NEWSLETTER

ICAR-CENTRAL ISLAND AGRICULTURAL RESEARCH INSTITUTE

Sri Vijaya Puram Andaman and Nicobar Islands

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हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

Agrisearch with a human touch

IN THIS ISSUE

RESEARCH SPOTLIGHT

From the Director's Desk ....

Institute's Intellectual Property Rights (IPR) Portfolio

An institute's Intellectual Property Rights (IPR) portfolio is a strategic collection of intellectual assets generated through its research, innovation, and creative activities. The primary goal of managing this portfolio is to protect these innovations, realize their monetary and strategic value, attract funding, and foster collaborations with industry. In this context, ICAR-CIARI has developed a robust IPR portfolio. The institute has developed and released six climate-resilient rice varieties with resistance to bacterial blight and tolerance to salinity; seven climate-resilient pulse varieties with resistance to pests and diseases; two improved varieties of Malabar tamarind (*Garcinia gummi-gutta*); two brinjal varieties resistant to bacterial wilt; and one spice variety, *Tejpat-1*. The institute has also developed two dwarf coconut varieties (*Dweep Haritha* and *Dweep Sona*), suitable for tender coconut purposes under island conditions. It has registered a unique dwarf arecanut accession with immense potential for use in breeding programs for dwarfness in arecanut. Additionally, *Nicobari Aloo*, a stable tuber crop of the Nicobarese tribals, along with *Pandanus amaryllifolius* and *Macaranga nicobarica*, have been registered for high foliage production.

Our institute has identified several novel crops such as Woody Pepper; a potential spice crop for homestead as well as commercial cultivation in the Andaman Islands, *Haematocarpus validus*, *Garcinia dhanikhariensis*, and *Curcuma manga*, which are promising crops for commercial cultivation in the islands. The institute has also registered six native animal genetic germplasms that are being promoted for sustainable livestock and poultry farming under island climatic conditions. The institute has been granted six patents, six industrial designs, and five ICAR-certified technologies. It has also obtained an exclusive trademark in the name of **"Dweep"** and one copyright for the cinematographic work on ICAR-CIARI, which showcases the institute's significant contributions to research and development in island agriculture, livestock, and fisheries.

The institute's IPR portfolio holds immense economic and societal value, which has been leveraged to license technologies to firms and entrepreneurs. To date, the institute has commercialized 13 technologies.

In essence, an institute's IPR portfolio is a dynamic tool for transforming research outputs into tangible impacts enhancing livelihoods, improving nutritional security of island farmers, strengthening institutional reputation, and contributing to the national economy.

(Dr. Eaknath B. Chakurkar)

Research Highlights

Performance evaluation of air layered cinnamon varieties with seedling

Ajit Arun Waman and Pooja Bohra

Propagation of cinnamon improved varieties through seedlings and air layered plants has both advantages and disadvantages. Research over the period of five years under arecanut intercropping conditions revealed that air layers of variety Yercaud-1 has superior growth and yield of the five layered varieties as well as the seedlings tested and air layers of variety Yercaud-1 is thus recommended for cultivation as an intercrop in the arecanut plantations of Andaman Islands.

Low cost colour shade net house model for the islands

Pooja Bohra and Ajit Arun Waman

Protected cultivation is an important technique for growing various horticultural crops and raising their nursery. Cost of constructing protected structures is generally higher in the Andaman Islands as the inputs are not readily available. Further, these islands regularly witness high velocity winds, which damage these structures and the cost is increased further. Though wood and bamboo frames are in vogue, these get damaged due to termites during dry period and high rainfall during rainy season. In order to develop low cost structures, the option of using TMT bars for making shade net house was explored. Being flexible in nature, the structures remained unaffected during the high velocity winds apart from reducing the construction cost. For testing the model, fish mint was grown for two seasons with appreciable growth and yield parameters; while nursery raising of Surinam Cherry was successful. These structures could be helpful for the island farmers in raising crops requiring shade for their cultivation.

Enriched germplasm wealth of local vegetable crops

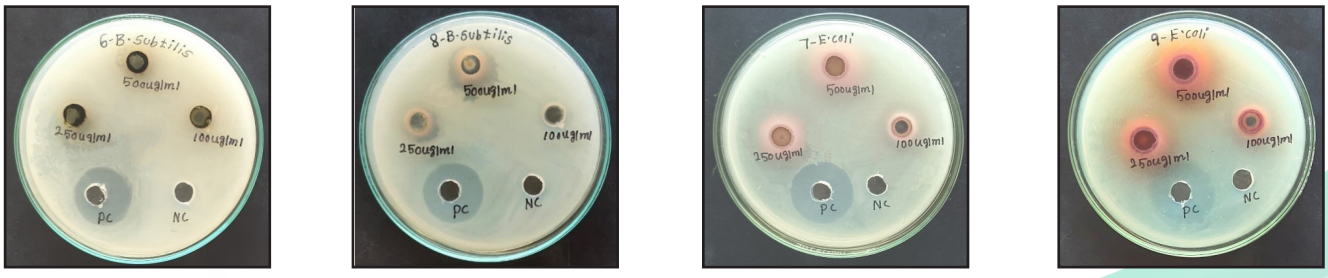
Raj Narayan

Enriched vegetable germplasm wealth of local vegetable crops' genotypes of Roselle (02), Poi bhaji (03), Chilli (01), Amaranths (01), Madrasi bhaji (01), Ivy gourd (01), mint (01), okra (01) from Mukkapahad and Rangchang, South Andaman.

Antibacterial activity of *Pterocarpus dalbergioides*

I. Jaisankar

Antibacterial activity of *Pterocarpus dalbergioides* (Andaman Padauk) tree parts *viz*., Leaf, bark, stem and resin were tested with three different crude concentrations (500, 250 and 100 µg/ml)methanolic extracts of its dried samples collected from the CIARI field. Three different bacterial strains, such as *Bacillus subtilis*, *E. coli*, and *Staphylococcus aureus* were usedfor the study. Gentamicin was used as a positive control (20.15±1.23mm).



Leaf against B.subtilis | Leaf against B.subtilis | Leaf against B.subtilis | Leaf against B.subtilis

Plate 1. Antibacterial activity of *Pterocarpus dalbergioides*

Out of leaf, stem, bark and resin, the stronger zone of inhibition was 21.35±0.21 mm with the stem and a moderate zone was 8.85±0.21 with the leaf against *B.subtilis*. Bark, has good zone formation against *E.*

coli bacterial strain with a diameter of 16.85±0.21. The resin part showed strong against in all the three bacterial strains, with the highest zone recorded against *E.coli* (18.45±0.35 mm). The results revealed that all the parts of Padauk possess antibacterial activity,

Development of milk replacer in Andaman and Nicobar Islands for goat kids

P. Perumal and I. Jaisankar

The milk yield of Andamani goat and Teressa goat was insufficient to adequately support the nutritional requirements of multiple kids per doe. Although the body weight and growth rate of kids improved when suckling on the dam's milk in line with standard references, the limited milk availability remained a constraint to optimal growth.To overcome this limitation, a milk replacer was developed utilizing locally available feed resources. Preliminary evaluation demonstrated that the replacer is highly effective, resulting in significant improvements in kid health, growth rate, and body weight gain compared to reliance on maternal milk alone. This intervention provides a sustainable strategy to support kid survival and productivity under local farming conditions.

Standardisation of high stocking density nursery rearing of Labeorohita and shrimp culture in biofloc system

Chittaranjan Raul, J. Praveenraj and R. Kiruba Sankar

The high stocking density nursery of *Labeo rohita* spawn to fry experiment was conducted for 30 days in different stocking densities of 5000, 6000 and 7000 numbers per m^3. The survival, growth, length gain, condition factor, FCR and floc composition was analysed. The result of this study found that the 5000 stoking density showed significantly higher survivability and growth than other densities. Between biofloc and zoofloc (biofloc enriched with fresh water zooplankton Moina micrura) treatments, the latter one performed significantly higher condition factor and FCR.

Commercialisation, impact assessment and technology spread of Dweep MASMIN poultry feed in Minicoy, Lakshadweep Islands

T. Sujatha, Y. Gladston, S.M. Ajina, E.B. Chakurkar, R. Kiruba Sankar and K. Saravanan

The technology ''Dweep MASMIN poultry feed'' was developed, applied for patent and commercialised to a local entrepreneur in Minicoy Island. The production of MASMIN-based poultry feed has sustained the availability of poultry feed at the organised poultry farm, Regional Station, Minicoy, Lakshadweep Islands. Its production continues with 450 kg per month, with a cumulative production of 5.0 tons to feed the poultry. With the feeding of MASMIN poultry feed, the body weight of hybrids such as Sasso and Gramasree has reached 1.8 kg and 2.2 kg, respectively, at the market age of 20 weeks. The hen housed egg production of 13.0 to 15.0 eggs per month per hen is recorded. Technological intervention with the technology has reduced the feed cost by 25.5 to 30.0 per cent. Further, the technology has caused round the year availability of high-quality poultry feed at the farm.

National Surveillance Programme on aquatic animal diseases, phase II

J. Praveenraj, R. Kiruba Sankar and Chittaranjan Raul

A case of abdominal dropsy in freshwatercat fish *Anabas testudineus* (Climbing perch) was recorded. The specimen, upon dissection, revealed a filled belly with pale liver and liquefied kidney. The pathogen was isolated from the liver and confirmed as *Aeromonas veronii* through 16Sr RNA PCR sequencing.

Technology spread and impact: GPS technology adoption on fishing efficiency and livelihood enhancement in Car Nicobar Island

R. Kiruba Sankar and Sharath S. Yeligar

The introduction and training on the use of Global Positioning System (GPS) technology among the fishermen of Car Nicobar has brought about remarkable improvements in their fishing efficiency, income generation, and overall livelihood. The GPS devices were also provided as inputs to promote their fishing and navigational efficiency. A "before and after" intervention framework revealed that the adoption of GPS enabled them to navigate an additional 3.2 kilometres into the sea and operate at depths of up to 200 meters, representing a 64% improvement over traditional fishing practices. The number of fishing trips increased significantly, from 10 to 17 per month, as 88% of the fishermen reported enhanced confidence in locating and returning from productive fishing grounds. The implementation of GPS resulted in a net profit gain of ₹16,550 per trip; 2.6 times higher than before. This translates to a Benefit-Cost Ratio (BCR) of 2.6, indicating that every rupee invested yielded ₹2.60 in return. Overall, the spread of GPS technology has had a transformative impact on the Car Nicobar fishing community, strengthening their economic resilience, promoting technological empowerment, and enhancing sustainable livelihood outcomes. The GPS devices were provided as inputs through the DST- Coastal Fisheries Information Hub scheme as well as the Scheduled Tribe Component (STC) of ICAR-CIARI.

Schedule Tribe Component

Programme	Number	No of Beneficiaries (M+F=T)
Trainings	10	723+216=939
Demonstration	9	216+120=336
Input distribution	8350	685+512=1197

Important Events Held

Workshop on "Application and management of e-office and e-HRMS system in Official Language Hindi"

ICAR-Central Island Agricultural Research Institute (ICAR-CIARI), Sri Vijaya Puram, organised a workshop on "Application and Management of e-Office and e-HRMS Systems in Official Language Hindi" on 09.07.2025 at Dr. T. R. Dutta Conference Hall. The workshop was held under the chairmanship of Dr. Eaknath Bhanudasrao Chakurkar, Director, ICAR-CIARI. At the outset, Shri Alex Praveen Barla, in charge, Hindi Cell, welcomed all the participants and briefed them about the objectives and significance of the workshop. A detailed lecture, along with a live demonstration and PowerPoint presentation, was delivered by Shri. Kanishk Bhukar, Administrative Officer, on the topic "Application and Management of e-Office and e-HRMS Systems in Official Language Hindi." The Director, ICAR-CIARI, emphasised the importance of maximum usage of Hindi in official administrative work and encouraged all administrative and technical staff to adopt Hindi extensively. The workshop witnessed active participation from around 85 staff members, including scientists, technical, administrative, and supporting staff, who greatly benefited from the sessions.The programme concluded with a formal vote of thanks proposed by Smt. Teena, T-6.

Plate 2. Workshop at ICAR-CIARI on e-Office and e-HRMS System Implementation in Hindi

Celebration of National Goat Day

ICAR-CIARI, Sri Vijaya Puram, celebrated National Goat Day on 12 July, 2025 at Namunaghar village, South Andaman. As part of the programme, an Awareness Campaign-cum-Animal Health Camp was organised under the AICRP on Goat Improvement in the newly adopted village of Namunaghar.The event was chaired by Dr. Jai Sunder, Head, Division of

Animal Science, and inaugurated by Mr. Venketeshwar, PanchayatPradhan of Namunagar village. Dr. Rafeeque R. Alyethodi, Principal Investigator of AICRP on Goat Improvement and Senior Scientist, Division of Animal Science, welcomed the farmers and highlighted the significance of National Goat Day, along with ongoing activities under the project. In his address, Dr. Jai Sunder discussed scientific goat farming practices and emphasised the project's role in enhancing goat productivity in the region. He also interacted with farmers, addressing key health concerns and advocating best management practices for sustainable goat farming. A total of 25 farmers participated in the event, making it a successful initiative to promote scientific goat rearing and animal health awareness in the Andaman Islands.

Plate 3. Animal health camp

ICAR-CIARI Hosts Farmers Fair and PM Kisan Samman Nidhi Live Streaming Event

On August 2, 2025, the ICAR Central Island Agricultural Research Institute (CIARI), Sri Vijaya Puram, organised a farmer-scientist interaction along with the live streaming of the PM Kisan Samman Nidhi programme at the Dr T.R. Dutta Conference Hall, CIARI. The occasion was marked by the active participation of local farmers and the display of technological innovations for the benefit of the island's farming community.The event was coordinated by Dr R. Kiruba Sankar, Senior Scientist, with a team of scientists representing various fields, including agriculture, animal husbandry, and fisheries, under the guidance of Dr. Eaknath B. Chakurkar, Director of CIARI. The CIARI experts engaged in interactive discussions with attending farmers, emphasised the significance of the event, and highlighted the innovative technologies designed to support sustainable and productive agriculture on the islands. A total of 130 participants from diverse villages across Sri Vijaya Puram and Ferrargunj taluk took part in the activities.

Plate 4. PM Kisan Samman Nidhi Live Streaming Event

Celebration of 79th Independence Day

The ICAR-Central Island Agricultural Research Institute commemorated the 79th Independence Day with immense enthusiasm and joy at its Garacharma campus, as well as at KVK South Andaman, KVK North and Middle Andaman, KVK Nicobar, and the Regional Station in Minicoy. Staff members and their families attended the flag hoisting ceremony. The celebrations began with the National Flag being raised by Dr. Eaknath B. Chakurkar, the Director of ICAR-CIARI, followed by the singing of the National Anthem. He highlighted the institute's achievements, which include the granting of six patents and the commercialisation of five technologies this year, featuring innovations such as DweepTickure, Dweep leaf separator, DweepCinn Rub, Dweep MAS Poultry feed, and Dweep Go Fly.He also emphasised that 18 varieties developed by the institute have been recommended for release by the UT subcommittee on seed (SVRC), with Malabar tamarind and Indian Bay leaf being released for the first time in the country. The Director, CIARI, appreciated the efforts of the CIARI team in bringing laurels to the institute and was motivated to carry forward the zeal and enthusiasm for the benefit of the Island farming community.

Plate 5. 79th Independence day celebration

Training Programme on Artificial Insemination in Goats in collaboration with AH&VS, A&N Administration

The Division of Animal Sciences, ICAR–Central Island Agricultural Research Institute (CIARI), in collaboration with the Department of Animal

Husbandry and Veterinary Services (AH&VS), A&N Administration, organized a two-day training programme on Artificial Insemination (AI) in Goats on August 18–19, 2025, at the CIARI campus, Sri Vijaya Puram, under the AICRP on Goat Improvement. The programme aimed to build the capacity of field veterinarians and para-veterinary staff in advanced reproductive technologies to support goat improvement initiatives. The sessions were coordinated by Dr. P. Perumal, Senior Scientist (Animal Reproduction), Dr. Prakash Bala, Principal Scientist (Animal Nutrition), and Dr. R.R. Alyethodi, Senior Scientist (Animal Genetics).Inaugurating the programme, Dr. Eaknath B. Chakurkar, Director, CIARI, highlighted the role of AI in improving productivity and enhancing farmers' livelihoods. Participants received hands-on training in semen collection, evaluation, and insemination techniques, along with laboratory demonstrations on semen processing and quality control at the CIARI Goat Farm.

Plate 6. Training Programme on Artificial Insemination in Goats

Basic Computer Literacy: Hands-on Training for Skilled Supporting Staff

A two-day hands-on training program focused on Basic Computer Literacy for Skilled Supporting Staff was conducted at the Agricultural Knowledge Management Unit (AKMU) of ICAR-Central Island Agricultural Research Institute on August 28 and 29, 2025, as part of its Human Resource Development (HRD) initiative. The program commenced on August 28, 2025, with an inauguration by Dr. Eaknath B. Chakurkar, the Director of ICAR-CIARI. During his opening address, the Chief Guest highlighted the importance of computer literacy for all staff members to effectively use e-HRMS and SPARROW, which are digital platforms designed for managing human resource processes, service records, and various government services. Acquiring fundamental computer skills, including typing, software usage, and internet browsing, is crucial for employees to submit leave applications and use SPARROW for Smart Performance Appraisal Report Recording. He encourages participants to actively participate in the hands-on training sessions conducted by experts.. Shri D. Karunakaran, Scientist and Course Director, extended a warm welcome to the attendees and detailed the training objectives, which encompassed essential computer skills, E-HRMS, and Email.

The practical training was conducted by Smt. Asma Bibi, Senior Technical Assistant, Shri K. Ali Akbar, Technician, and Mr. C.P. Vijayan, Young Professional-I. A total of 25 Skilled Supporting Staff took part in the program, which was organized into two batches.

Plate 7. Hands-on Training for Skilled Supporting Staff

हिंदी पखवाड़ा–2025 का समापन समारोह

भा. कृ. अनु. प.–केंद्रीय द्वीपीय कृषि अनुसंधान संस्थान, श्री विजयपुरम के डॉ.टी.आर. दत्ता सम्मेलन हॉल में हिंदी पखवाड़ा–2025 का समापन समारोह आयोजित हुआ। कार्यक्रम की अध्यक्षता निदेशक डॉ. एकनाथ भानुदासराव चाकूरकर ने की तथा मुख्य अतिथि के रूप में श्रीमती रिंकू नारायण,वकील उपस्थित रहीं।

हिंदी कक्ष प्रभारीश्री एलेक्स प्रवीण बरलाने स्वागत भाषण प्रस्तुत करते हुए पखवाड़े के दौरान आयोजित गतिविधियों की जानकारी दी। इस अवसर पर संस्थान कीराजभाषा पत्रिकाका लोकार्पण मुख्य अतिथि, निदेशक और प्रधान संपादक डॉ. राज नारायण ने किया। तत्पश्चात तत्काल भाषण प्रतियोगिता का आयोजन हुआ, जिसमें हिंदी एवं अहिंदी वर्गों के कर्मचारियों ने उत्साहपूर्वक भाग लिया। पखवाड़े की सभी प्रतियोगिताओं के विजेताओं को नकद पुरस्कार और प्रमाणपत्र प्रदान किए गए।

और कार्यालयीन कार्यों में उसके प्रयोग पर प्रकाश डाला। अध्यक्षीय भाषण मेंडॉ. राज नारायण ने अहिंदी

Plate 8. हिंदी पखवाड़ा–2025 का समापन समारोह

भाषी कर्मियों को हिंदी से जोड़ने, संवाद की समस्याओं के समाधान और सीखने के अवसर उपलब्ध कराने पर बल दिया।

इस कार्यक्रम में कुल 81प्रतिभागी सम्मिलित हुए, जिनमें वैज्ञानिक, तकनीकी, प्रशासनिक, कुशल सहायक तथा संविदात्मक कर्मचारी शामिल थे। समारोह का संचालन श्रीमती टीना, वरिष्ठ तकनीकी अधिकारी ने किया और धन्यवाद ज्ञापन श्री ब्रजेश कुमार, तकनीशियन ने प्रस्तुत किया।

हिंदी पखवाड़ा–2025 का सफल आयोजन संस्थान के निदेशक डॉ. एकनाथ भानुदासराव चाकूरक रके मार्गदर्शन एवं प्रेरणा से संभव हुआ।

Awards/ Honours/Recognitions

Date	Name	Achievements/Recognitions	Event
August 8, 2025	Dr. Santosh Kumar	Deputy Commissioner's Commendation Certificate	Independence Day event of 15 August 2025 at Car Nicobar
September 14, 2025	Dr. Raj Narayan	Chairman of a Technical Session	9th International Conference "Sustainable Environment For Agriculture, Biodiversity, Technology And Market For Next Generation", held at Himachal Pradesh University, Shimla, during Sept. 13-14, 2025. (Joined online).
September 25–26, 2025	Dr. Raj Narayan	Keynote Speaker and Co-Chairperson of the Technical Sessions	International Conference on "Frontiers in Science and Technology for Agricultural Transformation" (FSTAT-2025), held at ICAR–National Academy of Agricultural Research Management (NAARM), Hyderabad during Sept. 25–26, 2025.

Trainings/ Meetings/Campaigns

Name of the trainings/ meetings/campaigns programmes	Venue	Date	Participants (M/F/T)	Organizing committee/ coordinators
Training programme on Scientific Bee Keeping under National Bee Keeping & Honey Mision (NBHM) Scheme	Gram panchayat Rampur, Swadeshnagar, Harinagar, Pernasala, Urmilapur	01/07/2025	37/84/121	Department of agriculture in collaboration with ICAR KVK Nimbudera
Awareness Generation Programme Among Farmers on Hygiene, Pest Identification, and Safe Biopesticideuse	Tribal Council office, Big Lapathy	01/07/2025	23/33/56	Dr. Santosh Kumar

Name of the trainings/ meetings/campaigns programmes	Venue	Date	Participants (M/F/T)	Organizing committee/ coordinators
Training Programme on "Skilling Krishi Sakhis in Natural Farming"	ICAR KVK Nimbudera	01/07/2025	5/11/16	Mr. Rakesh Dawar Dr. V. Damodaran Er. Manoj Kumar Mr. Yatharth Sharma Mr. Subam Debroy
Cleanliness drive of office and surrounding of KVK under Swachhata hi Sewa	ICAR-KVK, Car Nicobar	09/07/2025	12/18/30	Dr. Santosh Kumar
Best practices for paddy crop management & seed production in island conditions	Gram Panchayat Harinagar	10/07/2025	20/2/22	Dr. P.K. Singh Dr. V. Damodaran Mr. Rakesh Dawar
Awareness campaign cum Interaction meeting with tribal healers under DST of Ethno veterinary medicinal practices	Car Nicobar	12/07/2025	2/15/17	Dr. T.Sujatha Dr. A.K.De
Ethno veterinary tribal medical knowledge and herbal product development	Tapoiming, Car Nicobar	12/07/2025	12/18/30	Dr. T. Sujatha Dr. Arun de
Scientific livestock farming for livelihood security of tribal farmers of Nicobar		12/07/2025 to 14/07/2025	12/18/30	
Scientific pig farming management for tribal farmers		12/07/2025 to 14/07/2025	12/18/30	
Value addition and entrepreneurship in horticulture	Kakana, Car Nicobar	22/07/2025 to 24/07/2025	10/30/40	Dr. Akshay
64th Meeting of Technical Committee Of High Value Agriculture Development Agency (HVADA)	Directorate of Agriculture, Haddo, Sri Vijaya Puram	23/07/2025	4+7=11	Project Director, HVADA /Joint Director, Agri., A&N Islands
Skill development training programme on IMC Breeding	Uttara, Nilambur Panchayat	28/07/2025 to 30/07/2025	37/18/55	Dr. V. Damodaran Mr. Subam Debroy
Training Programme on "Non-Conventional Energy Sources in Agriculture"	Gram Panchayat Paschimsagar, Diglipur	06/08/2025 to 08/08/2025	20/12/32	Er. Manoj Kumar Mr. Rakesh Dawar
Parthenium Awareness Week' from 16-22 August, 2024	ICAR KVK Nimbudera	16/08/2025 to 22/08/2025	18/6/24	Dr. V. Damodaran Er. Manoj Kumar Mr. Yatharth Sharma Mr. Subam Debroy Mr. Rakesh Dawar
Organic oyster mushroom cultivation	ICAR-CIARI-KVK, South Andaman	18/08/2025 to 21/08/2025	5/8/13	Shri. Mohit Miss Sushma Dr. Zachariah George Mrs. Pooja Kapoor

Name of the trainings/ meetings/campaigns programmes	Venue	Date	Participants (M/F/T)	Organizing committee/ coordinators
Training on Modern Paddy Cultivation Techniques.	Panchayat Smiti Hall Rangat	21/08/2025 to 23/08/2025	25/06/31	Dr. V. Damodaran Mr. Rakesh Dawar Er. Manoj Kumar Mr. Yatharth Sharma Mr. Subam Debroy
Annual Zonal Workshop 2025 of KVKs under ICAR-ATARI Zone-V Kolkata	UBKV-KVK, Cooch Behar	28/08/2025 to 30/08/2025	100/28/128	Dr. V. Damodaran
Awareness programme on national surveillance programme for aquatic animal diseases	Badmashpahad, South Andaman	29/08/2025	15/08/23	J. Praveenraj Chittaranjan Raul R. Kiruba Sankar Y. Ramakrishnan, Zachariah George Thanmai Paul
Field day on Culture of Shrimp in Biofloc system	Marine Hill Research Lab, ICAR-CIARI	02/09/2025	25/03/28	Chittaranjan Raul R. Kiruba Sankar J. Praveenraj Y. Ramakrishnan
Awareness programme on national surveillance programme for aquatic animal diseases		02/09/2025	25/03/28	J. Praveenraj Chittaranjan Raul R. Kiruba Sankar
World Coconut Day	Horticulture Research Farm, Sippighat	04/09/2025	0/23/23	Dr. Ajit Arun Waman
Exposure visit of students from GSSS Karmatang	ICAR KVK Nimbudera,	17/09/2025	12/22/34	Dr. V. Damodaran Er. Manoj Kumar Mr. Yatharth Sharma Mr. Subam Debroy Mr. Rakesh Dawar
Exposure visit of students from GSSS Karmatang		17/09/2025	0/0/34	
Swachhta Hi Sewa		17/09/2025 to 02/10/2025	108/79/187	
Online weekly training for extension functionaries on "Good Animal Husbandry Practices"	Online	05/09/2025 to 29/01/2026	24/06/30	Dr. Rama Krishna Dr. Zachariah George Dr. Jai Sunder

Plate 9. Glimpses of training/exposure/field day

Publications

Abhilash, Satpathi, A., Harshangkumar, T., Subramani, T., Jaisankar, I., & Shahi, N.K. (2025). Climatological and Hydrological Extremes of the Andaman and Nicobar Islands, India, and Its Database for Public Users. *Atmosphere*, *16*(3), 301. https://doi.org/10.3390/atmos16030301 (NAAS Rating: 8.30)

Bohra, P., Waman, A.A. and Karthika Devi, R. (2025) Extended distribution, key field notes, and morphological variations in endemic *Garcinia dhanikhariensis* S.K. Srivastava: a step towards domestication. *Genetic Resources and Crop Evolution*, https://doi.org/10.1007/s10722-025-02534-5 (NAAS rating: 7.60)

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- Raj Narayan, S.P. Kanaujia and Sumati Narayan. (2025). Enterprises and Enterprenuership in Agriculture.In: Innovative Approach for Climate Smart Agriculture.(Eds.- Ratnesh Kumar Rao,Dr. Vikas Gupta& Dr. Kalpana Singh). *Mahima Research Foundation and Social Welfare*, Varanasi-221005, UP, India. pp. 177-183.ISBN: 978-81-965883-3-5

TOT including radio talks/ TV programme broadcast

Title	Date of Broadcast	Expert
Scope of Aquaponics farming system in Andaman	31/07/2025	Dr. Chittaranjan Raul
Value addition in fruits and vegetables for income generation	18/09/2025	Dr. Pooja Kapoor

IPRs/Commercialisation of Technology

Patent Granted	Inventors
Fly Repellent Composition and Method of Preparation Thereof (Patent No. 570615) Granted on 12.09.2025	Mr. Talaviya Harshangkumar, Dr. Debasis Bhattacharya, Dr. T. Sujatha, Dr. Arun Kumar De, Dr. P Perumal, Dr. Jai Sunder, Dr. Abhilash and Dr. E.B. Chakurkar
Design Granted	**Inventors**
Air layering bag (Patent No: 401604-001) granted on 15.09.2025.	Dr. Ajit Arun Waman and Dr. Pooja Bohra
DWEEP-Pandanus Fruit Pulp Extractor	Dr. I. Jaisankar, Dr. T. Subramani and Dr. E.B. Chakurkar

Commercialisation of Technology	Inventors
Dweep Microclimate Monitor, commercialized to Mr. Sanjesh Kumar Tripathy, Proprietor: AgriClimSense, Liwan, Sonipat Haryana-122006, on 29.09.2025 with a license fee of Rs. 125000/-	Dr. Abhilash, Dr. I. Jaisankar, Dr. Talaviya Harshangkumar, Dr. E.B. Chakurkar

Development of a Double Recovery Protocol for Agar and Hydrophilic Biomass from Red Seaweeds

(Team: R. Kiruba Sankar, T. Sujatha, E.B. Chakurkar, Jai Sunder, Harshang Talaviya, Abhilash)

A double recovery protocol was standardised for the simultaneous extraction of agar and a hydrophilic biomass fraction from selected red seaweed species during the reporting period. The newly developed process optimises the utilization of seaweed raw material by enabling the recovery of two valuable components in a single extraction sequence. The agar obtained through this method exhibits desirable gel strength and clarity comparable to conventionally extracted agar. In addition, the residual hydrophilic biomass recovered after agar extraction possesses functional properties such as high water-holding capacity and biopolymer content, indicating its potential use in food formulations, microbiological media, and agricultural applications such as soil conditioners or biostimulants. This double recovery approach not only enhances the overall value of seaweed resources but also promotes the sustainable and eco-friendly utilisation of marine biomass. This can stimulate seaweed-based livelihood opportunities and strengthen the economic viability of seaweed aquaculture in the Andaman Islands by providing diversified product avenues and local processing potential.

Women empowerment activities/trainings

Day Training Programme on "Skilling KrishiSakhis in Natural Farming"

ICAR-Krishi Vigyan Kendra, Nimbudera organized a one-day training programme on "Skilling Krishi Sakhis in Natural Farming" on 01 July, 2025 with the objective of empowering rural women through skill development in eco-friendly farming practices. The training aimed to strengthen the capacity of *Krishi Sakhis*—grassroots-level women agriculture workers in promoting sustainable and chemical-free agriculture. The programme commenced with a welcome and introductory session by Mr. Rakesh Dawar, SMS (Agronomy). He elaborated on the objectives and importance of the training, highlighting the need for adopting natural farming techniques to enhance soil health, reduce input costs, and improve the livelihoods of small and marginal farmers in the islands. During the technical session, Er. Manoj Kumar, Subject Matter Specialist (Agricultural Engineering), delivered a lecture on the role of natural farming in island ecosystems. He addressed the challenges arising from limited resources and highlighted the importance of low-input, sustainable practices tailored to the unique agro-ecological conditions of North and Middle Andaman. Mr. Subham Debroy, SMS (Aquaculture) explained the key components of natural farming. Mr.Yatharth Sharma, SMS (Home Science), shared valuable insights into the nutritional benefits of organic farm produce and its role in improving the health and well-being of rural communities. In the post-lunch session, a hands-on training was conducted by Mr. Rakesh Dawar, where participants learned the preparation and application of natural farming inputs such as *Beejamrit* (seed treatment solution), *Jeevamrit* (soil microbial inoculant), *Neemastra*, and *Agniastra* (botanical bio-pesticides). The session featured live demonstrations on the application methods and dosage of these bio-inputs, equipping the Krishi Sakhis with the knowledge to implement and promote these techniques in their own villages.The Krishi Sakhis appreciated the hands-on training and showed keen interest in adopting and promoting natural farming in their communities.In the programme 21 rural women participated and benefited from the training. The programme was conducted under the supervision of Dr. V. Damodaran, Senior Scientist and Head, KVK, North and Middle Andaman, with overall guidance from Dr. Eaknath B. Chakurkar, Director, ICAR-CIARI, Sri Vijaya Puram.

Plate 10. Training Programme on "Skilling KrishiSakhis in Natural Farming"

Demonstration on preparation of Jackfruit

Method demonstration on preparation of Jackfruit and VCO to around 12 women from SHG in ICAR-CIARI- KVK, South Andaman. Demonstration was coordinated by Dr. Pooja Kapoor, SMS and team.

Participation in seminars/ symposia/ conferences/ workshop

Name	Programme	Details
Dr. J. Praveenraj	12th Symposium on Diseases in Asian Aquaculture (DAA12)	Organised bythe Asian Fisheries Society (AFS) in collaboration with the ICAR-Central Institute of Brackishwater, Aquaculture, Chennai on 27.09.2025
Dr. V. Damodaran Dr. Santosh Kumar	Annual Zonal Workshop 2025	Uttar Banga Krishi Viswavidyalaya- KVK Cooch Beher on 28-30 August, 2025
Dr. Pooja Kapoor Ms. Sushma	Webinar on Agri food business incubation center	Organized by ICAR-ATARI, Kolkata on 04.09.2025

Distinguished visitors

Date	Visitor	Place of visit	Remarks
07 August, 2025	Shri. Chandra Bhushan Kumar IAS, Chief Secretary of Andaman and Nicobar Islands	Demonstration fields of KVK, Car Nicobar	Appreciated the commitment of KVK, CIARI in implementation of innovative approaches and sustainable solutions to the farming community


Plate 11. Shri Chandra Bhushan Kumar, IAS, Chief Secretary, Andaman & Nicobar Islands, visited KVK, CAR Nicobar

New projects/ initiatives & Infrastructure development

ICAR-CIARI Inaugurates Island's First Coastal Fisheries Information Hub at Car Nicobar Island

(R Kiruba Sankar, K Saravanan, J Praveenraj, D Karunakaran)

The Director of ICAR-Central Island Agricultural Research Institute (CIARI) officially inaugurated the Coastal Fisheries Information Hub at Car Nicobar Island, established under the DST-funded Coastal Fisheries Hub (STI) Scheme. The hub is designed as a knowledge and resource centre, providing comprehensive information on delineated Ecologically Sensitive Areas (ESAs), small island management plans developed through citizen science initiatives, and community-based fisheries management strategies formulated in close

partnership with the Car Nicobar Tribal Council. With an infrastructure investment of approximately ₹20.00 Lakhs, the facility includes a modern fish sale point, storage facility, and an educational centre. The educational wing is equipped with interactive kiosks, IT infrastructure, Distress Alert Transmitters, High frequency communication devices, and GPS devices, ensuring technology-enabled fisheries management and improved livelihood opportunities for the Nicobari tribal community. The initiative is expected to strengthen sustainable fisheries governance, enhance community participation in marine resource management, and serve as a model for integrated coastal development in island ecosystems.

Agro-meteorological Observatory Upgradation

(Dr. Abhilash Dr. I. Jaisankar & Dr. E. B. Chakurkar)

Agromet Observatory of ICAR-CIARI has been upgraged with a rain gauge, Stevenson screen (housing dry bulb, wet bulb, maximum, and minimum thermometers), grass minimum thermometer, open pan evaporimeter, soil thermometer, wind vane, and wind anemometer and sunshine recorder under the IMD-sponsored Gramin Krishi Mausam Seva (GKMS). This upgradation has enabled to record critical weather parameters such as rainfall, maximum and minimum air temperature, relative humidity, soil temperature, wind speed, wind direction, evaporation, sunshine duration, and grass minimum temperature. project. The observatory is presently equipped with has also been procured and will be installed shortly. With this instrumentation, the observatory records.

MoU Renewal for Gramin Krishi Mausam Seva (GKMS) Project

Agromet Observatory of ICAR-CIARI has been upgraged with a rain gauge, Stevenson screen (housing dry bulb, wet bulb, maximum, and minimum thermometers), grass minimum thermometer, open pan evaporimeter, soil thermometer, wind vane, and wind anemometer and sunshine recorder under the IMD-sponsored Gramin Krishi Mausam Seva (GKMS). This upgradation has enabled to record critical weather parameters such as rainfall, maximum and minimum air temperature, relative humidity, soil temperature, wind speed, wind direction, evaporation, sunshine duration, and grass minimum temperature. project. The observatory is presently equipped with has also been procured and will be installed shortly. With this instrumentation, the observatory records.

Plate 12. Agro-meteorological Observatory Upgradation

Consultancy Project: Department of Environment and Forests, Sri Vijaya Puram

(Dr. I. Jaisankar)

A consultation project on Third party monitoring of works executed under the state CAMPA fund, funded by Department of Environment and Forests, Sri Vijaya Puram was sanctioned on 12.09.2025.

Other information

- Dr. R. Kiruba Sankar was identified and nominated as an Expert member (Fisheries) of the UT Wetland Authority, Andaman and Nicobar Administration by the office of the Chief Conservator of Forests, Andaman and Nicobar Islands.
- Dr. J. Praveenraj was identified as a resource person for the training programme on Taxonomy, biodiversity and habitat assessment of inland fishes 8-12 September, 2025 organized by ICAR-CIFRI, Barrackpore.
- Dr. Ajit Arun Waman provided technical guidance for scientific cultivation and processing of spices to the Andaman and Nicobar Administration which helped the launch of state-wide SPICE PRAVAH scheme for the island farmers.
- Dr. Sanketh G.D., SMS (Agronomy), KVK Nicobar, delivered a series of lectures on “Pests and Diseases of Honey Bees” in coordination with the Department of Agriculture, Nicobar. The programme was organized under the framework of the National Beekeeping and Honey Mission (NBHM).

Personnel

Promotion

- Dr. I. Jaisankar promoted to grade pay level -14 on 21st August, 2025

Retirement

- Dr. Eaknath Bhanudasrao Chakurkar, Ex-Director on 30th September, 2025

Students Exposure Visit to ICAR-CIARI

Published by	:	Dr. Eaknath B. Chakurkar, Director, ICAR-CIARI
Compiled & Edited by	:	Dr. T. Sujatha, Dr. R. Kiruba Sankar and Mr. D. Karunakaran
Typesetting & Designing	:	Mrs. Asma Bibi and Mrs. Nazneen Khan
Photographs	:	Mr. K. Ali Akbar
Address	:	ICAR-Central Island Agricultural Research Institute, Sri Vijaya Puram-744105, A & N Islands
Phone No.	:	03192-250436
E-mail	:	director.ciari@icar.org.in