 Mineral water - ₹ 17000
9. IS-14543 Mineral water (Microbiology) - ₹ 2500
10. IS-10500 Water - ₹ 20000
11. *Clostridium perfringens* - ₹ 1000
12. *Salmonella* - ₹ 1000
13. *Vibrio parahaemolyticus* - ₹ 1000
14. *Vibrio cholerae* - ₹ 1000
15. *Listeria monocytogenes* - ₹ 1500
16. Yeast and Mold - ₹ 1000
17. Sulphite reducing anerobes/Sulphite reducing bacteria - ₹ 1000

For details contact: The Director, ICAR-CIFT, Matsyapuri P.O., Kochi - 682 029