



# RLBCAU NEWS LETTER



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### From the Vice-Chancellor Desk



Projections indicate that the world population will surpass 10 billion by 2050. The demand for agricultural produce is anticipated to increase by up to 50% compared to 2013. Countries around the world have witnessed a manifold increase in farm productivity over the past century, which needs to be sustained in the future to meet the demands of a burgeoning population. However, the increase in food production and economic growth has been achieved at the cost of intensive exploitation of land, water, and other natural resources, which has often resulted in significant damage to the environment, agro-ecology, and human health. Intensive agriculture has led to deforestation, land degradation, depletion of groundwater, buildup of chemical residues in

the food chain, and increased emissions of greenhouse gases. This situation necessitates the creation of alternative, sustainable, and regenerative farm production approaches capable of achieving sustainable agricultural development without jeopardizing the existing ecological balance and environment.

In this situation, natural farming is emerging as an option to improve crop production while ensuring the needs of future generations are not compromised. Natural farming offers several advantages, including increased productivity, reduced cultivation costs, environmental conservation, efficient use of land, water, and other natural resources, soil health rejuvenation, and so on. Other benefits of natural farming include resource recycling, onfarm resource optimization, agro-ecology-based diversification of farming systems, the exclusion of synthetic chemical inputs, and reduced dependency on external inputs. Keeping in mind the future importance of natural farming, RLBCAU has initiated a Bachelors degree program in Natural Farming so as to prepare the human resources required for undertaking research, development, and popularization activities on natural farming practices in the country.

I am happy to inform readers that, during the upcoming *Kharif* season, besides promoting natural farming, RLBCAU will make intensive efforts to expand the area under *Kharif* maize, black gram, and high-yielding varieties of groundnut in the Bundelkhand region. In addition to expanding the area under high-yielding varieties, we intend to promote income source diversification by popularizing allied agricultural activities like beekeeping, mushroom cultivation, and other entrepreneurial activities. To achieve this, the university is partnering with FPOs to build capacity among farmers, raise awareness, and provide farm advisory services. In addition, the university will utilize FPOs as a conduit for the execution of diverse technology transfer initiatives, encompassing technology assessment, refinement, and dissemination.

I am confident that with better planning, coordination and engagement of farmers, the university will succeed in achieving sustainable development of the agriculture sector in the Bundelkhand region..

Vice-Chancellor



### **❖** North Zone Regional Agricultural Fair 2024

The North Zone Regional Agricultural Fair on "Regenerative Agriculture for Sustainable Development," sponsored by the Ministry of Agriculture and Farmers Welfare, Government of India, was organized by the Directorate of Extension Education, RLBCAU, Jhansi, from February 8 to 10, 2024.



This zone included Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Uttarakhand, Uttar Pradesh, Delhi, and Chandigarh. Shri Surya Pratap Shahi, Minister, Uttar Pradesh Agriculture Department, inaugurated the Regional Farmers Fair-2024 on February 8 in the august presence of Vice-Chancellor, Dr. Ashok Kumar Singh; Director Agriculture Shri Jitendra Kumar Tomar; DG, UPCAR, Dr. Sanjay Singh; Pramod Chaudhary, BAERC; Vice-Chancellor, RVSKVV, Gwalior, Dr. Arvind Shukla; Shri Abhay Mahajan, DRI, Chitrakoot; Jhansi, Sadar MLA, Shri Ravi Sharma, and CDO, Jhansi, Junaid Ahmed.



During this event, CAUs, SAUs, ICAR institutes, NGOs, FPOs, and agro-input manufacturers showcased the improved technologies for the benefit of farmers. Kisan Mela Smarika was also published to promote the message of Regenerative Agriculture. IFS models, millets processing,

protected playhouse facilities, drone technology, shri lakshmi honey, and seed wall —a collection of more than 250 improved varieties germplasm of oilseeds and pulses —were also showcased during this event, and more than 300 honey bee boxes were distributed among the farmers on the inauguration day of RAF-2024.



Shri Anna nutrition millets training and dish exhibition were also organized under the joint aegis of RLBCAU, Jhansi, and the Agriculture Department of Jhansi district. More than 100 participants took part in this competition and displayed around 150 dishes made from Shree Anna. The chief guest at the closing ceremony was Shri Narendra Singh Tomar, Hon'ble Speaker, Madhya Pradesh Legislative Assembly, and the former Minister of Agriculture and Farmers Welfare, GoI. The closing ceremony was witnessed by Samuel Parveen Kumar, Joint Secretary, Ministry of Agriculture, Government of India; Director of Extension, GoI; Dr. S.K. Mishra, Chancellor, RLBCAU, Jhansi, Dr. Punjab Singh, Vice-Chancellor, RLBCAU, Jhansi, Dr. A. K. Singh, and Mayor Jhansi Bihari Lal Arya.



More than fifteen thousand farmers from the different states of the northern region actively participated in the regional agricultural fair. A total of one hundred twenty-five stalls were displayed by various stakeholders, including 25 ICAR Institutes. Flower Show was also organized as a part of the regional agricultural fair. ICAR-CARI, IVRI & KVK-Shivpuri were awarded as best stalls in their respective categories. University Thematic Pavillion on "Regenerative Agriculture for Sustainable Development" was also ranked first. The University also inaugurated a YouTube channel where the "Bundeli Krishi Sandesh" issue is released every fortnight for advisory on farm-related issues. The University also signed a MoU with more than 25 FPOs to foster extension networking and linkages for value addition.



This North Zone Regional Agricultural Fair Programme had six technical sessions across three days where fruitful discussions on production, management, processing, and creating a network of linkages were emphasized. Major cereal crops, pulses, millets, oilseeds, flowers, vegetables, fruits, agroforestry medicinal and aromatic plants, etc., showing potential for Bundelkhand Region were thoroughly discussed, and technical problems were addressed.

Success stories in the field of agriculture across India were discussed in a technical session where five *Padamshri* awardee farmers and two progressive farmers shared their experience and gave an insight of their journey. Entrepreneurial orientation through mushroom production, beekeeping, vermicompost, seed production, etc., was also given a separate session. "Role of women in agriculture and society" was discussed, and the involvement of women in various sectors of agriculture, along with group approaches such as SHGs and FPOs, was discussed. A state-supported program on millet and its recipes was also organized, and prizes were distributed. Twelve progressive farmers from

Bundelkhand and across the country were also awarded for their excellence in agriculture.

### **❖** 11<sup>th</sup> Foundation day of RLBCAU

RLBCAU celebrated its 11th Foundation Day on March 5, 2024, with various events, including the flag-off of the Kishan Bharat Yatra, invited lectures, and cultural programs. Dignitaries, university officials, and guests attended, enhancing the occasion's significance. Traditional lamp lighting marked the beginning, followed by welcoming remarks and speeches by distinguished speakers. Agricultural insights were shared, and lectures on agricultural research enriched the audience's understanding. The Chief Guest, Sri Hargovind Kushwaha, shared important thoughts on agriculture and academia. Dr. A. K. Singh, Vice Chancellor of RLBCAU, highlighted the University's accomplishments and plans. The festivities concluded with a vibrant student cultural program.



### **❖** Shree Ann recipe competition, training and cuisine exhibition

The Shree Ann Recipe Competition, Training, and Cuisine Exhibition, held during the RAF from 8th to 10th February 2024, showcased diverse dishes crafted from Shri Anna (millet). Over 100 participants presented around 150 sweets and dishes, including innovative creations by notable chefs from renowned hotels like Nataraj Sarovar and Lemon Tree, K3 Residency and Grand Tulsi, homemakers, and students from various universities. Swapnil Modi of Bundeli Thali, Hotel Grand Tulsi, Reena Kumari Mehta, Hotel Nataraj Sarovar, Ramshree Gupta, Jowar Rasgulla from Chaiwala, Ragi Turkish Ice Cream from Zaida Parveen, Neha Singh, Ananya-Dipankar, Akanksha, Tanu Gautam, Kapil, Shri Praveen Verma of Manupra Foundation, Jhansi were winners in different categories. The event featured Bundeli thali, Shree Anna-based thali, Jowar Rasgulla, and Ragi ice cream. (Anil Kumar, Manmohan Dobriyal, Gaurav Sharma, Ashwani Kumar, Aman Dabral, Rumana Khan, Ghanshyam Abrol).





### **❖** MoU with 27 FPOs of Bundelkhand region

RLBCAU bolstered FPOs in Bundelkhand by signing an MoU with 27 FPOs (14 in Lalitpur & 13 in Jhansi district) on February 8, 2024, during the Northern Regional Farmers Fair. Hon'ble Agriculture Minister of U.P., Shri Surya Pratap Sahi ji, commended the initiative, suggesting technical assistance for holistic farmer development. The MoU facilitates FPOs accessing need-based technical assistance, technology assessment, demonstration, and capacity development.

### **❖** Dragon fruit & strawberry intercropping model

Intercropping, the simultaneous cultivation of two or more crops in proximity, offers a promising approach to maximize land productivity, optimize resource use, and enhance agricultural sustainability. Research introduced a novel intercropping model focusing on the cultivation of dragon fruit (*Hylocereus spp.*) and strawberries (*Fragaria spp.*), aimed at harnessing synergistic interactions between these two high-value crops. Dragon fruit and Strawberry, known for its unique appearance and nutritional benefits, is becoming increasingly popular in semi-arid regions like Bundelkhand. This fruit thrives in areas with less rainfall,

making it suitable for cultivation in such climates. In India, the commercial farming of these two fruits is expanding, with the market price ranging from 200 to 250 Rs/kg.Intercropping dragon fruit and strawberries presents a unique model of horticulture that can optimize land use and increase fruit yield. This method leverages the vertical growth habit of dragon fruit, which can be trained on trellises, alongside the ground-covering nature of strawberries.



It also allows for a diversification of income sources for farmers, as these crops have different harvest times. Implementing this model requires careful planning to ensure that the nutritional needs and root systems of both plants are accommodated without competition. Additionally, scientific literature reviews the novel production techniques and comprehensive information about the production technology of dragon fruit, which can be beneficial when considering intercropping with strawberries. The Dragon Fruit and Strawberry Intercropping Model (DFSIM) seeks to capitalize on the complementary growth habits, resource requirements, and market demand of dragon fruit and strawberries to create a resilient and economically viable agroecosystem.



Cultivating dragon fruit and strawberries on the same plot of land allows for a year-round production cycle, optimizing land use and potentially increasing profitability for growers. Dragon fruit typically has a cropping period from July to mid-December, which is followed by the strawberry fruiting season from January to March. This sequential cultivation can be highly beneficial; as it ensures that the land is continuously productive, providing a steady stream of highvalue fruits to the market. The cultivation of dragon fruit and strawberries presents a model of staggered economic benefits for farmers. On one acre of land, the estimated profit from dragon fruit cultivation after five years is approximately Rs. 5.1 lakh, whereas strawberries can yield about Rs. 3.38 lakh annually. This dual-crop model allows for both short-term and long-term financial planning, providing a balanced income stream for farmers. It's a strategic approach to horticulture that maximizes land use and can lead to sustainable economic growth.



### ❖ 91 crop varieties established at technology cafeteria

The University established a crop cafeteria during the Rabi season, 2023-24, featuring 91 varieties. Catering to students, farmers, scientists, and school children, it bridges theoretical knowledge with practical agricultural skills. Various Rabi season crops like wheat, barley, maize, chickpea, field pea, lentils, and oilseeds were cultivated, adhering to standard agronomic practices. 91 varieties of cereal crops such as wheat (12), barley (5), maize (5); pulse crops such as chickpea (10), field pea (6), lentil (4), pigeon pea (2), oilseed such as mustard group (13), linseed (4), safflower (3), Castor (2), sunflower; fodder Crops- Berseem (3), Oat (5), and other crops such as Sugarcane (4), Cotton (6), Quinoa are major attraction during the *Rabi* season. (Arpit Suryawanshi).





### Growing speciality melon under protected structures

Sharda Melon is a specialty melon variety. Pusa Sharda was cultivated under a controlled playhouse structure at the University farm. The seeds were sown during the first week of November, and the first fruit was ready to harvest in the first week of February. Fruits get ready for harvest in 85-90 days. Fruit flesh is thick, greenish-white, crispy, and sweet (TSS 13.6 °B). It can be stored for 15 to 20 days at room temperature. Introducing new varieties may help farmers get remunerative prices as produce reaches the market early. (B.B. Sharma, Saurabh Singh & Arjun Lal Ola).



### **❖** ICAR sponsored winter school

"From genes to proteins: addressing molecular complexity of agriculturally important traits in crops": The ICAR-sponsored winter school, held from February 19 to March 10, 2024, focused on addressing the molecular complexity of agriculturally important crop traits. Participants gained hands-on training in genomics, proteomics, bioinformatics, and system biology analysis. (Anil Kumar, P.P. Jambhulkar, Piyoosh Babele, Ashutosh Singh, Maneet Rana, Umesh Pankaj).



### \* All India study tour 2023-24

Final year B.Sc. (Horticulture) students from RHWE embarked on a 16-day educational tour across South India from December 26, 2023, to January 10, 2024, as part of the ICAR Vth Deans course curriculum. This tour included various ICAR institutes and horticultural sites in Pune, Kasaragod, Coimbatore, Ooty, Mysuru, and Bengaluru. The tour provided valuable insights and practical knowledge, enriching the students' academic and professional growth. (Ranjit Pal, B.B Sharma).



### **\*** Exposure visit of students at KVK-Datia

An exposure visit was arranged on February 29, 2024, for undergraduate and master's students to learn about the operations of KVK and ATARI, focusing on their mandate, FLDs, OFTs, and organizational structure. (Sanjeev Kumar).



### **26th Atal Jai Vigyan lecture on foundation day**

On March 5, 2024, the University celebrated its Eleventh Foundation Day with the 26th Atal Jai Vigyan lecture. Dr. Gyanendra Pratap Singh, Director at the National Bureau of Plant Genetic Resources, delivered an insightful address, enriching the intellectual capacity of students and faculty. (Shubha Trivedi, Shrawan Shukla, Vaibhav Singh).

### **❖** NSS special camp

From March 2 to 8th, 2024, a seven-day NSS camp in Village Simradha, Jhansi, was conducted to acquaint volunteers with rural challenges and promote solutions through various activities, including Yoga, meditation, awareness rallies, lectures, cleanliness drives, tree plantations, and campaigns. (Gaurav Sharma, Ram Prakash Yadav, Rakesh Kumar, Ashutosh Kumar, Yumnam Bijilaxmi Devi, Anita Puyam, Swati Shedage, Prabhat Tiwari).



#### **Study tour of PG and Ph.D. students**

A study tour was organized for postgraduate and doctoral students from the Department of Floriculture & Landscaping. The tour took place in New Delhi on March 10th and 11th, 2024, as part of their coursework in

Ornamental Gardening and Landscaping (HFL-505) and Advances in Landscaping (HFL-605). The group, comprising two Ph.D. students and three PG students, visited various gardens in Delhi, including Rashtrapati Bhavan, Amrit Udyan, Lodhi Garden, National War Memorial, Roshnara Garden, and Buddha Jayanti Park. The tour focused on urban landscaping concepts utilizing hardscape and softscape materials. (Priyanka Sharma).



### **!** Interactive session on job opportunities

An interactive session on career prospects for B.Sc. Forestry students was conducted on March 7, 2024. Mr. Vipin Vijiyan, Regional Head-North for CSR & Sustainability at LTI Mindtree Limited, led the session, discussing corporate social responsibility in the forestry sector and corporate-NGO collaborations. (Amey Kale).



#### **❖** Spread the good word 2024 celebrating a decade

As RLBCAU celebrates a decade of its establishment, The CoHF launched a 6- month (March 15, 2024- August 15, 2024) English vocabulary building project, "Spread the Good Word." The project employs vocabulary research strategies for all the stakeholders, focusing on peer-teach and student-centric approaches. A WhatsApp Channel has been dedicated to broadcasting one vocabulary card daily with intermittent assessment activities and games. (M.J. Dobriyal, Gaurav Sharma, Alka Jain, B.S. Pavithra, Garima Gupta, and 11 UG students).

### **❖** Inauguration of voga and wellness centre

The Yoga and Wellness Center of the University was inaugurated on March 16, 2024, by Dr. A. K. Singh, the Hon'ble Vice-Chancellor. The center promotes holistic health for students, faculty, and staff through Yoga, fostering overall well-being. (Anil Kumar, Gaurav Sharma, Yogendra Mishra, Pavithra B.).



### **❖** International day of forests & national webinar

CoHF's faculty organized a national-level webinar themed "Forests and Innovation: New Solutions for a Better World" on March 21, 2024, to mark the "International Day of Forests." The University conducted student competitions throughout the week. (M. J. Dobriyal, R. P. Yadav, Y. Bijilaxmi Devi, H.T. Hegde).

### **\*** Experiential Learning Programme on quality planting material production

The University concluded an experiential learning programme to enhance the quality of forest tree planting material. Six fifth-semester B.Sc. Forestry students actively participated, resulting in the cultivation of 3760 seedlings of diverse forest tree species. (Ramprakash Yadava, Manmohan Dobrival).

### ❖ Dynamics of women in agricultural livelihood in Bundelkhand region

The Indian Council of Social Science Research (ICSSR) New Delhi has awarded a two-year research program on Women's Livelihood in the Bundelkhand. The study aims to explore the historical and contemporary roles of agricultural women in rural Bundelkhand. The study aims to explore the historical and contemporary roles of agricultural women, investigating the impacts of socio-economic, cultural, and policy changes. Utilizing methodologies like historical analysis, surveys, and interviews, it seeks to identify factors shaping women's roles and inform policymaking to enhance socio-economic status, gender equality, and rural regional development. (Alka Jain, David Chella Bhaskar & Ashish Gupta).

### **❖** National youth day

RLBCAU commemorated National Youth Day from January 18 to 20, 2024, with cultural events organized by students. The initiative aimed at nurturing talents and fostering holistic student development. (Gunjan Guleria, Pramod Soni, Artika Singh, Y Bijilaxmi, Garima Gupta).

### **❖** National youth festival

National youth festival was organized at the University, Jhansi from January 12<sup>th</sup> to January 23<sup>rd</sup>, 2024. The festival was inaugurated on the National Youth Day program observed on the birth anniversary of Swami Vivekanand ji on January 12<sup>th</sup> 2024. The university campus was decorated with gusto and enthusiasm as students, teachers and special guests gathered to pay tribute to the iconic personality who inspired the youth across the country. Enlightening program with Mr. Ajay Sharma and Mr. Vikrant Agnihotri graced the occasion as the guest speakers of honour. Both the speakers, accomplished in their respective fields, shared valuable insights and perspectives on the relevance of Swami Vivekananda's teachings in today's dynamic world. Numerous events such as debate and essay writing competition, cultural performances etc. were organized to cater to the diverse interests and talents of our students. From intellectual pursuits to cultural expressions, the festival was a comprehensive showcase of the multifaceted abilities of our youth. (Ani Kumar, P.P. Jambhulkar, Kuleshwar P. Sahu & Vishwanath, SPARSH platform and all students).



#### \* Parakram diwas

Parakram Diwas on January 23, 2024 was celebrated as Valor Day on the birth anniversary of the revered freedom fighter, Netaji Subhash Chandra Bose. The event was marked by patriotic fervor and inspirational discourse, with the chief guest being Brigadier R. Satyanarayanan and was presided over by the Honorable Vice-Chancellor of the University. Parakram Diwas, celebrated on the birth anniversary of Netaji Subhash Chandra Bose, is a national occasion to honor his indomitable spirit, leadership and contribution to India's freedom struggle. (Ani Kumar, P.P. Jambhulkar, Kuleshwar P. Sahu & Vishwanath, SPARSH platform and all students).



### **❖** Martyr's day

Martyrs' Day, observed on January 30, 2024, honored those who sacrificed their lives for India's freedom struggle. At RLBCAU, the day began with garlanding Mahatma Gandhi's portrait, followed by two minutes of silence at 11 am, suspending all university activities. The University echoed with the devotional song "Raghupati Raghav Raja Ram" at 10:45 am, transitioning into silence signalled by a siren. Vice Chancellor A.K. Singh paid respects to freedom fighters like Bhagat Singh and Chandra Shekhar Azad and soldiers of independent India's armed forces, emphasizing their contributions to the nation's freedom and security.

### **❖** Yuva samvad-India@2047

Yuva Samvad-India@2047, organized by NSS Jhansi on February 3, 2024, gathered 150 volunteers at the University. 15 participants engaged in a competition on "Panch Pran of Amrit Kaal," focusing on aspects like Goal of Developed India (विकसित भारत) remove any trace of colonial mindset (गुलामी से मुक्ति), take pride in our roots (विरासत पर गर्व), unity (एकता एवं एकजुटता) and sense of duty (नागरिकों का कर्तव्य). Keynote speaker Mr. Rahul Dwivedi from the Gauri Foundation stressed the significance of these pledges and urged volunteers to commit to India's development. (Y Bijilaxmi Devi, Ashutosh Kumar, Rakesh Kumar, Soniya Maimom).

### **Voter awareness programme**

On March 23, 2024, the NSS unit and Nehru Yuva Kendra Sangathan and Gauri Foundation organized Neighbourhood Youth Parliament program to promote voting awareness. The event featured the release of tricolor balloons, a human chain formation, and a quiz organized by the Gauri Foundation. The event was graced by the presence of Hon'ble Vice Chancellor Dr. A. K. Singh, Chief Guest IAS Mr. Utkarsh Dwivedi, District Youth Officer Mr. Vishal Singh, President and Secretary of Gauri Foundation Mr. Rahul Dwivedi and Mrs. Diksha Dwivedi and statutory officers of the University. (RP Yadav, Ashutosh Srivastava, Rakesh Negi, Y Bijilaxmi Devi).

### **❖** International women's day

RLBCAU marked International Women's Day on 8<sup>th</sup> March. An elocution competition titled "Success Stories of Women Empowerment in Bundelkhand Region" saw participation from thirteen students, with Pranav Jha, Alisha Behera, and Aanchal Singh emerging as winners. Subsequently, an event honoured thirteen "Jal Saheliyan" for their role in water conservation in Bundelkhand, attended by over 200 rural women. Parmarth Sansthan and the honoured Jal Sahelis shared their experiences. (S. Shridhar Patil, Alka Jain).

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#### \* RLBCAU and Bundelkhand FPOs meet

An interactive interface meeting was held between RLBCAU, Jhansi, and the FPOs operating in the Bundelkhand region on January 17, 2024. The main aim of this meeting was to sensitize the FPOs about the University's extension service offerings and to clarify how FPOs can take advantage of such services. The meeting was conducted in the gracious presence of statutory officers and representatives of FPOs from Jhansi & Lalitpur District. It was emphasized that through the interactive platform between RLBCAU & FPOs, the University could increase the outreach of its need-based & resource-oriented extension services to many farmers in Bundelkhand. (Ashish Kumar Gupta, Shridhar Patil, Sanjeev Kumar, Shailendra Kumar, Arpit Suryavanshi, and Ram Pratap Pal).

### **❖** DPR PIAs review meet at NABARD, Lucknow

The University participated in the DPR PIAs Review Meet at the regional office NABARD, Lucknow, U.P on February 15, 2024, chaired by Sri S K Dora, CGM, NABARD, Lucknow. In this meeting, the PI of the NABARD-funded project across the U.P. presented the progress report. Project "Integrated Platform for Agripreneur: A Force Multiplier Forum of Farmers-Consumers-Entrepreneur" was presented and given the status of *Bundeli Krishi Vipnan* Mobile at Google Play Store. (Sanjeev Kumar, Shailendra Kumar).

### **\*** Exposure visit of NABARD officials

More than 50 officials (DDMs, senior and middle-level officials) of NABARD, U. P. made an exposure visit to the University exploring various experimental trials, fruit orchards, medicinal plantations, and beekeeping units. Interface meetings were held between the university and NABARD officials on 18<sup>th</sup> March 2024. Vice Chancellor Dr. Ashok Kumar Singh emphasized collaborative networking for value addition and entrepreneurship. (Sanjeev Kumar, Arpit Suryavanshi, Sushil Kumar, Shiv Vendra Singh, Ranjit Pal, Sundarpal, Usha Morya, V. K Mishra, Prashant Jhambhulkar, Subha Tiwari).

### \* Training-cum-field day on NRM

University organized three days farmer's training-cum-field day at Padari village of Jhansi (U.P.) during 16-18 March 2024 where more than 100 farmers participated. The training emphasized on judicious & efficient water usage, water harvesting & recycling, soil health restoration, limited use of agrochemicals, adoption of integrated pest and nutrient management approaches, awareness on soil, air and water pollution, significance of giving emphasis on locally available inputs and natural resources for agricultural sustainability etc. (Yogeshwar Singh, Susheel Kumar Singh, Anil Kumar Rai, Shiv Vendra Singh).

### **\*** Training program on poultry farming

A three-day poultry farming training was held for 35 farmers from Jhansi, Datia, and Gorakhpur from November 7 to 9th, 2023. Topics covered challenges, nutrition, and marketing strategies tailored to the region. Lectures were conducted on poultry farming, housing, nutrition, health management, economic aspects, government support, and marketing strategies. Exposure visits to local poultry farms and KVK, Datia were arranged. (Pramood Soni, Sanjeev Kumar, Ashish Kumar Gupta, Ashutosh Sharma, VP Singh).



### **Training on induced breeding technique of fish**

A three-day farmer's training program was organized in collaboration with ICAR-CIFE, Mumbai, under SCSP from

15- 17 January 2024. This training aimed to enable fish farmers in the Bundelkhand region to produce high-quality fish seeds while promoting high-quality fish seed production locally to end dependencies in other states. Twenty-five farmers from Jhansi and Datia districts participated in this training, including many rural women and young farmers. (B. K. Behera, Neelesh Kumar, Ashutosh Sharma, Partha Sarathi Tripathy, Piyoosh Babele, Sanjeev Kumar, Ajaya Kumar Rout, Satyanarayan Parida, Charan Singh Kushwaha).



### **Exposure visit under UP millets regeneration programme**

An exposure visit of 70 officials was organized at RLBCAU, Jhansi, on 15th March 2024. Honey Bee and Mushroom Training Centres, Integrated Farming System model, Apiary, millet crop cafeteria, etc., were mainly visited. University and Officials' interaction was also organized to discuss strategies for increasing outreach of extension programs of GoI. (Arpit Suryawanshi, Sundarpal, Sanjeev Kumar).

#### **\*** FLD on fisheries

On February 29, 2024, RLBCAU's College of Fisheries provided fish farmers in Bundelkhand with essential feed and seeds to boost fish production. This initiative, part of the Pradhan Mantri Matsya Sampada Yojana (PMMSY), aimed to enhance fisheries productivity. Twenty farmers received 20,000 high-quality fish seeds, 2000 kilograms of feed, and other materials, promoting composite fish farming. (Neelesh Kumar, Sanjeev Kumar, Partha Sarathi Tripathy, Ajaya Kumar Rout, Satya Narayan Parida.

### **❖** Farmer's training on "composite fish culture through scientific methods"

A three-day training on scientific composite fish culture, jointly organized by ICAR-CIFE, Mumbai, and RLBCAU, Jhansi, under SCSP, took place on 27-29 February 2024. It aimed to empower fish farmers in Bundelkhand to breed faster-growing Indian Major Carps and Exotic Major Carps while emphasizing water conservation and technological advancement for doubling production. The training provided high-quality seeds and fish feed to 25 beneficiaries from

Jhansi and Datia. Essential supplies were distributed to sixteen economically disadvantaged fish farmers on the final day. (B. K. Behera, Neelesh Kumar, Partha Sarathi Tripathy, Ashutosh Sharma, Piyoosh Babele, Ajaya Kumar Rout, Sanjeev Kumar, Satyanarayan Parida, Charan Singh Kushwaha).

### **❖** Capacity building programme on "FSSAI registration & licensing"

Under the University's FPO activities intervention, the first capacity-building program on "FSSAI Registration & Licensing" was conducted for 13 FPOs of Jhansi on March 2, 2024. With the FSSAI licensing, farmers can fetch better prices for their farm produce and sell it on national and foreign markets. Ghanshyam Abrol and Ashwani Kumar delivered the lectures on various aspects of FSSAI Registration & Licensing. (Ashish Kumar Gupta, Ghanshyam Abrol, Sanjeev Kumar, Shailendra Kumar, Arpit Suryavanshi and Ram Pratap Pal).

### **Primary training on plant doctor under SCSP**

Thirty farmers were trained during five days of residential training for "Plant Doctor." Department of Plant Pathology organized it during 04-08 March 2024. Thirty farmers from the Jhansi, Niwari, Lalitpur, Datia, Tikamgarh, and Shivpuri districts participated in this training. The farmers were guided on basic concepts of disease diagnosis and management techniques, soil sampling and health, organic farming, biological control, mushroom cultivation, and using different tools and equipment related to disease and insect identification through lectures and hands-on training. Certificates were distributed during the valedictory session. (P. P. Jambhulkar, Usha, Shubha Trivediand Vaibhav Singh).

# **❖** Farmers training on 'commercial cultivation and processing technology of Medicinal and Aromatic Plants (MAP)'

A three-day training program was conducted from March 6 to 8<sup>th</sup>, 2024. Farmers were trained on MAP cultivation, harvesting, and processing aspects, including suitability for the Bundelkhand region, agroforestry, lemon grass oil extraction, Sinduri plantation, and apiary units. The program concluded with certificate distribution. (Vinod Kumar, Amey Kale, Pankaj Lavania, Rakesh Kumar, Prabhat Tiwari, Rohit Srivastav, Nitin Namdev).

### **❖** Training on sustainable fruit production technology

A 3-day training program on "Sustainable fruit production technology for enhancing farmers' income," was held from March 11<sup>th</sup> to 13<sup>th</sup>, 2024. This initiative by the CoHF focused on imparting knowledge about fruit-based farming systems a method that holds promise for the socio-economic upliftment of the area. The program successfully engaged

around 25 participants, including local farmers and beneficiaries, who gained valuable insights into sustainable practices. (Ranjit Pal, Govind Vishwakarma, Sukanya Misra, Gaurav Sharma).



#### **Training programe on beekeeping**

A 3- day residential training on Beekeeping was organized during 12-14 March, 2024. Funded by Rastriya Krishi Vikas Yojana Uttar Pradesh, the training benefitted 55 farmers. The training emphasized apiary establishment, honeybee management, pests and diseases etc. (Usha, Vijay K. Mishra, Sundar Pal, Yogendra K. Mishra, Hari Chand & D. B. Ahuja).



## Training on improved tomato production practices

A three-day training program on improved tomato production practices was organized on the 14th and 16th of March 2024. Thirty-three farmers attended this program to learn improved tomato production practices. It included a series of lectures about the protected cultivation of cherry tomatoes, agronomical practices, water management, insect-pest management, organic farming, disease management, etc. A tomato field visit of the trainees was also organized at RLBCAU farm. (Ashutosh Singh, B. B. Sharma, Shravan Kumar Shukla, Sushil Kumar Singh).

# **❖** Farmer's training programme on income enhancement through Agroforestry

Department of Silviculture and Agroforestry organized a three-day training program. This training program took place in village Ronija, block Badagaon, district Jhansi, from 14 to 16th March, 2024, to promote agroforestry and enhance farmers' income. A total of 35 farmers participated in the training. The farmers showed their dedication to embracing the agroforestry model. The diverse applications of Malabar neem, Gamhar, and Kadam, the principal trees in industrial agroforestry, were emphasized in training. Farmers participating in the program showed a strong interest in adopting industrial agroforestry techniques (Prabhat Tiwari, Garima Gupta, Pavan Kumar, R.P. Yadav, M. J. Dobriyal).

### **❖** Training program on "fish health management and disease diagnosis"

A three-day training program was held from March 16-18, 2024, jointly by ICAR-CIFE, Mumbai, and RLBCAU, Jhansi, under SCSP. It aimed to empower fish farmers to diagnose and treat diseases and implement advanced technologies to double fish production. Dr. Ashok Kumar Singh, the Vice Chancellor, encouraged farmers to adopt modern techniques. Twenty-five farmers from Jhansi and Datia participated, including rural women. The University provided fish seeds and feed to economically weaker farmers on the last day as part of FLDs. (B. K. Behera, Neelesh Kumar, Partha Sarathi Tripathy, Ashutosh Sharma, Sanjeev Kumar, Ajaya Kumar Rout, Satyanarayan Parida, Charan Singh Kushwaha).

## **❖** Front-line demonstration on fisheries (ICAR-CIFE, Mumbai)

The CoF, RLBCAU, and Jhansi provided feed and seeds to ensure good fish production for the fish farmers of the Bundelkhand region on March 18, 2024. Six farmers from the Bundelkhand region were given feed and seeds to encourage composite fish farming through scientific methods. The information specifically regarding the distribution of fish seeds and feed to the fish farmers in the Bundelkhand region is related to the Pradhan Mantri Matsya Sampada Yojana (PMMSY) run by the GoI. Under these FLDs, six farmers released fish seeds into the ponds. The farmers received 10,000 high-quality fish seeds and 320 kilograms of feed. (Neelesh Kumar, Sanjeev Kumar, Partha Sarathi Tripathy, Ajaya Kumar Rout, Satya Narayan Parida).

### **\*** Training programme on flower crops

Department of Floriculture and Landscaping organised a training under FLD on "Aaya vardhan hetu unit taking dwara phoolon ki kheti" from 18th to 20th March 2024. Training focused on advanced techniques for 28 farmers from Datia (MP) and Jhansi (UP) for higher income participated. Training covered nursery production, cultivation, marketing, and pest management. (Gaurav Sharma, Priyanka Sharma, Anita Puyam, Prince Kumar).



### **❖** Training program on commercial goat farming in Bundelkhand

A four-day training was organized for 50 farmers on Commercial Goat Farming in Bundelkhand from 18-21 March 2024. The trainees from Jhansi, Jalaun, Datia, and Niwari were apprised on multiple aspects of goat farming by experts from ICAR-IGFRI, DUVASU, and Mathura, on the importance of commercial goat farming, breed selection, feed preparation, cultivation of fodder crops, and various governments scheme for goat farming. (V.P. Singh, P. K. Soni, Amit Vishen, Gaurav Kumar, Sanjeev Kumar, Ashutosh Sharma).

### **❖** Advance training on plant doctor" under SCSP project

Thirty farmers were trained during five days of residential training for "Plant Doctor." Department of Plant Pathology organized it during 19 – 23 March 2024. Thirty farmers from the Jhansi, Niwari, Lalitpur, Datia, Tikamgarh, and Shivpuri districts participated in this training. The farmers were guided on advanced disease diagnosis and management techniques, soil sampling and health, organic farming, biological control, mushroom cultivation, and using different tools and equipment related to disease and insect identification through lectures and hands-on training. Nameplates and certificates were distributed during the valedictory session. (Shubha Trivedi, Meenakshi Arya, P. P. Jambhulkar and Vaibhav Singh).



❖ Training on "advance manufacturing - general and COVID"

The Dept. of Postharvest Technology held a one-day training on "Advanced Manufacturing - General and Covid" on March 20, 2024, focusing on advanced manufacturing practices within the food industry. Led by Rajkumar Yadula from FSSAI, Chennai, and Ashwani Kumar, Assistant Professor, the program aimed to enhance participants' understanding of Schedule IV of FSSAI to mitigate foodborne illnesses. It targeted students, entrepreneurs, FPOs, SHGs, and others in the food chain. (Ghanshyam Abrol, Priyanka Sharma, Gaurav Sharma).

### **❖** Farmers training on "production technique of wheat/durum wheat in Bundelkhand region"

A three-day farmers' training on wheat/durum wheat FLD was held from March 20 to 22nd, 2024, in Bangra, Mauranipur, RLBACU, and the Jhansi campus. Around 250 farmers attended, receiving insights on advanced production technology, varieties, and integrated pest and disease management. (Gunjan Guleria, Shiv Vendra Singh, Anita Puyam, Vishwanath).

#### **Protected structures**

The cultivation of tomato, cherry tomato, Sharda melon, capsicum, cucumber, etc., was successfully raised under controlled playhouses from January to March, and production continues. This was also a point of attraction during the entire season and was visited by farmers, students, and university visitors.

#### **❖** Training-cum-field day on NRM

University organized three days farmer's training-cum-field day at Padari village of Jhansi (U.P.) during 16-18 March 2024 where more than 100 farmers participated. The training emphasized on judicious & efficient water usage, water harvesting & recycling, soil health restoration, limited use of agrochemicals, adoption of integrated pest and nutrient management approaches, awareness on soil, air and water pollution, significance of giving emphasis on locally available inputs and natural resources for agricultural sustainability etc. (Yogeshwar Singh, Susheel Kumar Singh, Anil Kumar Rai, Shiv Vendra Singh).



### **Publications/Awards/ Invited Lectures**

#### **Farmers Advisories**

Farmers Advisories						
क्र.	सलाह	वैज्ञानिक	दिनांक			
सं.		02-0	01/01/0001			
1.	सरसों की फसल को सफेद रतुआ एवं गलन रोग से बचाएं	शुभा त्रिवेदी	01/01/2024			
2.	देसी उपाय से बचाएं चने की फसल	योगेंद्र कुमार मिश्रा एवं सुंदर पाल	03/01/2024			
3.	पाला से फसल बचाने को किसान खेतों में करें धुआँ, छिड़कें सल्फर	राकेश चौधरी	04/01/2024			
4.	गेहूं, चना व सरसों में हो सकता है नुकसान	योगेश्वर सिंह एवं अनिल कुमार राय	05/01/2024			
5.	सिंचाई कर पाले से बचाएं फसल	योगेश्वर सिंह एवं अनिल कुमार राय	05/01/2024			
6.	चितकबरा कीट से सरसों की फसल हो सकती प्रभावित, करें बचाव	विजय कुमार मिश्रा एवं अर्तिका सिंह	09/01/2024			
7.	गोभी वर्गीय सब्जीयों में लगने वाले प्रमुख कीट एवं उनके रोकथाम के उपाय	सुंदर पाल एवं अर्जुन लाल ओला	17/01/2024			
8.	मटर की देखभाल न की तो हो सकता नुकसान	अनिल कुमार राय एवं योगेश्वर सिंह	19/01/2024			
9.	पॉपुलर की लकड़ी से पैसा कमा सकते हैं किसान	राकेश नेगी एवं मनमोहन डोबरियाल	26/01/2024			
10.	आँवला की अच्छी पैदावार के लिए कृषि वैज्ञानिकों ने किसानों को दी सलाह	गोविंद विश्वकर्मा एवं गौरव शर्मा	30/01/2024			
11.	पत्ती-पोषक तत्वों के छिड़काव से फसलों की बढ़ाएं बढ़वार	संदीप उपाध्याय एवं राजीव नंदन	01/02/2024			
12.	कीट के निशाने पर गोभी वर्गीय सब्जियां करें बचाव	सुंदर पाल एवं अर्जुन लाल ओला	02/02/2024			
13.	बुंदेलखंड क्षेत्र में माहू कीट से सरसों की फसल का बचाव	विजय कुमार मिश्रा एवं माइमोम सोनिया	18/02/2024			
14.	कीटनाशी दवाओं के खरीदने में किसान बरतें सावधानियां	संदीप उपाध्याय एवं योगेंद्र कुमार मिश्रा	20/02/2024			
15.	मधुमक्खी पालन से किसान करें अच्छी कमाई	सुंदर पाल एवं ऊषा	24/02/2024			
16.	बदलते मौसम में हो रही बारिश एवं ओलावृष्टि से फसलों को बचाएं किसान	अनिल कुमार राय एवं योगेश्वर सिंह	29/02/2024			
17.	बुंदेलखंड में जायद का रकबा बढ़ाने के लिए ग्रीष्मकालीन मूंग हो सकती है उपयुक्त	अंशुमान सिंह	13/03/2024			
18.	मटर का सुरक्षित भंडारण करें	अनिल कुमार राय एवं योगेश्वर सिंह	21/03/2024			

### Technical bulletins and folders published

फोल्डर का नाम	वैज्ञानिक	प्रकाशन संख्या
किसानों की आजीविका	गौरव कुमार, अमित सिंह विसेन,	प्र.शि.नि./त.प्र.सा
का साधन: बकरी पालन		फोल्डर/2024/94
		प्र.शि.नि./त.प्र.सा
	प्रमोद कुमार सोनी, वी. पी. सिंह	फोल्डर/2024/95
		प्र.शि.नि./त.प्र.सा
		फोल्डर/2024/96
गला घोंटू रोग के लक्षण एवं		प्र.शि.नि./त.प्र.सा
उपचार		फोल्डर/2024/97
		प्र.शि.नि./त.प्र.सा
का महत्व एवं सम्भावनायें		फोल्डर/2024/98
मटर की वैज्ञानिक खेती		प्र.शि.नि./त.प्र.सा
		फोल्डर/2024/99
मसूर की वैज्ञानिक खेती		प्र.शि.नि./त.प्र.सा
		फोल्डर/2024/100
उरद की वैज्ञानिक खेती		प्र.शि.नि./त.प्र.सा
		फोल्डर/2024/101
मूँग की वैज्ञानिक खेती		प्र.शि.नि./त.प्र.सा
		फोल्डर/2024/102
	एवं एस. के. चतुर्वेदी	
	किसानों की आजीविका का साधन: बकरी पालन सर्दियों के दौरान नवजात बछड़े बछड़ियों का पालन पोषण एवं प्रबंधन पशुओं में सालभर हरा चारा उत्पादन और प्रबंधन गला घोंटू रोग के लक्षण एवं उपचार बुंदेलखंड में कुक्कुट पालन का महत्व एवं सम्भावनायें	किसानों की आजीविका का साधनः बकरी पालन प्रमोद कुमार, अमित सिंह विसेन, प्रमोद कुमार सोनी, वी. पी. सिंह सिंदीयों के दौरान नवजात बछड़े बछड़ियों का पालन पोषण एवं प्रबंधन प्रमोद कुमार सोनी, वी. पी. सिंह पर्याचर उत्पादन और प्रबंधन प्रमोद कुमार सोनी, अमित कुमार सोनी, अमित कुमार जा सोंटू रोग के लक्षण एवं उपचार प्रमोद कुमार सोनी, वी. पी. सिंह बुंदेलखंड में कुक्कुट पालन का महत्व एवं सम्भावनायें प्रमोद कुमार सोनी, वी. पी. सिंह मीनाक्षी आर्य, अंशुमान सिंह, अर्पित सूर्यवंशी, संजीव कुमार एवं एस. के. चतुर्वेदी उरद की वैज्ञानिक खेती पीनाक्षी आर्य, अंशुमान सिंह, अर्पित सूर्यवंशी, संजीव कुमार एवं एस. के. चतुर्वेदी पीनाक्षी आर्य, अंशुमान सिंह, अर्पित सूर्यवंशी, संजीव कुमार एवं एस. के. चतुर्वेदी

10.	बुंदेलखंड में राई-सरसों की	राकेश चौधरी, अर्तिका सिंह	प्र.शि.नि./त.प्र.सा
	वैज्ञानिक खेती	कुशवाहा, शुभा त्रिवेदी एवं	फोल्डर/2024/103
1.1	<del>*************************************</del>	सुशील कुमार चतुर्वेदी	
11.	मूँगफली की वैज्ञानिक खेती	अर्तिका सिंह, राकेश चौधरी, शुभा त्रिवेदी, योगेश्वर सिंह, एस.	प्र.शि.नि./त.प्र.सा फोल्डर/2024/104
		कि. चतुर्वेदी	471(SX/2024/104
12.	तिल की वैज्ञानिक खेती	अर्तिका सिंह, राकेश चौधरी,	प्र.शि.नि./त.प्र.सा
	ारारा का बुसा। कि दारा।	शुभा त्रिवेदी, योगेश्वर सिंह, एस.	फोल्डर/2024/105
		के. चतुर्वेदी	
13.	बुंदेलखंड में अलसी की	राकेश चौधरी, अर्तिका सिंह	प्र.शि.नि./त.प्र.सा
	उन्नत खेती	कुशवाहा, शुभा त्रिवेदी एवं	फोल्डर/2024/106
	0 0 0 0	सुशील कुमार चतुर्वेदी	
14.	गुलदाउदी की वैज्ञानिक	प्रियंका शर्मा, गौरव शर्मा एवं	प्र.शि.नि./त.प्र.सा
15.	खेती गोभी वर्गीय सब्जियों के	पूजा ए.	फोल्डर/2024/107
15.	उत्पादन की उच्च	अर्जुन लाल ओला, बृज बिहारी शर्मा, सौरभ सिंह, गौरव शर्मा एवं	प्र.शि.नि./त.प्र.सा फोल्डर/2024/108
	प्रौद्योगिकी   प्रौद्योगिकी	आकांक्षा सिंह	971051/2024/108
16.	कद्दू वर्गीय सब्जियों के	अर्जुन लाल ओला, बृज बिहारी	प्र.शि.नि./त.प्र.सा
	उत्पादन की उच्च	शर्मा, सौरभ सिंह, गौरव शर्मा एवं	फोल्डर/2024/109
	प्रौद्योगिकी	आकांक्षा सिंह	
17.	सेम की वैज्ञानिक खेती	अर्जुन लाल ओला, बृज बिहारी	प्र.शि.नि./त.प्र.सा
		शर्मी, सौरभ सिंह, गौरव शर्मी एवं	फोल्डर/2024/110
18.	गुलाब की वैज्ञानिक खेती	आकांक्षा सिंह प्रियंका शर्मा, गौरव शर्मा, पूजा	प्र.शि.नि./त.प्र.सा
10.	તુલાબ વરા વર્શાાં ૧વર હાલા	ए., प्रिंस कुमार एवं अनीता पुयाम	प्र.शि.1न./त.प्र.सा फोल्डर/2024/111
19.	वर्मीकम्पोस्ट: निर्माण विधि	संदीप उपाध्याय, अनुसुइया पंडा,	प्र.शि.नि./त.प्र.सा
	एवं लाभ	योगेश्वर सिंह, आशीष कुमार	फोल्डर/2024/112
		गुप्ता, एस. के. चतुर्वेदी एवं आर.	
		के. सिंह	
20.	मृदा नमूना एकत्रीकरण	अनुसुइया पंडा, संदीप उपाध्याय,	प्र.शि.नि./त.प्र.सा
	विधि, मृदा परीक्षण कसौटी	विश्वनाथ, थॉमस मीतेई, एस. के. चतुर्वेदी एवं आर. के. सिंह	फोल्डर/2024/113
21.	अदरक के प्रसंस्कृत उत्पाद	घनश्याम अबरोल, अश्वनी कुमार,	प्र.शि.नि./त.प्र.सा
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	गौरव शर्मा	फोल्डर/2024/114
22.	बुंदेलखंड में अंजन	पंकज लवानिया, विनोद कुमार,	प्र.शि.नि./त.प्र.सा
	आधारित कृषि वानिकी में	अमेय काले, रामप्रकाश यादव,	फोल्डर/2024/115
	औषधीय एवं संगधीय पौधों	मनमोहन डोबरियाल	
23.	की खेती श्री अन्न के प्रसंस्कृत	अश्वनी कुमार, घनश्याम अबरोल,	प्र.शि.नि./त.प्र.सा
23.	उत्पाद: बिस्कुट और ब्रेड	जिन्ना पुरमार, वनस्याम जबरात, गौरव शर्मा	फोल्डर/2024/116
24.	रि-सर्कुलेटरी एकाकल्चर	बी. के. बेहेरा, सत्य नारायण	प्र.शि.नि./त.प्र.सा
	प्रणाली: कम पानी में करें	परिडा, नीलेश कुमार, पार्थ	फोल्डर/2024/117
	मछली पालन	सारथी त्रिपाठी, अजय कुमार	
2	20	राउत	
25.	मछली का प्रेरित प्रजनन	बिजय कुमार बेहेरा, पार्थ सारथी	प्र.शि.नि./त.प्र.सा
		त्रिपाठी, नीलेश कुमार, अजय कुमार राउत, सत्य नारायण	फोल्डर/2024/118
		परिडा	
26.	बुंदेलखंड में वर्षभर	वैभव सिंह, शुभा त्रिवेदी एवं पी.	प्र.शि.नि./त.प्र.सा
	मशरूम उत्पादन	पी. जाम्भुलकर	फोल्डर/2024/119
27.	बुंदेलखंड क्षेत्र के लिए	विनोद कुमार, अमय काले,	प्र.्शि.नि./त.प्र.सा
	व्यावसायिक रूप से	पंकज लवानिया, रामप्रकाश	फोल्डर/2024/120
	महत्वपूर्ण औषधीय पौधे	यादव एवं मनमोहन जे.	
28.	मधुमक्खी पालन	डोबरियाल ऊषा, विजय कुमार मिश्रा,	प्र.शि.नि./त.प्र.सा
26.	मपुमप्ता पारीन	माइमोम सोनिया देवी, सुंदरपाल,	प्र.शि.1न./त.प्र.सा फोल्डर/2024/121
		योगेंद्र कुमार मिश्रा, हरीचंद एवं	1710 1/2024/121
		डी. बी. आहूजा	

### Research papers published

- Thounaojam, T. C., Meetei, T. T., Devi, Y. B., Tanti, B., Panda, S. K., Upadhyaya, H. (2024). Arsenic stress responses in sensitive and tolerant rice of North-East, India. Cereal Research Communic., 1-15. (NAAS: 7.6).
- Kiran, V., Ola, A. L., Tiwari, D., Sharma, G., Kumar, S.,
   Singh, S. (2024). Morpho-phenological characterization and genetic analysis of dolichos bean

### **RLBCAU News Letter**

- germplasm from Uttar Pradesh, India. *Plant Genetic Resources*, 1-10. (NAAS: 7.1).
- Sanjay, H. B., Chaturvedi, S. K., Kumar, S., Singh, S., Harish, J., Lakshmeesh, R., Panwar, D., Manjunatha, M. (2024). Accessing the Performance of Promising Germplasm of Chickpea (*Cicer arietinum L.*) under Red and Black Soil Conditions. *Journal of Advances in Biology & Biotechnology*, 27(5), 98-106. (NAAS: 5.3).

#### **Book**

❖ Practical silviculture and tree species management (2024). Kausahl Singh, Rajiv Umrao, Sanjeev Kumar and Garima Gupta. New India Publishing Agency. ISBN-10: 9358874953.

#### **Book chapter**

❖ Hubballi M., Ramesh, Nakeeran S., Devappa V., Basvarajappa M.P., Jambhulkar P.P., Shubha Trivedi and Biju C.N. (2024). "Biological Control of Plant Diseases" in a book entitled "Concepts of Plant Pathology and Disease Management" published by Indian Phytopathological Society, New Delhi-110012 ISBN 978-93-94678-98-9. (pp 273-282).

#### **Patent**

❖ Thounaojam Thomas Meetei¹, Nongmaithem Shitaljit Singh¹, and Yumnam Bijilaxmi Devi² (2024) Measuring and Dispensing Pan for Weighing Machine. (¹LPU, ²RLBCAU).

### **Popular Articles**

- ❖ Sandeep Upadhyay, "Bundelkhand me Polyhouse hetu Mrida Swasthya aivam Prabndhan" Krishi Kumbh (Emagazine" E-ISSN: 2582-9769) Vol 03 Issue 10.On a Simmer, Alka Jain. The Hindu. Feb., 04, 2024.
- \* "Krishi Virasat ka Utsav- Kisan Mela", A.K.Singh, S.S.Singh, Alka Jain, Dainik Jagran, Feb, 9, 2024.
- ❖ Anil Kumar (January 11, 2024), Power and sweetness of millet in the winter of Bundelkhand. *Dainik Jagran*
- ❖ Anil Kumar (February 24, 2024) The primacy of karma is one's own energy *Dainik Jagran*.

#### Conference/Seminar/Training

- ❖ Alka Jain presented a paper (Sweet Dish, Bitter Truth-Food as a metaphor for sorrow in Gita Hariharan's Gajar Halwa) at the 3-day "National Conference on Food and Culture," organized by the IISSTC for Cultural Studies, Kerala.
- ❖ Pavithra B S. attended 21 days training programme from January 5th-25th at CoH, Mysore, on "Influence of microbiome and native biota on conservation of genetic resources of important horticulture GI crops and their inherent qualities."

### Lecture delivered

- ❖ Alka Jain invited to a Panel Discussion ("Barriers to Women Empowerment") organized by Jhansi Smart City, Women Startup wing of Jhansi Municipal Corporation, on March 7, 2024, Women's Day.
- Alka Jain, chairperson and invited lecturer in a technical session on 3- the Day National Conference on "National Education Policy 2020: Revamping of all Aspects of 21st Century Education" organized by R & D Cell, Shramjivi Shikshan Prasarak Mandal's Adarsh Mahavidyalaya, Omega.
- ❖ Anil Kumar was invited to lecture on "Science-Led Innovation of Millets for Agri-Food Nutrition" in the 10day CAFT training on "Entrepreneurship Development Through Mechanized Production, Processing and Value Addition of Millets and their byproducts" organized by ICAR-CIAE Bhopal on February 23, 2024.
- Anil Kumar, an invited lecture on "World Water Day" organized by Parmarth Samaj Sevi Sansthan at BIET, Jhansi, on March 22, 2024.
- ❖ Anil Kumar invited as a Chief Guest in the SERB-DSTsponsored High-end workshop and training on "Processing and Value Addition of Millets: Sustainable Solution for Health and Nutrition Security" organized by the Department of Nutrition Biology, CUH, Mahendergarh. (March 18, 2024).

#### **Awards/ Presentation**

- ❖ Best oral presentation award to Sanjeev Kumar in National Conference on "Next Generation Agriculture Organic & Natural Farming Pathways: Extension Strategies & Approaches" during 28-30 January 2024 at ICAR-ATARI, Jabalpur, Madhya Pradesh, India. (Society: International Society of Extension Education)
- ❖ Sanjeev Kumar, an oral presentation entitled "Future of extension education vis-a-vis role of ICT in capacity building of community-based organizations" in the National Seminar on "Sustainable Agriculture, Rural Development and Future Food Security in India: An Interdisciplinary Approach" held at Department of Agricultural Economics, Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati during 1-2 March 2024.
- Best poster presentation award to Shubha Trivedi, Chetan Chopra, Artika Singh, Rakesh Choudhary, and Shailendra Kumar, 2024. "A modified and cost-effective stem inoculation technique for artificial screening against Sclerotinia sclerotiorum in mustard." during the 5<sup>th</sup> National Brassica Conference on "Oilseed Brassicas for Sustainability, Profitability, and Nutritional Security" from February 7-9, 2024, at RARI, Durgapura, Jaipur.