



काजू समाचार CASHEW NEWS

भा.कृ.अनु.प. - काजू अनुसंधान निदेशालय, पुत्तूर का अर्धवार्षिक समाचार पत्र

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Director's Desk

Advancing Cashew Productivity through Genetic Excellence and Precision Nutrition

The cashew industry stands at a pivotal juncture where the demand for high-quality kernels must be met with sustainable, high-yielding cultivation practices. At ICAR-Directorate of Cashew Research (ICAR-DCR), our mission remains focused on bridging the gap between potential and actual farm yields. I am delighted to share two significant breakthroughs from our research; the release of the promising cashew variety 'Nethra Samruddhi' and the development of a specialized micronutrient formulation tailored for the crop, *i.e.* Cashew special.

Nethra Samruddhi is a seedling selection from VTH 30/4. It was found to be promising, with consistently high-yielding, cluster-bearing habit and high shelling percentage. The variety was selected based on the performance of seedlings that outperformed their parent, VTH 30/4. The key features of this variety are high-yield and protein content compared to earlier released varieties *viz.*, Bhaskara and NRCC Sel. 2. It is cluster-bearing in nature with 10-12 nuts per panicle, with uniform nut size of W210 grade kernels and high shelling percentage of 30.40%. It produces alternate flushes and flowering laterals even after TMB infestation.

The majority of cashew growing soils are low in soil fertility in terms of nitrogen, base status, cation exchange capacity and micronutrients such as zinc and boron. Due to heavy precipitation in the coastal areas where cashew is grown, the basic cations are washed out. The active flushing phenophase in cashew started after the cessation of north east monsoon and flowering and fruiting season of the crop coincide with summer. The limited soil moisture during summer poses a major challenge in soil application of nutrients to cashew during more nutrient demanding critical stages. This hinders flower development, flower, nut and fruit retention. The balanced micronutrient nutrition along with the nutrients such as potassium which is required during flowering and fruit development and magnesium which is generally deficient in humid tropical regions, is therefore essential for sustainable cashew production. The foliar application of nutrients is the best way to supplement nutrient demand during the critical growth stages in cashew. ICAR-DCR, Puttur has developed a cashew specific nutrient mixture through systematic research and field validation, which provides about 30% increase in nut and cashew apple yield. This micronutrient composition is highly soluble in water (95% to 100%) and it is suitable for application as a foliar spray on cashew plants, particularly those grown in acidic soils with a pH less than 7. The key features of this Cashew special are; it is designed specifically for cashew nutritional requirements, it is compatible with standard soil fertilizer schedule, suitable for different cashew growing soil conditions and it can be integrated into existing nutrient management practices. The composition is easy to apply, non-toxic to cashew plants, and cost-effective, making it an ideal solution for enhancing the growth, yield, and quality of cashew plants.





The synergy between the high-yielding variety Nethra Samruddhi and new foliar nutrition technology, Cashew special offers a comprehensive package for cashew farmers. By adopting superior genetics alongside precision feeding, growers can ensure higher profitability, better nut quality, and improved orchard health.

These technologies are expected to play a vital role in contributing towards achieving self-sufficiency of raw nuts in the country.


(J. DINAKARA ADIGA)

Focus on Research

Leaf Nutrient Diagnostics: A Smart Tool for Higher Cashew Productivity

Shamsudheen M., M.G.Nayak, J.D. Adiga, D. Prabha Susan Philip, T.R. Rupa, Babli Mog, Veena G.L., V Srinivasan, and S.K. Behera

Cashew is often described as a “hardy crop of marginal lands,” but this perception has also led to widespread neglect of scientific nutrient management. Across India's coastal belt, cashew plantations are largely grown on acidic, low-fertility soils, resulting in chronic nutrient deficiencies and sub-optimal yields. Recent research has clearly shown that balanced nutrition, guided by leaf nutrient diagnostic norms, can significantly improve cashew productivity

Importance of leaf nutrient diagnosis in Cashew

Cashew is a perennial, tree crop with heavy nutrient demand. Over the years, continuous removal of nutrients through nuts, apples, and biomass, without adequate replenishment, has depleted soil fertility. Visual deficiency symptoms of nutrients appear only at advanced stages, and are unreliable for fertilizer decisions. Hence, leaf analysis has emerged as a rapid and reliable diagnostic tool, reflecting the actual nutrient uptake by the tree rather than just soil availability. In cashew, the 4th and 5th fully matured leaves from the tip of current season shoots serve as the standard index leaves for diagnosis.

Development of Cashew Leaf Nutrient Norms

A comprehensive study covering major cashew-growing regions along India's east and west coasts established nutrient diagnostic norms using the DRIS (Diagnosis and Recommendation Integrated System) approach.

These norms classify leaf nutrient levels into deficient, low, optimum, high, and excessive categories, enabling precise nutrient correction. Trees with leaf nutrient levels within these ranges consistently recorded higher yields.

Optimum leaf nutrient ranges in cashew

Sl. No.	Name of the Macronutrient	Optimum range (%)
1.	Nitrogen (N)	2.23 – 2.82
2	Phosphorus (P)	0.13 – 0.18
3	Potassium (K)	0.91 – 1.47
4	Calcium (Ca)	0.92 – 1.39
5	Magnesium (Mg)	0.46 – 0.70
6	Sulphur (S)	0.75 – 1.14
Micronutrients (mg kg⁻¹)		
1	Iron (Fe)	285 – 398
2	Manganese (Mn)	200 – 409
3	Zinc (Zn)	54 – 74
4	Copper (Cu)	47 – 60
5	Boron (B)	22 – 46
6	Molybdenum (Mo)	3.0 – 4.4





Major nutrient constraints in Indian cashew orchards

Large-scale surveys revealed widespread nutrient deficiencies across cashew plantations, showing nitrogen deficiency in nearly two-thirds of orchards, potassium deficiency in about half of the plantations, severe deficiency of calcium and magnesium, linked to soil acidity, and widespread deficiencies of zinc, copper and boron. Soils were predominantly moderate to strongly acidic in nature, restricting nutrient availability and uptake, especially Ca, Mg, and micronutrients.

The leaf nutrient concentrations were highest during the flushing stage and declined during flowering and fruiting, particularly for nitrogen, phosphorus, and potassium. This decline is attributed to nutrient remobilization from leaves to developing flowers and nuts, emphasizing the importance of timely nutrient supply before and during these stages.

Based on leaf nutrient norms, growers can identify hidden hunger before yield loss occurs by fine-tuning fertilizer doses instead of blanket application, correct soil acidity using lime or dolomite to improve Ca and Mg availability and adopt site-specific nutrient management for sustainable productivity

Cashew should no longer be treated as a “no-input crop.” With increasing climate vagaries and declining soil fertility, leaf nutrient diagnostics provide a powerful decision-making tool for enhancing yields, farm income, and soil health. Integrating soil testing with leaf analysis and using established nutrient norms can help unlock the true potential of India’s cashew plantations.

From Waste to Wellness: Cashew Apple Fruit Bars

Veena, G.L., J.D. Adiga, Shamsudheen, M., Preethi, P., Rajashekara, H., Manjesh, G.N., Thondaiman, V. and Aswathy, C.

Fruit bars represent a significant category of value-added fruit products, favoured for their extended shelf life and convenience as a nutrient-dense snack. In many tropical regions, the cashew apple is frequently discarded as industrial waste despite being a rich source of Vitamin C and polyphenols, primarily due to its astringency and poor storability.

Blending the cashew apple pulp with guava presents a strategic opportunity to improve the sensory profile, specifically taste and texture of the resulting leather while reducing post-harvest losses. This work evaluates the physicochemical and organoleptic characteristics of these blended bars to establish a standardized production method that benefits both the agricultural supply chain and the functional food market.

Fresh cashew apples were harvested and subjected to a rigorous cleaning process to remove surface contaminants and were blanched. The blended fruit pulp was homogenized into a uniform solution. For the dehydration phase, the mixture was cast into thin layers and placed in a convective hot-air oven. The drying process was standardized at a constant temperature for a standardized duration. This specific time-temperature combination was selected to achieve a target moisture content that ensures a flexible, rubbery texture while preventing case hardening and maintaining nutritional integrity. Following complete dehydration, the resulting fruit leather was cut into desired geometric shapes for further quality evaluation.

The blend of cashew apple and guava in fruit bar development is impressive because of the unique



properties. The final bars are packed with antioxidants & Phenols (241mg/100g of total phenols and an antioxidant activity of 93.29 mg/100g), these bars help combat oxidative stress.

The product indicates a high infusion of essential minerals, including Potassium, Phosphorus, Calcium and Iron. The bars contain plant-based protein, making them a more substantial snack than traditional sugar-based candies. The presence of vital carotenoids adds both colour and health benefits. The development of the cashew apple and guava blended fruit bar marks a significant advancement by transforming a highly perishable harvest into a nutrient-dense, shelf-stable snack, this innovation effectively bridges the gap between post-harvest waste reduction and the growing demand for functional, clean-label confectionery.

The industrial production of cashew apple and guava fruit bars presents a lucrative opportunity for high-value agricultural upcycling. For a standard 1 kg production primary investment is the raw material, with quality cashew apples, guava and essential additives.

Operational expenses—including the intensive dehydration process and specialized moisture-resistant packaging. With a total production cost of approximately ₹120 per Kg excluding the machinery cost. The venture yields a substantial return; conservative wholesale pricing of ₹400 per kg (In market individual fruit bar cost ₹5 per 5g) with a benefit cost ratio of 2.33. This high profitability is driven by the ability to market a previously underutilised byproduct as a premium functional snack, particularly if manufacturers source cashew apples directly from farms during peak seasons to further minimize costs.



News and Events

PM-Kisan Utsav Diwas-2025

The Directorate hosted a training programme on "Scientific Cultivation of Cashew" as a part of PM-KISAN UTSAV DIWAS on 02.08.2025, during which the Hon'ble PM Shri Narendra Modi released the 20th financial instalment of PM-KISAN from Varanasi, Uttar Pradesh. The release was streamed live at the Directorate in which farmers and staff of the Directorate participated.

Dr. T.N. Raviprasad, Director-In-charge, ICAR-DCR, Puttur gave the introductory remarks in which he emphasized the importance of farmers and their involvement in attaining more ambitious economic goals for the country. He also discussed about the imperative role of this Directorate in educating farmers about cashew cultivation. Technical sessions were organized to create awareness on the scientific cultivation of cashew for the farmers.

The significance of using cashew cultivation techniques, such as choosing appropriate varieties, high density planting systems, and pruning responsive varieties suitable for high density and ultra-high density planting systems for yield enhancement was discussed by Dr. E. Eradasappa, Senior Scientist (Plant Breeding). Dr. Manjesh G.N., Scientist (Spices, Plantation, Medicinal and Aromatic Plants) gave a lecture on cashew nursery management and explained the significance of the grafting technique and aftercare for successful graft establishment. Dr. Vanitha K. Senior Scientist (Agricultural Entomology) highlighted about the major pests of cashew and their management which was followed by a lecture on important diseases of cashew and management by Dr. Rajashekara H., Senior Scientist (Plant Pathology). Subsequent to the technical sessions, scientists interacted with the farmers about the field problems faced by them during cultivation and management.



After the technical sessions, the live streaming of Hon'ble PM Programme was held at 11:00 AM. Inputs were distributed to the ST farmers after the programme and a total of 100 participants attended the training cum live streaming of PM-Kisan Utsav.



Workshop on Revitalizing the Indian Cashew Sector for Building Competitiveness and Enhancing Prosperity

A national-level workshop on “Revitalising the Indian Cashew Sector for Building Competitiveness and Enhancing Prosperity” was jointly organised by the Indian Academy of Horticultural Sciences (IAHS), New Delhi, ICAR–Directorate of Cashew Research (DCR), Puttur and the National Horticulture Board (NHB), Gurugram, in hybrid mode on 29.09.2025 at New Delhi. The workshop was co-chaired by Dr. Sanjay Kumar Singh, President, IAHS and DDG (Horticultural Science), ICAR, and Shri Priya Ranjan, Joint Secretary (Horticulture). The deliberations highlighted the need for a mission-mode approach, technological interventions in production and processing, and community-based pest management strategies to enhance productivity and align Indian cashew with global quality standards.

The technical sessions and panel discussions brought together scientists, policymakers, industry representatives, and farmers to deliberate on scaling up raw cashewnut production and revitalising the sector.

Emphasis was laid on high-yielding and climate-resilient varieties, mechanisation to reduce drudgery, modernisation of processing units, improved market intelligence, and value addition of cashew apple for enhancing farmers' income. Farmer success stories demonstrated the impact of scientific management and entrepreneurship, reinforcing the need for translational research and a coordinated, multi-pronged strategy to achieve self-sufficiency in cashew and strengthen India's global competitiveness. A total of 40 delegates attended the workshop physically.



Live Telecast of the launch of PMDDKY and Pulses Mission by the Hon'ble PM

The Hon'ble Prime Minister Shri Narendra Modi in a special Krishi programme organised at the Indian Agricultural Research Institute in New Delhi on 11.10.2025, launched Pradhan Mantri Dhan Dhanya Krishi Yojana (PM-DDKY), a landmark initiative for transforming India's agricultural landscape. The event was livestreamed at the Directorate and as a part of the programme, farmers were invited and technical sessions were arranged to familiarise the farmers about PM-DDKY and about scientific cashew cultivation and technologies developed at the Directorate. The programme commenced with the welcome by Dr. Eradasappa E, Principal scientist (Genetics and Plant Breeding), followed by a brief lecture about PM-DDKY by Dr. Manjesh G N, scientist (Spices, Plantation, Medicinal and Aromatic Plants). Dr. Veena G L, Senior



Scientist (Spices, Plantation, Medicinal and Aromatic Plants) gave a detailed presentation on the newly developed varieties, planting and after care, cashew apple processing and about newly develop machines for cashew apple and nut separation.

This was followed by the live telecasting of the PM Programme. After the telecast, the Memorandum of Agreement (MoA) was signed with Bharat Agri Farmer Producer Company Ltd. Mangalore for licensing of cashew varieties Nethra Jumbo-1, Nethra Ubhaya and Nethra Jumbo-2 for multiplication and commercialisation through nursery establishment under the approved RKVY project “Development of model cashew villages for transforming farm livelihoods in Karnataka”. Shri Prasad Shetty and the other board of Directors received the MoA from the Director on behalf of the FPCL. Dr. J Dinakara Adiga, Director, ICAR-DCR, Puttur gave the presidential address in which he emphasized the importance of such schemes and ended his remarks with a positive hope that a mission mode approach will be adopted in cashew for achieving self sufficiency. A total of 100 participants attended the programme in which 32 were farmers.



Commemoration of 150 years of Vande Mataram

An event on ‘Inauguration of mass singing of “Vande Mataram”, the National Song’, was organized on 07.11.2025 at ICAR-DCR, Puttur.

Dr. M.S. Venkatesh, Director (in-Charge), scientists, technical and administrative staff of DCR including contractual staff have actively participated in this event. The event banner was displayed and the short film about the event was played on www.vandemataram 150.in. Dr. K. Vanitha, Nodal Officer of this event briefed about the programme, and the year-long activities to be organized. A total of 42 participants attended this mass singing event.



Constitution Day

Samvidhan Diwas was observed on 26.11.2025 as part of the nation-wide celebrations commemorating the 75th year of the adoption of the Constitution of India. The programme began with the National Song, marking the start of the day’s events. Dr. K. Vanitha, Senior Scientist (Agricultural Entomology) and Nodal Officer for the programme, welcomed the staff and outlined the activities planned for the occasion. At 11:00 a.m., all staff members participated in the Reading of the Preamble to the Constitution and took the Constitution Day pledge.



As part of the observance, Mr. G. Ashwin, Finance and Accounts Officer, ICAR-DCR, delivered an enlightening talk on constitutional values, highlighting the history of the Constitution's framing and emphasizing the significance of fundamental rights. Dr. J. D. Adiga, Director, ICAR-DCR, addressed the gathering and spoke on the importance of the Indian Constitution in shaping the nation. A Constitution Day film was also screened to enrich the participants' understanding. Dr. Babli Mog, Senior Scientist (Plant Physiology), proposed the vote of thanks. The programme concluded with the National Anthem. A total of 70 participants took part in this programme.

In addition to the on-campus activities, the staff of ICAR-DCR actively participated in the online Reading of the Preamble at Constitution75.com and the online quiz hosted on MyGov.in. Certificates of participation were received for these activities.

EDP on Cashew Apple Utilisation and its Value addition

On the occasion of the release of the 21st instalment of the PM-KISAN scheme by the Hon'ble Prime Minister, an EDP on Cashew Apple Utilisation and its Value Addition was organised on 19.11.2025. The EDP was conducted under the Agri- Business Incubation (ABI) Centre of the institute. Krishi Sakhis, as para-extension workers, play a key role in linking government departments with farming communities.

The program aimed at imparting training to the Krishi Sakhis of Puttur and Kadaba taluk on cashew apple processing, value addition, waste reduction and entrepreneurship development.

Expert lectures were delivered by Dr. Veena G. L. and Dr. Jyoti Nishad, covering product diversification, processing technologies and quality aspects. The value-added products developed by the institute were showcased to the Krishi Sakhis to create awareness and interest in them. They were also sensitised about the various training programmes, services and incubation offered under the ABI. A total of 34 participants attended the programme.

During the valedictory session, participants expressed that the training enriched their understanding and motivated them to promote cashew cultivation and initiate small-scale cashew apple processing units in their villages.

World Soil Day

World Soil Day was celebrated on 5.12.2025. The theme of World Soil Day 2025 was "Healthy Soils for Healthy Cities" which shows that healthy and green cities are possible only if the soils are kept healthy. The Chief Guest of this year's World Soil Day was Dr C.A. Shreenivasa Murthy, Retired Professor and Head (Soil Science), UAS, GKVK, Bengaluru & Former Dean, CAU, Imphal, who spoke about soil management for successful Horticultural enterprises and ways to improve the productivity of horticultural crops, including cashew by nutrients and soil management.



Dr Venkatesh M.S., Principal Scientist (Soil Science) and co-ordinator of the event, in his welcome address, mentioned the background and history of the celebration of World Soil Day. Dr J. Dinakara Adiga, Director, ICAR-DCR in his presidential address mentioned the importance of healthy soils and organic management of soils. About 100 participants attended the event, and soil health cards were distributed to the farmers of Puttur and Sullia taluk. Two leaflets, *viz.*, Nutrient management in cashew and green manuring in cashew orchards, were released during the function. A demonstration was conducted to show the farmers the scientific way of collecting soil samples in cashew orchards.

Kisan Diwas

Kisan Diwas was celebrated on 23.12.2025 with a training cum input distribution programme organised by the Directorate, in collaboration with the Tribal Development Department and KVK, Kasaragod, for the Koraga community residing in Enmakaje Panchayat, Kasaragod district. The programme commenced with introductory remarks by Mrs Veena, Tribal Extension Officer, who highlighted the importance of livelihood-oriented interventions for tribal communities. Mrs Soudabi Haneef, Standing Committee Chairperson from the panchayat, briefed the participants about the importance of such programs in uplifting them and advised them to make the best use of such opportunities.



Dr. Aswathy Chandrakumar, Scientist (Agricultural Extension), and nodal officer Tribal Sub Plan (TSP) briefed the participants about the newly launched Government initiative “Viksit Bharat – Guarantee Rozgar and Ajeevan Mission”, focusing on employment and livelihood security. She also took a lecture on scientific cashew cultivation and informed the beneficiaries about the support and benefits available under the TSP scheme of the Directorate.

Ms. Divya Shekhar, Young Professional, Agri Business Incubation (ABI) Centre, elaborated on the value-added products developed from cashew apple and introduced the participants to the activities and entrepreneurship support services offered by the ABI Centre.

As part of the programme, to support their livelihoods, agricultural inputs, including chainsaws, sprayers, palm climbers, and spray hoses, were distributed to the beneficiary households to enhance their income. The programme effectively combined capacity building, awareness creation, and input support, reinforcing the Directorate’s commitment to inclusive agricultural development and livelihood enhancement of PVTG communities. A total of 40 participants attended the programme, including farmers and ST promoters.

Swachhta Hi Seva campaign

The ICAR-Directorate of Cashew Research, Puttur, organized various activities as part of the Swachhata Hi Seva campaign 2025 from 17.09.2025 to 01.10.2025, based on the theme “Swachhotsava”. The activities included webinars and workshops to sensitize the public about the importance of Cashew apple, walkathons, plantation drive, cleanliness drives, health camp for sanitation workers, distribution of PPE kits to farm staff and rangoli competitions. During the valedictory function, a talk on communicable diseases was delivered by Shri Yachcharesh V. H., Health Inspector, Urban Primary Health Centre, Puttur, who explained the causes, preventive measures, and significance of sanitation in controlling the spread of diseases. This was followed by a talk on health and hygiene by Smt. Lakshmi, Senior Primary Health Officer, Eshwaramagala.



Swachhta Special Campaign 5.0

A special swachhta campaign 5.0 was organised at the Directorate from 02.10.2025 to 31.10.2025. During the campaign, cleanliness drives and scrap disposal were initiated.

Swachhta Pakhwada 2025

The ICAR-Directorate of Cashew Research, Puttur organized Swachhta Pakhwada campaign from 16.12.2025 to 31.12.2025. The activities were planned and implemented according to the tentative activity schedule given from the council ensuring the active participation of ICAR-DCR staff, school students, youths and local residents of nearby villages.

Various activities were organized which includes cleanliness drives within and outside the institute, pledge taking by the ICAR-DCR staff, local residents of villages

and school students, short video contests and tagline competitions, awareness talks by experts and distribution of dustbins to local residents of nearby village for creating awareness on the importance of swachhta.



Transfer of Technology

Trainings

Two Days Skill Development Training on Nursery Management Techniques in Cashew

A two days Skill Development Training on Nursery Management Techniques in Cashew was organised from 18.08.2025 to 19.08.2025, sponsored by PM- RKVY RAFTAAR, Government of Karnataka. The training aimed to sensitize the participants about the basics of nursery management including sessions on establishment of mother orchard, grafting and after-care of cashew grafts.

The training programme commenced with a brief introduction by the Director, Dr. J. Dinakara Adiga in which he emphasized the role of nurseries in ensuring production of quality cashew grafts and the need for DCCD accreditation. The inaugural session was attended by Shri Prasad Shetty, Managing Director, Bharat Agri Development Farmers Producer Company Ltd. Vittal Branch, Dr. Aswathy Chandrakumar, Co-ordinator of the training programme, Dr. Bhagya H P, Co-coordinator cum Resource person and Dr. Eradasappa E, senior scientist and resource person of the training programme.

On the first day, the sessions exclusively dealt with establishment of scion bank and cashew nursery and its maintenance. The participants were taken to the nursery for scion stick collection followed by hands-on-training on grafting technique in cashew which is the widely adopted method for vegetative propagation of cashew.

Disease and pest management is an important aspect of commercial nursery management. On the second day, Dr. Rajashekara H, Scientist (Plant Pathology) delivered a lecture on the common diseases that occur in cashew nurseries and its management followed by a lecture on common pests, symptoms and its management delivered by Dr. T N Raviprasad, Principal Scientist (Agrl. Entomology). The participants were also briefed about cost economics of establishing a cashew nursery so that they can understand how to make it a profitable venture.



The training concluded with valedictory session in which certificates along with a kit comprising of grafting knives and pruning secateurs were distributed to the participants. A total of 10 participants attended the training.

Empowering *Krishi Sakhis* on Cashew Production and Post Harvest Processing

A “Three Days Capacity Development Workshop on Cashew Production and Post Harvest Technologies” was organised for the *Krishi Sakhis* of Sullia taluk from 20.08.2025 to 22.08.2025. The training aimed to enhance the capacity of *Krishi Sakhis* to act as effective change agents in promoting scientific cashew cultivation in Sullia taluk of Dakshina Kannada district. The inaugural function of the programme was organised in Sullia taluk panchayat office on 20.08.2025. The Chief Guest of the function was Dr. J Dinakara Adiga, Director, ICAR-DCR, Puttur. Dr. Pramod, Assistant Director of Horticulture, Sullia Taluk and Shri Jayaram, NRLM Project Co-ordinator were other dignitaries invited for the event.

The three days was structured with various technical sessions covering different aspects of scientific cashew cultivation such as high yielding varieties of cashew, pest and disease management, canopy management, mechanisation in cashew, soil and nutrient management, value addition of cashew apple and processing of raw cashewnut. The *Krishi Sakhis* were also sensitized about the various schemes and facilities available at the institute for promotion of cashew. A total of 24 *Krishi Sakhis* attended the programme.



SCSP/TSP/NEH/ABI ACTIVITIES

Sl. No.	Details of the programme	No. of participants	Venue and date
1.	SCSP Training on Integrated Production System in Cashew and Cocoa Inputs distributed- Soil amendment/ nutrient 2000kg	50	Iruvaakki, Shivamogga on 30.07.2025 to 01-08-2025
2.	Training on Modern horticulture practice for enhancing income among SC farmers through innovation Inputs distributed – Trichoderma (1260 kg), Micronutrients (180 kg) and Graft (1710 nos), Veg. seed kit (90 nos)	90	UHS-CoH, Mysore on 22.09.2025
3.	Training cum Input Distribution Program on Promotion of Horticulture -based Integrated Farming System Inputs distributed- FYM (4000 kg) and Graft (1280 nos), Seedling (200 nos.), Water apple 40nos, Veg. Seed Kit (40 nos.)	40	UHS-CoH, GKVK Bangalore on 06.10.2025



Sl. No.	Details of the programme	No. of participants	Venue and date
4.	Training on Modern horticulture practice for enhancing income among SC farmers through new innovation and input distributed-Trichoderma (420 kg), Micronutrient (60 kg) and Grafts (570 nos.), Vegseed Kit (30 nos.)	30	UHS-CoH, Mysore on 14.10.2025
5.	Training on Enhancing the income and livelihood security among SC farmers of north Karnataka through capacity building on adoption of Horticulture innovations and input distributed- Compost (1875 kg), MC (750 kg) and Graft (2400 nos.)	75	UHS-CoH, Bagalkot, Karnataka on 11.11.2025
6.	Enhancing farmers income and resource efficiency through Horticulture based Integrated farming system Inputs distributed- Trichoderma (400 kg) and Graft (4080 nos.), Veg seed Kit (160 nos.), Battery Operated 2-in sprayer (80 nos.), garden tool kit (80 nos.).	80	Bengaluru South (Ramanagara) District, Karnataka on 28.12.2025
TSP			
1.	Training Programme on Rejuvenation, Top Working and Pineapple intercropping in Cashew Orchards	100	Parvathipuram Maniyam district, Andhra Pradesh on 11.10.2025 - 15.10.2025
2.	Distribution of pineapple suckers (300 Nos.) for establishment of Demonstration plots (50 Nos.) of pineapple intercropping in cashew orchards	50	Parvathipuram Maniyam district, Andhra Pradesh on 11.10.2025 - 15.10.2025
3.	Training and distribution of agricultural implements for economic and social empowerment of tribal community farmers.	30	Hiriyur taluk, Chitradurga district, Karnataka on 19.12.2025
4.	Training programme on “Scientific cashew cultivation” for ST farmers and input distribution	40	Enmakaje panchayat, Kasaragod, Kerala on 23.12.2025
	Agri Business Incubation activities		
1.	Incubation training on cashewnut processing	3	ICAR-DCR on 14.07.2025 to 16.07.2025
2.	Good Agricultural Practices and Entrepreneurship related to Cashew	3	ICAR-DCR on 11.09.2025



Frontline Demonstrations

FLDs

Thirty-five drone- technology demonstrations for spraying agrochemicals, micronutrients, and organic pesticides were conducted across 66.50 acres, benefiting 268 farmers. Implemented under the Drone Technology Demonstration (DTD) scheme of the Department of Agriculture & Farmers Welfare through ATARI (Sub-Mission on Agricultural Mechanization), the initiative promoted awareness of agricultural drone applications among farmers and stakeholders. Farmer feedback highlighted major advantages such as savings in time and labour, reduced production costs, efficient input use, and improved operator safety. Key challenges identified included frequent battery recharging, limited tank capacity, short flight duration, requirement of skilled operators, and high pilot licensing costs.



Consultancy project on 'Scaling up of value chain in cashew through area expansion and improving value addition processes'

An expert team visited the project areas to assess the status of cashew grafts planted during 2024 and 2025 and to provide technical consultancy on post-planting care and establishment of cashew nurseries for ensuring self-reliance in quality planting material.

Under the project, 38,180 cashew grafts during 2024–25 and 25,100 grafts during 2025–26 were distributed.

The intervention benefitted 705 farmers, covering an area of 144 ha in 2024 and 128 ha in 2025, implemented in two phases. Recommended early-yielding varieties such as *Bhaskara*, *Dhana*, *Vengurla-7*, *Vengurla-4*, and *Vridhachalam-3* were procured in consultation with the institute and distributed to beneficiaries. In addition, Jaganath and H-2/16 (BPP) varieties were procured by the counterpart agency, Department of Horticulture (DoH), Meghalaya, for distribution. Cashew grafts were primarily distributed across East, West, South and South-West Garo Hills, and East and South-West Khasi Hills. Efforts were also initiated to evaluate varietal performance in East Jaintia Hills. The survival rate of grafts planted during 2024 was poor, mainly due to delayed supply followed by dry weather conditions. Based on these learnings, grafts were procured and planted during the monsoon season in the subsequent phase to improve establishment. Field-level workers are currently assessing graft survival and field performance. A structured questionnaire was developed for different target groups to capture relevant field information and shared with the Department of Horticulture for further action. A virtual review meeting held on 12.11.2025 with DoH officials reviewed project progress, identified implementation gaps, and emphasized strict adherence to technical recommendations.

Front line demonstration of latest cashew varieties of ICAR-DCR Puttur under normal density and other old /new suitable varieties under high density systems' [2025-26]

FLTD (NDP with drip irrigation)

Planting material (grafts) were taken by 11 farmers from Chitradurga, Tumakuru, Shivamogga, Uttara Kannada, Gadag, Chitradurga districts of Karnataka and Anantpur district of Andhra Pradesh covering an area of 20 acres (8 ha) out of the targeted area of 10 ha.



FLTD (HDP with drip irrigation)

Planting material (grafts) were taken from Chitradurga covering an area of 2.5 acres (1 ha) out of the targeted area of 10 ha.

Exhibitions

Sl. No.	Exhibitions	Date
1.	Exhibited ICAR-DCR, Puttur technologies and activities of Agri Business Incubation centre of this Directorate during the 11th Indian Horticulture congress 2025 organized Indian Academy of Horticultural Sciences (IAHS) at the University of Agricultural Sciences (UAS), Bengaluru	06.11.2025 to 09.11.2025
2.	Exhibited technologies developed at ICAR-DCR, Puttur and Agri Business Incubation Centre of this Directorate in the Vendors Development Program organized by MSME Development & facilitation Office in association with other Industries at Town Hall, Mangalore	18.09.2025 to 19.09.2025
3.	Exhibited technologies developed at ICAR-DCR, Puttur and Agri Business Incubation Centre of this Directorate in the Cashew Fest-2025 jointly organized by Karnataka Cashew Manufacturer Association (KCMA) in collaboration with Fiza Mall at Mangalore	08.08.2025 to 10.08.2025



Details of Patent / Design Registrations / Copyright

Copyrights granted

Sl. No.	Title of the work	Certificate No.	Date of Issue
1	Portable semi-automatic cashew nut separator	CF-202506058	12.08.2025
2	Drone spraying in cashew orchard	CF-202506116	19.09.2025
3	Cashew fruit pickers	CF-202506090	10.09.2025

Staff News

Inter- Institutional Transfers

1.	Sri. Prateek Tewari, Assistant, is relieved from this Directorate 20.08.2025(AN), consequent on his transfer to ICAR-Indian Institute of Rice Research (IIRR), Rajendranagar, Hyderabad
2.	Sri. Sandeep Joshi, Assistant, is relieved from this Directorate 28.08.2025(AN), consequent on his transfer to ICAR-National Research Centre on Pomegranate, Solapur, Maharashtra

Technical Resignation

1.	Sri. Prince Kumar, Technician (T-1) -T1 resigned from this Directorate on 26.12.2025 (FN).
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Promotion

1.	Dr .E. Eradasappa, Senior Scientist (Plant Breeding) has been promoted from the Research pay level -13 A to the next higher grade of Principal Scientist Research pay level -14 w.e.f 26.02.2024.
2.	Dr. Veena. G.L, Senior Scientist (Fruit Science) has been promoted from the Research pay level-11 to the next higher grade Research pay level -12 w.e.f 01.01.2024
3.	Dr. Siddanna Savadi, Senior Scientist (Agricultural Biotechnology) has been promoted from the Research pay level - 11 to the next higher grade Research pay level -12 w.e.f. 01.01.2024
4.	Dr. Manjunatha. K, Scientist (Farm Machinery & Power) has been promoted from the Research pay level - 10 to next higher grade Research pay level -11 w.e.f 07.01.2024
5.	Dr. Aswathy Chandrakumar, Scientist (Agricultural Extension) has been promoted from the Research pay level - 10 to next higher-grade Research pay level-11 w.e.f 07.01.2024.





Six technologies developed by the institute were certified by ICAR on the occasion of 97th ICAR-Foundation Day on 16.07.2025



Krishi Sakhis of Sullia Taluk with the Director and Scientists of ICAR-DCR Puttur





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