



ICAR-CIFT



Newsletter

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January - March, 2024



Director's Desk

The first newsletter of 2024 brings glimpses of activities that ICAR-Central Institute of Fisheries Technology, Kochi conducted during the period January to March, 2024. The Institute continues to engage with the fisheries sector in multifarious ways through research, capacity-building and outreach activities.

A major initiative for addressing the issue of marine litter has been trying to find ways to recycle and upcycle it, and this aligns with our mission for Clean Oceans and Swachhta Action Plan. A glimpse of the activity this quarter is given. The Institute has continued its international collaborations with programmes with the University of Southampton, UK; the Joint Institute for Food Safety and Applied Nutrition (JIFSAN) and US United States Food and Drug Administration (FDA), USA. An international online training programme under ITEC of the Ministry of External Affairs, Government of India was also organised. Additionally, the Institute conducted several capacity-building and technology transfer programs across various regions of the country, including flagship initiatives of the Government of India such as DAPST, DAPSC and NER, reaching vulnerable groups and regions.

Dr. George Ninan

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From The Research Front

Endeavouring for Sustainable Marine Litter Management

Research in ICAR-CIFT has focussed on resource sustainability and ecosystem management. In a recent initiative, a project aimed at addressing the pressing issue of marine litter and to devise effective management strategies was launched. Marine litter is being sourced from various fishing operations, carefully sorted to evaluate the extent of the problem and to develop recycling and upcycling strategies. In a small but significant step towards marine litter management, litter retrieved from trawl fishing operations was handed over to Plan@Earth on January 1, 2024. The sorted litter comprised fishing plastics (such as gear and boat-related materials) as well as other plastics (including bottles, single-use items like carry bags and packaging materials, along with thermocol, rubber tubes etc.). This endeavor aligns with the Swatcha Action Plan of the Institute, further underlining the Institute's dedication to fostering cleaner oceans and promoting sustainable fishing practices.



Dr. George Ninan, Director, ICAR-CIFT handing over the marine litter to representatives of Plan@Earth

Events

Handing over of “CIFT-VSOB” to the stakeholders

Hon'ble Union Minister of Fisheries, Animal Husbandry and Dairying, Sri Parshottam Rupala, in the presence of Member of Parliament, Junagadh Gir-Somanath, Sri Rajesh Chudasama, and Sri N.H. Kelawala, Vice Chancellor of Kamdhenu University, distributed CIFT-VSOB (V form double slotted otter board) to the fishermen of the Veraval, Mangrol, and Porbandar regions on 30 December, 2023 at Fisheries College Veraval, Gujarat, as part of the National Fisheries Development Board (NFDB) funded project by ICAR-CIFT on 'Popularisation of V form double slotted otter board' under Pradhan Mantri Matsya Sampada Yojana (PMMSY).



Stake holders' workshop on the development and implementation of Turtle Excluder Device in India, 19-25 February 2024

In collaboration with the Marine Products Export Development Authority (MPEDA), the ICAR-CIFT organized a stakeholders' workshop on "Development and Implementation of the Turtle Excluder Device (TED)" at the Institute. Three experts from the National Oceanic and Atmospheric Administration (NOAA), USA, Mr. Jared R Milton, Mr. Jeff Gearhart and Mr. Kendal M Falana, served as resource persons. Participants received hands-on training in fabrication of the newly developed TED of ICAR-CIFT that was tested in the USA and built to the specifications of NOAA. A core group of 16 members from ICAR-CIFT, Cochin; Fisheries Survey of India (FSI), Cochin; Network for Fish Quality Management & Sustainable Fishing – Marine Products Export Development Authority (NETFISH-MPEDA), Cochin and Central Institute of Fisheries Nautical and Engineering Training (CIFNET) underwent training on the first two days. Subsequent sessions focused on training net menders and State Nodal Officers for TED. The workshop culminated in onboard trials of the newly developed TED. A summing-up meeting was held officials from NOAA, the US Embassy of India, MPEDA, ICAR-CIFT, State Fisheries Department Nodal Officers, fishing boat owners associations, seafood export associations and other key stakeholders participating where queries raised by participants were addressed.



Training of the newly developed Turtle Excluder Device (TED)



Onboard trials of the newly developed TED



AquaBiz Summit 2024, 20 March 2024

The Zonal Technology Management - Agribusiness Incubation Centre (ZTM-ABI) of ICAR-CIFT organised the 'AquaBiz Summit 2024', in Kochi. Around 200 participants, including entrepreneurs, researchers, policymakers, and funding agencies attended the Summit. An exhibition of ICAR-CIFT technologies and incubatee products provided attendees with first hand insights into the cutting-edge innovations shaping the future of the fisheries industry.

The cutting-edge technologies from ICAR Fisheries Research Institutes were also showcased.



Shri. Dodda Venkata Swamy, IAS, Chairman of MPEDA inaugurating AquaBiz Summit 2024



(From left to right) Shri. Dodda Venkata Swamy, IAS, Chairman of MPEDA; Dr. C. O. Mohan, Principal Scientist, ICAR-CIFT ; Shri. Alex Ninan, Vice President, SEAI; Dr. George Ninan, Director, ICAR- CIFT; Dr. A. Gopalakrishnan, Director, ICAR-CMFRI and Dr. S. Remya, Senior Scientist, ICAR-CIFT



Dr. M.P. Remesan, Head, Fishing Technology Division



Dr. Bindu J., Head, Fish Processing Division



Dr. Anandan R., Head, Biochemistry & Nutrition Division



Dr. A.A. Zynudheen, Head, Quality Assurance & Management Division



Dr. T. Raja Swaminathan, Head, Microbiology, Fermentation & Biotechnology Division



Dr. S. Murali, Scientist, Engineering Section



Dr. Toms C. Joseph, Principal Scientist and Dr. Nikita Gopal, Head, Extension Information & Statistics Division Coordinating the session

Representatives from various organizations also delivered talks, underscoring the importance of collaborative efforts and institutional support for fostering entrepreneurship in the fisheries sector. Testimonies were shared by successful incubatees of ICAR-CIFT.



Improving Fish Handling in Bepore Fishing Harbour

In an effort to alleviate drudgery and promote hygienic fish handling practices at Bepore fishing harbour, Kozhikode, ICAR-CIFT handed over nine trolleys to the Bepore Fishermen Welfare Development and Cooperative Society on 13 February, 2024 under the SCSP Scheme.





The Mumbai Research Centre of ICAR-CIFT signed an MoU for three collaborative research projects on Alternate Fuel and Energy Systems, Biodegradable Fishing nets, and Marine Debris Assessment in the presence of Shri Sudhir Mungantiwar, Hon'ble Cabinet Minister for Forests, Cultural Affairs and Fisheries, Government of Maharashtra Mumbai, on 6 February 2024.

Underwater Ghost Net Removal Program

A four-day program on underwater ghost net removal was organized by the Veraval Research Centre of ICAR-CIFT in association with Marine National Park, Jamnagar, Gujarat under the Swachhta Action Plan from 29 February to 3 March, 2024. The team successfully retrieved 150 kg of monofilament fishing gear along a 3 km coast off Mithapur, Gujarat, at depths ranging from 4 to 10m.



International Workshop on Antimicrobial Resistance, 25-26 March 2024

ICAR-Central Institute of Fisheries Technology, Cochin, Kerala, in association with the University of Southampton, UK, organized a two-day International Stakeholders Workshop on Antimicrobial Resistance, themed "Point-of-Care (POC) Testing for tackling AMR with a One Health perspective" sponsored by the Research England International Science Partnerships – Official Development Assistance. The workshop aimed to build long-term, international research partnerships focusing on exploring affordable, POC tests for the detection of AMR pathogens from a one health perspective. Developed by the University of Southampton, these tests have applications that benefit stakeholders related to fish and animal farms in India.



(From left to right) Dr. Girish Patil, Director, ICAR- NRCM, Nagaland, India; Dr. George Ninan, Director, ICAR – CIFT, Cochin, India; Dr. Baldev Raj Gulati, Director, ICAR – NIVEDI, Bangalore; Dr. G. K. Sivaraman, Principal Scientist, ICAR-CIFT, Cochin; Dr. Collin Sones, Principal Research Fellow, Optoelectronics Research Centre, University of Southampton, UK

Capacity Building

ITEC International training programme on Quality assurance of fish and fishery products, 8-19 January 2024

ICAR-CIFT in collaboration with Indian Technical and Economic Co-operation (ITEC) organised an international online training programme (e-ITEC) on 'Quality Assurance of fish and fishery products' during 08-19 January, 2024. There were ten participants from six countries Algeria, Iraq, Oman, Malawi, Nicaragua and South Sudan participated in the online training programme.

Hands-on Training on Fish Disease Diagnosis and Management, 1-12 February 2024

ICAR - Central Institute of Fisheries Technology, Cochin, organized a hands-on training session on "Fish Disease Diagnosis and Management" for officials from the Kerala State Fisheries Department. This program addressed the specific needs of departmental officials involved in the testing and diagnosis of aquatic animal diseases. Fifteen technical officers from state fisheries laboratories in Kerala and the Agency for Development of Aquaculture Kerala (ADAK) participated in the program.





Training for Subject Matter Specialists from Krishi Vigyan Kendras of the North-Eastern Region, 12-16 February, 2024



In a bid to foster fisheries-based entrepreneurship and establish a robust value chain for fish and fishery products across the North East, ICAR-Central Institute of Fisheries Technology (CIFT), Cochin, in collaboration with Agricultural Technology Application Research Institute (ATARI) Umiam, Meghalaya, organized a week-long training at CIFT headquarters. Themed 'Advances in Fish Harvest and Post-Harvest Technologies,' the training program was attended by Subject Matter Specialists from 26 Krishi Vigyan Kendras from Mizoram, Nagaland, Tripura, and Meghalaya.

ICAR- CIFT collaborates with FSSAI to build capacity in food testing, 08-12 January, 2024

As part of its ongoing efforts to elevate food testing standards in India to global benchmarks, ICAR-Central Institute of Fisheries Technology (CIFT), the national referral and reference laboratory for fish and fisheries products, conducted a five-day training program sponsored by the Food Safety and Standards Authority of India (FSSAI), New Delhi. This initiative, focused on the adoption of national and international protocols in food microbiology, aims to enhance participants' skills and knowledge in cutting-edge microbiological techniques while raising awareness. The training was attended by 15 representatives from various FSSAI labs, state regional food analytical labs, and the private sector.



ICAR-CIFT and ICAR's IP&TM Unit Collaborate for 'Patents in Agriculture' Short Course, 15 January-14 February 2024

In a significant endeavor to bolster the intellectual property management capabilities of scientists within the Indian Council of Agricultural Research (ICAR), the Intellectual Property & Technology Management (IP&TM) Unit of ICAR and the Zonal Technology Management- Agribusiness Incubation (ZTM-ABI) Centre of ICAR-Central Institute of Fisheries Technology (ICAR-CIFT) joined hands to conduct a short course on 'Patents in Agriculture'. The course, conducted virtually benefited over 300 scientists across various ICAR institutes.



Dr. J. K. Jena, Deputy Director General (Fisheries Science), ICAR

Dr. Unnat P. Pandit, Controller General CGPDTM & RoC, Govt. of India

Dr. Neeru Bhooshan, Assistant Director General, IP&TM Unit, ICAR

ICAR-CIFT Partners with JIFSAN and USFDA to Enhance Seafood Quality Standards, 29 January-2 February, 2024

The ICAR-Central Institute of Fisheries Technology (CIFT) partnered with the Joint Institute for Food Safety and Applied Nutrition (JIFSAN), USA, and the Food and Drug Administration (FDA), USA, to conduct two consecutive training programs on "Seafood Decomposition" at the CIFT. The comprehensive training sessions, sponsored by JIFSAN, USA, aimed to elevate the quality of seafood exports from India to meet USFDA standards. The sessions, led by 11 experts from USFDA and JIFSAN, aimed to equip participants with crucial skills for ensuring seafood quality and safety. About 50 officials from government and private sectors participated in the programme.



Dr. J. Bindu; Dr. Sarah McMullen, Country Director, India Office, USFDA; Dr. George Ninan; Mr. Brett Koonse, Aquaculture & Seafood Safety Expert, JIFSAN; Dr. A.A. Zynudheen





ICAR CIFT hosts One-Day Workshop on Evaluation of RAS & Biofloc Aquaculture Technologies organized by National Productivity Council, New Delhi, 15 February 2024

In a bid to disseminate awareness on Re-circulatory Aquaculture System (RAS) & Biofloc Aquaculture Technologies to boost fish production in the state aquaculture sector, a one-day workshop themed “Evaluation of RAS & Biofloc Aquaculture Technologies ” was hosted by ICAR CIFT on 15 February 2024. The workshop was organized by the National Productivity Council (NPC), New Delhi, under the Ministry of Commerce & Industry, as an End Implementation Agency for the Pradhan Mantri Matsya Sampada Yojna (PMMSY). About 200 fish farmers, fisherman, fisherwomen, fish entrepreneurs, Govt Officials attended the workshop.



Shri. S Gopalakrishnan IAS, Director General, NPC; Shri. S.P. Singh, Director & Group Head, NPC; Dr. Sijo P Varghese, Zonal Director, FSI; Shri. Mahesh S, Joint Director, Dept of Fisheries, Ferala; Dr. M.P. Remesan, Head, Fishing Technology Division; Dr. George Sleeba, Chairman, Kerala State Productivity Council; Dr.S. Raizada, Former ADG (I.Fy), ICAR & Senior Advisor, NPC

The event also witnessed signing of a Memorandum of Understanding (MoU) between ICAR-Central Institute of Fisheries Technology (CIFT) and the National Productivity Council (NPC) on collaborating on common mandates in the fisheries sector. About 200 fish farmers, fisherman, fisherwomen, fish entrepreneurs, government officials attended the workshop.

Training Programmes Organised

Sl. No	Name of Training	No: of Beneficiaries	Venue	Date
Regular Training Programme				
1	Training -cum exposure visit of fishermen and women from Ramanathapuram through Dakshin Foundation	16	ICAR-CIFT, Cochin	22-25 January, 2024
2	Implementation of HACCP in the meat processing industry	7	ICAR-CIFT, Cochin	05- 06 February, 2024
3	Fish disease diagnostics and its management	15	ICAR-CIFT, Cochin	01 - 12 February, 2024
4	Pre-processing and drying of fish	22	ICAR-CIFT, Cochin	27- 28 February, 2024



Sl. No.	Training Programmes under Special Schemes (DAPSC, DAPST, NER)	No: of Beneficiaries	Venue	Collaboration	Date
Development Action Plan for Schedule Caste (DAPSC/SCSP)					
1	Fish Processing and product development for elevating rural economy and livelihood opportunities in West Bengal	28	Malda, West Bengal	CISH RRS/KVK, Malda	17-19 January, 2024
2	Orientation on responsible fishing and by-catch reduction devices	4	ICAR-CIFT, Cochin	-	24-30 January, 2024
3	Fish Hygiene and Value Addition		Aapti in Khalapur District, Raigad, Maharashtra	-	29-31 January, 2024
4	Advanced analytical techniques in fish Biochemistry and nutrition	13	ICAR-CIFT, Cochin	-	29 January to 02 February 2024
5	Basic Econometric Tools and Techniques in Data Analytics	30	Pondicherry	Pondicherry University	29 January to 02 February, 2024
6	Marine bioactive compounds encapsulation and characterization techniques	12	ICAR-CIFT, Cochin	-	12 – 16 February, 2024
7	Pre-processing and Drying of Fish in Solar Hybrid Dryer	25	KVK Palakkad	-	29 February, 2024
8	Nano technological applications in fisheries	10	ICAR-CIFT, Cochin	-	11-15 March, 2024
9	HACCP concepts	21	ICAR-CIFT, Cochin	-	11-15 March, 2024
10	Microbiological testing as per ISO methods for food laboratories	25	ICAR-CIFT, Cochin	-	18- 22 March, 2024
11	Value addition of fish and clam	21	ICAR-CIFT, Cochin	-	21-22 March, 2024
Development Action Plan for Scheduled Tribes (DAPST/TSP)					
12	Seafood waste management: Good handling practices and by-product development	16	ICAR-CIFT, Cochin	-	15-19 January, 2024
13	Intervention of new responsible inland fish harvesting techniques	25	Kawardha, Chhattisgarh	LSPN College of Fisheries, Kawardha, Chhattisgarh	05 -07 February, 2024
14	Hygienic handling and value addition of fish and fishery products	25	Kawardha, Chhattisgarh	LSPN College of Fisheries, Kawardha, Chhattisgarh	05 -07 February, 2024

15	Preparation of value-added products from fish and shellfish	85	Jawadhu Hills in Thiruvannamalai District, Tamil Nadu	Krishi Vigyan Kendra (KVK) - Thiruvannamalai	07 -09 February, 2024
16	Preparation of value-added products from fish and shellfish	60	Arepalayam, Tamil Nadu	Krishi Vigyan Kendra (KVK) MYRADA	13- 15 February, 2024
17	Advanced Microbiological and molecular techniques	16	ICAR-CIFT, Cochin	-	20- 24 February, 2024
18	Value-added products from Mussel	23	KUFOS Regional Centre, Payyannur	-	21-22 March, 2024

North Eastern Region (NER/ NEH Programme)

19	Responsible Inland Fishing through Sustainable Fish Harvesting Practices	25	Regional Fisheries Training Institute, Amaranga, KamrupDist, Assam	-	22-24 January, 2024
20	Entrepreneurship development in Assam through Hygienic fish drying and Value Addition programme	25	Regional Fisheries Training Institute, Amaranga, Kamrup Dist, Assam	-	22-24 January, 2024
21	Responsible Inland Fishing through Sustainable Fish Harvesting Practices	25	Aizawl, Mizoram	-	30 January to 01 February, 2024
22	Value Addition and Hygienic Handling of Fish for increasing domestic fish consumption and promoting small-scale entrepreneurship	25	Aizawl, Mizoram	-	30 January to 01 February, 2024
24	Production of Hygienic Shidal	25	Birchandramanu, Tripura	Krishi Vigyan Kendra (KVK), South Tripura	06-08 February, 2024



Outreach/ Technology Transfer

Exhibitions Participated

Sl . No	Name of the Exhibition	Organizers	Date
1	Int. Fisheries Congress & Expo	KUFOS, Kochi	12-14 January, 2024
2	36 th Kerala Science Congress, Kasaragod	KSCSTE, Thiruvananthapuram	8-11 February, 2024
3	13 th IFAF, Kolkata	ICAR-CIFRI, Kolkata	23-25 February, 2024
4	AquaBiz Summit 2024	ICAR-CIFT, Cochin	20 March, 2024

Technology Transfer/Professional Service Functions

SNo:	Technology Transfer/Professional Service Function	Date of signing MoA	Name of the Party
1	Consultancy Implementation of HACCP system in frozen boneless buffalo meat production	05 February, 2024	Meat Products of India Ltd., Koothattukulam
2	Collaborative Research Umbrella Agreement	15 February, 2024	National Productivity Council [under Dept. of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. of India]
3	Collaborative Research <ul style="list-style-type: none"> Development of indigenous dolphin pingers Field/lab trails with pingers and optimization of design 	19 February, 2024	Muthoot Institute of Technology and Science (MITS), Kochi
4	Consultancy Verification study of histamine and sulfite kit for RAFT approval	22 February, 2024	Biosystems Diagnostics Pvt. Ltd., Tamil Nadu
5	Technology Transfer Technical know-how for Hygienic fish handling and packaging	29 February, 2024	My Azli Ventures LLP, Bangalore
6	Collaborative Research Development of molecular biology kits for authentication of fish and fishery products	01 March, 2024	Origin Diagnostics and Research, Kollam



7	Consultancy Design evaluation and approval of drawing, design, and stability booklet of 37.3m LOA Exclusive Tuna Long Liner	14 March, 2024	Stressed Asset Reconstruction and Development, Chennai
8	Technology Transfer Technical know-how for fish marination	20 March, 2024	Eloi Enterprise, Alappuzha
9	Technology Transfer Production of fish and shrimp pickles	20 March, 2024	Mrs. Aparna Ashok, Vaduthala
10	Technology Transfer <ul style="list-style-type: none"> Development of thermally processed fishery products Technical assistance for setting up the canning or retort processing unit at Gadu. 	20 March, 2024	Mahestra Royal Food (opc) Pvt. Ltd., Gujarat

Intellectual Property

Patent	Natural Carrier-Based Anthocyanin Formulation for Targeted Release in Gut and Process Thereof Patent No: 510789 Date of grant: 14 February 2024 Dr. Saha, Supradip, IARI; Dr. Dutta, Anirban, IARI; Dr. Chatterjee, Niladri Sekhar, CIFT; Dr. Tejpal C.S., CIFT
Copyright	Recurrent Neural Network-based Regression Analysis for Fish Freshness Grading in Genetically Improved Farmed Tilapia Registration No: SW-18154/2024 Date of Registration: 25 January 2024 Dr. S. Murali; Dr. B. Sreelekshmi; Dr. P. R. Reshma; Dr. D. S. Aniesrani Delfiya; Dr. V. Murugadas; Dr. P.K. Binsi; Dr. George Ninan
Industrial Designs	Freshness Indicating Device Regd. Design No. 396148-001 Date of registration: 22 March 2024 Dr. Mohan C.O.; Dr. Remya S.; Dr. Pankaj Kishore; Mr. Ananthu Prasad; Dr. Bindu J.

Distinguished Visitors



Prof. V K Ramachandran, Vice Chairperson, Kerala State Planning Board visited ICAR-CIFT on 15 March 2024

Personalia

Appointments/ Transfers

- Dr. Nenavath Rajendra Naik has re-joined ICAR-CIFT, Cochin on 04.03.2024 after deputation.
- Shri R. N. Subramanian, Administrative Officer was relieved on 05.02.2024 from CIFT to join as Senior Administrative Officer at ICAR-CPCRI, Kasargod.
- Shri Subeesh S. S., LDC has re-joined ICAR-CIFT, Cochin on 29.01.2024

Promotions

- Dr. V. Chandrasekar, Senior Scientist from Level 12 to Level 13A w.e.f. 04.11.2022
- Dr. C. G. Joshy, Senior Scientist, from Level 12 to Level 13A w.e.f. 04.11.2022
- Dr. Murugadas V, Senior Scientist, from Level 12 to Level 13A w.e.f. 15.12.2022
- Dr. Manju Lekshmi N., from Scientist to Senior Scientist. w.e.f. 01.01.2023
- Shri Gaihamngam Kamei, Scientist to Level 12, designation remains as Scientist w.e.f. 01.01.2023
- Smt. Triveni Gopal Adiga, Chief Technical Officer one advance increment in Level 12 w.e.f. 01.01.2023

- Smt. Kala K. K., from Assistant Chief Technical Officer to Chief Technical Officer W.e.f. 04.07.2023
- Smt. Rekha M., from Assistant Chief Technical Officer to Chief Technical Officer w.e.f. 18.09.2022
- Dr. Santhosh Alex, from Assistant Chief Technical Officer to Chief Technical Officer w.e.f. 29.06.2023
- Shri Sibasis Guha, from Assistant Chief Technical Officer to Chief Technical Officer w.e.f. 15.07.2023
- Shri Nobi P. S. Technical Officer has got promotion to the post of Senior Technical Officer w.e.f. 01.01.2013
- Smt. Sobha K. S., from Upper Division Clerk to Assistant on 27.03.2024

MACP (Modified Assured Career Progression Scheme)

- Shri Nikhil Das, LDC w.e.f. 16.01.2024
- Shri Vinod A, SSS w.e.f. 05.02.2024

Retirements

- Dr. B. Ganesan, Chief Technical Officer of CIFT retired on 29.02.2024



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