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MY MEETING NOTES

RISE UP 2.0: Fostering Innovation and Entrepreneurship in Agriculture, ICAR-Indian Institute of Spices Research, Kozhikode, February 19 to 21, 2025.

In this meeting note, Sajesh V. K., Maneesha S.R. and T. E. Sheeja reflect on the organization of the RISE UP 2.0 Innovation and Entrepreneurship Meet, held at ICAR-Indian Institute of Spices Research, Kozhikode, from February 19 to 21, 2025.

CONTEXT

The Agri Business Incubator of ICAR-Indian Institute of Spices Research (IISR), Kozhikode (http://www.spices.res.in/), successfully hosted the groundbreaking RISE UP 2.0 Innovation and Entrepreneurship Meet from February 19–21, 2025. This significant event was organized in collaboration with the Kerala Startup Mission (https://startupmission.kerala.gov.in/) and the Indian Society for Spices (https://indiansocietyforspices.in/), creating synergy between agricultural research, the innovation ecosystem, and industry stakeholders.

Dr. George Ninan, Director of ICAR-Central Institute of Fisheries Technology (CIFT), Kochi, inaugurated the event, which brought together a diverse array of participants, including aspiring entrepreneurs, university students, established business leaders, researchers, and agricultural stakeholders, to foster meaningful collaboration specifically within the agriculture and spice sectors—areas crucial to Kerala's economy and India's agricultural exports.

NavUdyam: Participants with organizers

TECHNICAL SESSIONS

The RISE UP meet was thoughtfully structured around four complementary subthemes—NavUdyam, Udyamita, Udayam, and Udyamika—each addressing different aspects of the entrepreneurial journey and agricultural innovation spectrum.

NavUdyam: Nurturing New Ideas

NavUdyam featured two key components designed to spark innovation and guide new entrepreneurs:

Theme-based Idea Hackathon: This intensive competition challenged participants to develop innovative solutions addressing critical challenges in the spices sector. The hackathon focused on six priority areas:

- Developing rapid, field-deployable tools for detecting pesticide residues and adulterants in both fresh and processed spices—addressing a major food safety and export concern.
- Designing novel, efficient harvesting equipment specifically for high-value spices, including black pepper, cinnamon, and nutmeg—crops that traditionally require labor-intensive harvesting methods.
- Creating artificial intelligence-based tools for early detection of insects, pests, and diseases—enabling preventive rather than reactive agricultural management.
- Innovating approaches to mitigate chemical pesticide usage and generate economic value from spice waste—promoting sustainability and circular economy principles.
- Developing effective strategies for managing human-wildlife conflict—a significant challenge in many spice-growing regions near forest boundaries.
- Designing sustainable cultivation models for slope areas utilizing modern technologies like AI and drones—addressing the challenges of growing spices in Kerala's hilly terrain.

The hackathon received fifty submissions, from which thirteen innovative ideas were shortlisted for detailed evaluation by an expert panel. Following rigorous assessment, two exceptionally promising concepts were selected for further development, with support to progress from the conceptual stage to functional prototypes and ultimately to market-ready products.

Session on Idea Hackathon-Pitching and winners from the competition

Startup Orientation Programme: This educational segment featured experienced founders and representatives from prominent incubation centers, including the Kerala Startup Mission, Technology Business Incubator of the National Institute of Technology, Calicut, and RAAFTAR AgriBusiness Incubator (ABI) of Kerala Agricultural University (KAU). These experts shared valuable insights from their entrepreneurial journeys, discussed common challenges faced by agri-startups, and provided practical guidance on navigating the startup ecosystem, securing funding, and scaling agricultural innovations.

The experts strongly advised entrepreneurs to utilize established incubation facilities before investing in their own infrastructure, citing numerous examples where this approach saved startups from premature capital expenditure. They detailed specific government and private funding opportunities available to agri-startups, sharing application strategies and common pitfalls to avoid. They outlined structured processes for transforming initial concepts into viable business models, offering examples where incubator mentoring had transformed vague ideas into precise, scalable solutions. They also

emphasized the importance of developing clear exit strategies, discussing options such as acquisition, strategic partnerships, and sustainable growth models.

The experience-sharing sessions led by startup founders Ms. Selma S. of IQZYME MedTech and Mr. Sanu Mohammed of Fulva served as a great source of motivation for participants. Their stories encouraged attendees to recognize and seize opportunities while shedding light on the supportive ecosystem available to entrepreneurs. Both emphasized the importance of identifying market opportunities, leveraging strategic partnerships, and maintaining quality control during production scale-up.

Aswathy.V.Girija (Kerala Startup Mission); K.P Sudheer (RAAFTAR- ABI, KAU); Selma.S (IQZYME Medtech): and Sanu Mohammed (Fulva)

Udayam: Showcasing Agricultural Entrepreneurship

The second day witnessed the inauguration of Udayam 2.0 Agri Expo by Dr. R. Dinesh, Director of ICAR-IISR, at the institute's campus. This comprehensive exhibition featured approximately 70 small-scale entrepreneurs and agricultural product manufacturers, creating a vibrant marketplace of innovation. The expo showcased a diverse range of products, including advanced farm tools, eco-friendly bio-inputs, high-quality seeds, and value-added spice products. It provided small-scale agricultural entrepreneurs with invaluable market exposure and networking opportunities.

Udyamita: Connecting Technology with Enterprise

The Udyamita Entrepreneur's Meet served as a critical bridge between research institutions and aspiring entrepreneurs. The event featured presentations of market-ready technologies developed by premier agricultural research institutions, including the Central Plantation Crop Research Institute (CPCRI), Directorate of Cashew Research, Indian Institute of Spices Research (IISR), Kerala Agricultural University, and the National Institute of Food Technology Entrepreneurship and Management (NIFTEM-Thanjavur).

Representatives from key support institutions provided insights into government and institutional support schemes (Table 1) designed to address capital requirements and operational challenges faced by agri-entrepreneurs. These included the District Industries Centre, MSME-Development and Facilitation Office, and the Department of Agriculture, Government of Kerala.

Table 1: Support provided by various organisations to promote agripreneurship

Supporting Agency	Scheme	Details
District Industries Centre	Entrepreneur Support Scheme (ESS)	15% subsidy assistance on capital investment, limited to Rs. 30 lakhs.
	PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme)	35% subsidy (Maximum Rs. 10 lakhs) for capital investment, excluding land purchase. Includes technology purchases from research institutes (30% of investment).
	PM Employment Generation Programme (PMEGP)	Margin money subsidy of Rs. 15%-35% under the manufacturing sector (Rs. 50 lakh investment) and business/service sector (Rs. 20 lakhs investment).
	One Family One Enterprise (OFOE)	Interest subvention for loans up to Rs. 10 lakhs (for fixed capital and/or working capital).
MSME-Development and Facilitation Office	Collateral-Free Loan (CGTMSE)	MSE loans up to Rs. 5 crores, not backed with collateral or third-party guarantees.
	Entrepreneurship and Skill Development Programme Scheme	Capacity development programmes for MSME owners and aspiring entrepreneurs
	Zed Scheme	Subsidy on Zed certification costs based on defined quality and production parameters.
	Procurement and Marketing Support Scheme	Market access initiatives, trade fairs, vendor development programs, and MSME capacity building.

Sunil.V.G (KAU); Maneesha.S.R (ICAR-IISR); Vishesh Aggarwal (MSME-DFO) and Gayathri (DIC)

Udyamika: Empowering Women in Agricultural Entrepreneurship

The third day featured Udyamika – Women Entrepreneurs Forum, addressing the unique challenges and opportunities for women entrepreneurs in agriculture. The forum provided a platform for successful women agricultural entrepreneurs to share experiences, discuss gender-specific challenges, and propose solutions to increase women's participation in agricultural entrepreneurship.

Discussions covered access to finance, balancing family responsibilities, overcoming social barriers, and leveraging support networks. Panelists emphasized financial literacy, stress management, and the importance of integrating women entrepreneurs into organized business structures such as startups and companies.

VALEDICTORY SESSION

The meet concluded with an inspiring valedictory session graced by Shri P. Prasad, Minister for Agriculture, Government of Kerala. Minister Prasad commended IISR for its entrepreneurial initiatives

and highlighted innovative research developments, including spice-infused jaggery mix and technologies for mitigating wildlife-related crop damage. He also issued license agreements for the commercialization of three superior IISR spice varieties—Surasa (Ginger), Surya (Turmeric), and Vajra (Ginger).

Shri. P. Prasad, Hon'ble Minister of Agriculture (Government of Kerala) addressing the valedictory session

ENDNOTE

The RISE UP Innovation and Entrepreneurship Meet exemplified a holistic approach to fostering agricultural entrepreneurship by including diverse stakeholders, from students and startup enthusiasts to established entrepreneurs and MSMEs. By addressing the complete innovation pipeline—from idea generation to market access—the event created multiple entry points for entrepreneurial engagement with agriculture.

Looking ahead, IISR plans to establish these entrepreneurship programs as recurring annual events, focusing on different themes within agricultural innovation. Expanding publicity and outreach strategies, including social media campaigns, agricultural publications, and collaborations with entrepreneurship networks, will further enhance participation and impact.

Ultimately, the entrepreneurial ecosystem nurtured through these events creates valuable pathways for transforming research innovations into real-world commercial applications while inspiring the next generation of agricultural entrepreneurs.

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