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Director's Desk

Foreword



There is every need to restructure the present delivery of agro-advisories to farmers and other stakeholders keeping in view of changing dynamics in information technology revolution and also changing needs of the information users.

The nature of messages should focus on innovations like tech-enabled agri and allied sectors, sustainable technologies, regenerative farming, waste management, energy efficient practices, natural farming, integrated nutrient management, application of artificial intelligence, machine learning, IoT and sensor based technologies in agri and allied sectors, natural resource management, post-harvest management, value addition, direct marketing, collective and contract farming, automation, precision farming, data driven farming, digital agriculture, crop diversification, export orientated technologies, high yielding varieties, breeds, green technologies, climate smart farming, promotion of FPOs, drones, circular economy, smart irrigation, integrated pest management, soil health management, big data analytics application in agri and allied sectors, block chain technology for supply chain, genetic engineering, urban farming, antimicrobial resistance, optimizing livestock nutrition, feed and fodder in livestock, agripreneurship, application of GIS and remote sensing technology in agriculture, protected cultivation, high value crop cultivation

Myriad platforms/ mechanisms have to be used to disseminate information on all these relevant areas- the regular methods like training programmes, method and result demonstrations, exposure visits, kisan melas, exhibitions, conferences, seminars, workshops, farmer field schools, print media like newspapers, and farm magazines, success stories, case studies, participatory appraisal techniques, role plays, simulation techniques, group meetings, hands on experience sessions, farmer-scientist interactions, social media like mobile advisory services, YouTube channels, farm telecast through electronic media, mobile apps, whatsapp groups, facebook, instagram, X (formerly twitter), blogs, websites, webpages, online farmer-scientist interactions, community radios, podcasts etc. All these media/ channels should focus not only on transferring the messages but also building knowledge networks, interoperability of the data, and facilitate to obtain the feedback from the users. The information service providers should understand the usecases in agri and allied sectors to customize and deliver the impactful messages for better application by the last mile user in supply and value chain in agri and allied sectors. Extension Education Institute, Rajendranagar, Hyderabad is working to understand the usecases of the middle level extension officials of the Southern region to offer quality training programmes to improve their capacities to address better the needs of farming community.

mjreddy

(Dr. M. Jagan Mohan Reddy)

Director, EEI, Hyderabad



Promotion of Startups and Entrepreneurship in Agriculture and Allied sectors

India being the agriculture based country, to ensure that, the benefits of the startup India initiative are effectively reaching across the country, the govt of India is making efforts in the form of capacity building and hand holding, facilitating outreach and awareness, ecosystem development events and programs, envisaging international exposure and linkages etc., To harness these opportunities, it is imperative for the faculty of agriculture and allied sectors to be equipped with the knowledge and skills necessary to guide and mentor potential entrepreneurs. Understanding business planning, investment strategies, market research are essential to accelerate the India's Startup Eco System.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Promotion of Startups and Entrepreneurship in Agriculture and Allied sectors from 01st – 05th July, 2025 at EEI, Hyderabad.

Content covered in the programme was- Overview of startup ecosystem in India, Empowering Grassroots Innovations : The role of educators in fostering agri-entrepreneurship and rural startups, Business plan preparation for agriculture start ups, Market research and opportunity assessment in agriculture enterprises, Investment planning, financing and risk mitigation in agriculture sector, Startup models in agriculture: practice to tactics, Role of Incubation Centres in promoting entrepreneurs and agri-startups, Logistic framework and regulations for startups, Sources of funding and financial support for agri-startups, Mentoring women agri-startups, Government schemes and programmes, Strategies for scaling up startups in agriculture



Dr. M. Jagan Mohan Reddy, Director, EEI, Dr J Stanley CEO , Nutrihub-IIMR and PS, IIMR, Hyderabad and Dr. V. Ravinder Naik, Professor & Course Coordinator, EEI addressing participants during inaugural programme

During the inauguration Dr M Jagan Mohan Reddy, the Director ,EEI and Dr J Stanley CEO , Nutrihub-IIMR and PS, IIMR, Hyderabad were the guests graced the inaugural session . Dr M Jagan Mohan Reddy, the Director ,EEI while addressing the trainees briefed about the importance of the knowledge of startups in the present days and remembered that, KVKs have fair chances of promoting the startup ecosystem in the Indian Agricultural Domain as Agriculture is the main occupation to majority of the Indian population. Dr J Stanley CEO, Nutrihub-IIMR while addressing the inaugural has spoken about the importance of startups in the millets and the necessity of promoting the startup ecosystem in the agriculture domain.

During icebreaking session, the icebreaking session was conducted to the trainees to facilitate the trainees more comfortable and relaxed when they first meet or interact, especially in a group setting. The purpose is to reduce initial awkwardness and create a more open and engaging atmosphere. the icebreaking session was moderated by Dr N Praveen and Dr V Ravinder Naik.

The EEI, Hyderabad follows very unique training methodologies to create impactful training programme . The methodologies include, Presentations by eminent speakers/experts, Interim interactive sessions, Interim group discussions, Brain storming, Individual and group presentations, Individual and group assignments, Panel discussion followed by forum.

The field visits were made to orient the trainees about the Centre for Innovation and Agripreneurship (CIA) - An Agribusiness Incubation hosted at National Institute of Agricultural Extension Management (MANAGE). It is one-stop solution for creating successful ventures in agriculture & allied sectors. Our Agri Innovation Launchpad will empower to fulfil the dreams and create the next big thing in the agricultural sector for aspiring enthusiasts and entrepreneurs. Similarly the trainees were taken to Nutrihub, ICAR-IIMR, the Nutrihub is making efforts to synergise millet startups, and other stakeholders (corporations, governments, academia and investors) to bring transformative change. A field visit was also made to Kalagoora gampa -A startup to acquaint the trainees about the prospects of agriculture and allied sectors.

On the occasion of valediction, Dr M Jagan Mohan Reddy, the Director ,EEI has graced the valedictory and



while addressing the trainees he remembered that, the trainees need to replicate the learnings of the training to the places where they are coming from and try to be part of the Indian agricultural startup ecosystem as the entire world is looking at them for the same.

During the feedback, Very positive and encouraging feedback was received from the participants. The trainees were fascinated by a very novel Panel Discussion which involved about four Startups from Agriculture and Allied Sectors followed by Forum. The session was moderated by Vijay N. from Ag Hub, PJTAU.

Twenty (20) middle level extension officials of SMSs of Agriculture, Horticulture, Fisheries, Animal

Husbandry of different KVKs of Odisha State were attended the training programme, which was coordinated by Dr. V. Ravinder Naik, Professor, EEI, Hyderabad



Trainees during training programme

Digital solutions for effective TOT in Dairy

Human resource development helps in developing a superior workforce for the organization by educating and training them. It imparts all knowledge and skills to employees necessary for carrying out their roles and duties. It leads to better trust and respect among them which strengthens their relations with one another.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Digital solutions for effective TOT in Dairy from Sector for the officers of Department of Dairy, Kerala State 01st to 05th July, 2025 at EEI, Hyderabad.

Content covered in the programme was- Overview on Digital Initiatives in Dairy Sector, Web Portals for Dairy Sector AI Instruments & Tools in Dairy Technology, Digital story telling: Web site development, Web page designing, Geospatial Technologies and Decision Support Systems in Dairy Management, Sensitization on cyber crimes, Mobile-Based Advisory Services for Dairy Farmers, Startups Smart

Caller App, Muzzle reader App and Software in Dairy, Sharing of Success story of Dairy Entrepreneur, GOI schemes and initiatives in Digital applications Blog Orientation Back home planning and Gender budgeting for mainstreaming of gender in agri and allied sectors.

During the inauguration Dr. M. Jagan Mohan Reddy, Director, EEI in his inaugural remarks emphasize how Digitalization can have a significant impact on the value chain's 'Milk Production' component. Dairy farming in India is unorganized, and therefore, technology penetration is low, but nonetheless, a few start-ups have popped up in this field in the previous five years. These businesses strive to boost agricultural production while reducing waste.

During field visit, Visit to Electronic wing PJTAU learnt hands on training on short video, Video script and Jingles. Visit to Dairy farm, college of veterinary science were Key innovations on automated milking systems,



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. N. Praveen, Professor & Course Coordinator, EEI addressing participants during inaugural programme



Trainee expressing their feed back during valedictory session



wearable sensors for cows, real-time milk quality analysis, and data analytics for herd management. were explained and few digital technologies were shown.

On the occasion of valediction, Dr. M. Jagan Mohan Reddy, Director, EEI in his Valedictory remarks emphasized how digital revolution is transforming the Indian dairy sector, moving it towards increased efficiency and sustainability. Digital solutions like AI-powered herd management, blockchain for milk traceability, and automated milking systems are being adopted to enhance productivity and improve milk quality. These advancements are empowering small dairy farmers and driving the "White Revolution 2.0"..

During the feedback, Digital solutions in the dairy industry are generally viewed positively, offering improvements in efficiency, productivity, and sustainability. Digital platform highlights the potential of technologies like IoT sensors, data analytics, and automation to transform various aspects of dairy farming and processing. However, challenges remain in terms of adoption, data management, and infrastructure to be addressed.

Nineteen (19) middle level extension officials of Dairy Development of Kerala State were attended the training programme, which was coordinated by Dr.N. Praveen, Professor, EEI, Hyderabad

Managerial Skills for Organizational Excellence

The Extension Education Institute (EEI), Hyderabad organized an on-campus training programme on **"Managerial Skills for Organizational Excellence"** from 7th to 11th July 2025. The programme aimed to enhance strategic leadership, innovation, and problem-solving capabilities among officers from the Department of Agricultural Marketing and Agri Business, Tamil Nadu.

Dr. M. Jagan Mohan Reddy, Director, EEI, inaugurated the programme, emphasizing the importance of strategic thinking, communication, and team leadership for driving professional excellence in extension systems. The training covered vital topics including AI-driven managerial skills, workplace ethics, gender budgeting, stress management, and hands-on training in website and webpage designing.

Participants actively engaged in interactive lectures, group activities, case studies, and experiential learning modules. Ice-breaking games such as the Name Ball Game, Human Chain Twist, Number Line, and Fish and Fisherman game were conducted to foster familiarity, collaboration, and problem-solving spirit among participants.

A field visit to Shanti Sarovar – Brahma Kumaris, Gachibowli, was organized to expose participants to the spiritual dimensions of workplace ethics. The session emphasized values like inner peace, integrity, and mindfulness for professional conduct.

The valedictory session was graced by Dr. M. Jagan Mohan Reddy and Dr. Y. Ekadri, Director of Extension, PJTSAU. Dr. Reddy urged participants to be catalysts of change, while Dr. M. Yakadri emphasized the role of managerial capacity building in strengthening institutional efficiency and grassroots impact.

Participants expressed that the programme was highly useful and practically relevant. They appreciated the green initiative of sapling plantation, the well-organized sessions, and the hospitality. Many suggested extending the duration for deeper engagement with the topics.

A total of 18 participants from the state of Tamil Nadu attended the programme, which was coordinated by Dr. M. Preethi, Professor, EEI Hyderabad.



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. M. Preethi, Professor & Course Coordinator, EEI addressing participants during inaugural programme



Trainees are playing practical session during Dr. M. Jagan Mohan Reddy, Director, EEI session in the training



Innovations in marketing for Agricultural Products

Innovations in agricultural marketing are focusing on digital technologies, sustainable practices, and direct-to-consumer approaches. These include leveraging online platforms for sales, using data analytics to optimize marketing strategies, and emphasizing the story of the product's origin and sustainability. Examples include e-commerce platforms for farmers, blockchain for supply chain transparency, and mobile apps for connecting consumers with local farms. By embracing these innovations, agricultural businesses can improve their marketing effectiveness, build stronger relationships with consumers, and contribute to a more sustainable and resilient food system.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Human Resource Development for Professional Excellence from 07th – 11th July, 2025 at EEI, Hyderabad.

Content covered in the programme was- Innovations in marketing for Agricultural Products- An overview, Role of e-NAM in Promotion of Marketing in Agriculture, Development Programmes and Schemes of State and Central Govt. for Agriculture Marketing, Remote Sensing – GIS and GPS with Special Focus on Marketing and Insurance in Agri culture, IT Enabled Marketing in Agriculture products, Block Chain Technology Management in marketing of Agriculture products – An Advance IOT Initiatives, Visit to Kalagura Gampa Store, Visit to centre for sustainable Agriculture, Hands on experience on website development and web designing for marketing of Agriculture products, Digital Initiatives in Marketing of Agriculture commodities by FPOs, Market Intelligence and Market Networking of Agri and commodities, Gender budgeting and mainstreaming in Agriculture Marketing.



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. D. Shireesha, Asst. Professor & Course Coordinator, EEI addressing participants during a session

During icebreaking session, "Passing the Ball" is a versatile icebreaker activity where participants stand in a circle and pass a ball while introducing themselves or sharing information. It helps build rapport, encourages interaction, and can be adapted to various group sizes and objectives. A "balloon caterpillar" icebreaker session involves teams forming a line (like a caterpillar) and passing a balloon (or multiple balloons) between team members, often while navigating obstacles or completing a task. This activity is designed to encourage teamwork, communication, and coordination.

During the inauguration Dr.M.jagan Mohan Reddy Graced the inaugural session and emphasized that innovations in agricultural marketing are transforming how food reaches consumers, focusing on efficiency, transparency, and sustainability. These include digital platforms, precision agriculture, and new approaches like Community Supported Agriculture (CSA). Technological advancements like drones, blockchain, and AI are also playing a significant role in optimizing supply chains and connecting farmers directly with buyers. And instructed the participants to follow all sessions thoroughly to get first hand information on different innovative strategies of marketing.

During field visits, IFFCO, Telangana, Hyderabad (Indian Farmers Fertiliser Cooperative Limited): has a presence in Hyderabad, Telangana. Specifically, there's an office located at 10-5-22, Masab Tank, Hyderabad, 500028, with the Zone being South. IFFCO offers a range of nano fertilizers, including urea, DAP and few micronutrients and vermicompost, as well as other agricultural inputs. They also offer health insurance through IFFCO-Tokio. IFFCO also has an e-Bazar Limited (IeBL), which is a subsidiary focused on providing modern retail experience for agri



Trainees during field visit to CAS, Tarnaka along with Dr. D. Shireesha, Asst. Professor & Course Coordinator, EEI



inputs and services in rural India. Centre for sustainable agriculture: CSA envisions to become national institution to lead the transition of Indian agriculture to become ecologically and economically sustainable Mission: Caring for those who feed the nation by Conducting research on agroecological farming methods and their impact Assisting farmers and consumers in successfully transitioning to organic Building vibrant rural enterprises and producer organisations Enhance the last mile delivery of support services, and Improve the governance of public policy systems

Hands-on training was given to participants on website development typically involving practical exercises and projects where participants learned skills in webdesigning by building real websites or web applications. This approach helped them solidify theoretical knowledge and build a portfolio of projects.

On the occasion of valediction, Dr.M.Yakadri graced the valedictory session and mentioned that innovations in marketing are not only improving the efficiency and profitability of agricultural businesses but also contributing to more sustainable and resilient food systems. Using advanced technologies like satellite imagery, IoT sensors, and drones, farmers can monitor soil health, crop conditions, and weather patterns in real time. This Agri innovation helps optimize irrigation, fertilization, and pesticide use, resulting in higher productivity and reduced waste. And also informed all the trainees to apply

the learning of the training in their real life job situations to make farming community profitable Dr.M.jagan mohan reddy in his valedictory remarks indicated the importance of Government initiatives are promoting the development of a more efficient and transparent agricultural marketing system through regulated markets, infrastructure development, and policy support. Innovations in marketing, along with others, are transforming agricultural marketing, leading to a more sustainable, efficient, and profitable food system. And advised the trainees to send the feedback of the application of learnings at their concerned state.

During the feedback, Participants reacted positively to training program focused on agricultural marketing innovation, with a strong emphasis on practical application and digital tools. Feedback often indicated that market analysis tools, e-NAM (National Agriculture Market), and the application of geospatial technologies in marketing agricultural commodities, Extensions strategies and gender budgeting for Agricultural marketing were informative and very much useful. Participants also highlighted the need for training that addresses supply chain management, market dynamics, and business planning for Farmer Producer Organizations (FPOs).

Twenty (20) middle level extension officials of Department of Agriculture of Tamil Nadu state were attended the training programme, which was coordinated by Dr. D. Shireesha, Professor, EEI, Hyderabad

Digital Solutions for Effective Transfer of Technology in Horticulture

An ecosystem of digital technologies in Indian horticulture is emerging and expanding at an impressive pace. A large number of young entrepreneurs have ventured into this Digi-Tech process to tackle specific challenges resulting in reduction of crop cycles, optimum utilization of resources, automating farm management and linking farmers to markets. Hence upgrading knowledge and skill levels of Horticultural officers is very important on digital applications plays a pivotal role in reaching the farmers.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Digital Solutions for Effective Transfer of Technology in Horticulture from 22nd – 26th July, 2025 at EEI, Hyderabad.

Content covered in the programme was- An overview on Digital solutions for effective Transfer of

Technology in Horticulture Sharing of experiences in digital marketing, Gender budgeting, GOI schemes and initiatives in digital applications, Data protection privacy and Sensitization on Cyber crimes, Digital applications in



*Dr. M. Yakadri, Director of Extension, PJTAU,
Dr. M. Jagan Mohan Reddy, Director, EEI and
Dr. R. Vasantha, Professor & Course Coordinator, EEI addressing
participants during inaugural programme*



Good Horticultural practices in Telangana, Extension strategies for promotion of digital tools, Skill demonstration on precision irrigation, Visit to Electronic wing for preparation of video jingles, Hands on training on Kisan Link, Skill demonstration on practical application of Drones, Hands on Training on Usage of Plantix app (Pest and Disease diagnostic App), Experiential learning on transfer of technology through Infographs developed by using CANVA, Creation of website and Hands on training on designing Webpages with Online Platform, Development of QR codes, Development and conducting survey using Google forms, Hands on experience on Krishi tantra and Rapid soil testing kit, EEI blog Demonstration.

Dr M. Yakadri, Director of Extension, PJTAU and Dr M. Jagan Mohan Reddy, Director, EEI graced the inaugural event. Dr Yakadri, speaking about the importance of training said that training on digital tools will keep the learners updated, motivated and attentive. He opined that Digital training has emerged as an essential element for the growth and success of both individuals and organizations in our society.

Fish and Fisherman and 8 chairs icebreakers were conducted to the trainees to bring out their leadership, communication, decision making, coordination, cooperation, creativity, stress management and time management skills in real time settings. After drawing the learnings, trainees were suggested dos and don'ts in their performance

During field visit, trainees took part in live interaction using CISCO WEBEX platform with farmers from Karnataka. They clarified their doubts regarding palm

oil trees cultivation. Later they developed video jingles embraced with songs, dialogues etc on topics of importance for karnataka farmers.

On the occasion of valediction, Dr M. Jagan Mohan Reddy, Director, EEI. Congratulated all the trainees for upskilling themselves on various digital tools like QR codes, PLANTIX, Website development etc. He appealed them to send the filled in google forms on application of learnings after 1 week, 1 month and 3 months of training programme for documentation of training impact.

During the feedback, Trainees expressed that sessions on development of QR codes, usage of PLANTIX, google forms, Cybercrimes, Extension strategies, Soil testing, Digital marketing etc are very useful for them as they can apply them for educating different stake holders of their jurisdiction.

Fourteen (14) middle level extension officials of Horticulture of Karnataka state were attended the training programme, which was coordinated by Dr. R. Vasantha, Professor, EEI, Hyderabad



Trainees during visit at Electronic Wing, PJTAU, Rajendranagar

Digital solutions for effective TOT in Agriculture

Whenever you are booking an Uber or making payments directly through apps on the phone, you are using a digital platform for performing tasks that were once manual. The incorporation of technology in everyday tasks to improve functionality is known as Digitalization. Going back a few years, remember the time when opening a bank account required a visit to the bank and waiting in long queues? Thanks to the recent rapid digitalization, the exhaustive paperwork in banks, hospitals, and most private and public sector organizations seems to diminish as their businesses move online. Digitization has reduced the manual work – which was time-consuming, error-prone, and inefficient thus saving corporations millions. With

advancements in AI, the data analysis capabilities have improved so that all the appliances in our house can be managed by a virtual assistant that can understand human voice commands and respond. Proving to be a boon to every sector, digitalization in agriculture is also slowly revolutionizing this vast and complex sector that remains the centre of the world economy as still over 60% of the global population depends on it for survival. Introduction to digital farming Digital farming can be defined as the use of technology by farmers to integrate financial and field-level records for complete farm activity management. According to a paper by the Direct Line Group, "Digital Farming is the consistent application of the methods of



precision agriculture and smart farming, internal and external networking of the farm and use of web-based data platforms together with Big Data” Data from each plot can be analysed to provide information on soil, weather, and crop growth patterns to give actionable geographically relevant timely insights to prevent losses and optimize the productivity of each plot on the farm. Farmers can even get their queries solved and manage the supply chain directly through applications on their phones. Through pre-harvest and post-harvest management of farms, digital farming aims to take over all the aspects of farming from farm to fork.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Digital solutions for effective TOT in Agriculture for the officers of Department of Agriculture, Kerala State from 29th July 02nd August, 2025 at EEI, Hyderabad.

Content covered in the programme was- Overview on Digital Initiatives in Agriculture Sector, Web Portals for Agriculture Sector, Digital story telling: Web site development, Web page designing, Sensitization on cyber crimes, Agri-media skills for effective ToT, Hands on Training on: Usage of Plantix app, Development of QR codes & Google forms, Introduction to latest trends in digital solutions: Quantum computing, Generative AI, Chatbots& Metaverse (AR+VR), KRISHI TANTRA-Digital Soil Testing Kit and Rapid Soil testing kit-Hands on Training, GOI schemes and initiatives in Digital applications, Blog Orientation Back home planning, Gender budgeting for mainstreaming of gender in agri and allied sectors, Irrigation automation and Fertigation, Hands on Training-KISAN LINK APP, Drone Technologies in Agriculture, C-DAC Agri innovations.



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. K. Madhu Babu, Professor & Course Coordinator, EEI distributing certificates to the trainees in the valedictory programme

As part of the inauguration M.Yakadri, told that Digital technologies are transforming agriculture by providing farmers with tools for improved decision-making, increased efficiency, and enhanced sustainability. These technologies include mobile applications, data analytics, precision farming techniques, and automation, all contributing to a more productive and resource-efficient agricultural sector.

Dr. M. Jagan Mohan Reddy, Director, EEI specified that, Digital agriculture, sometimes known as smart farming or e-agriculture encompasses the tools that digitally collect, store, analyze, and share electronic data. As part of digital applications in agriculture, mobile apps and online platforms provide farmers with real-time access to vital information such as weather forecasts, market prices, crop management practices, and pest/disease diagnostics.

Ice-breaking helped the participants to open up their mind to ease in understanding the concepts, free interaction with other fellow participants and making them to actively participate in the sessions

The field visit, The visit to Electronic wing made them to prepare jingles, effectively transfer technology by making use of short and effective digital applications. Visit to C-DAC is useful in terms of knowing and practically experiencing digital innovation in weather forecast and assessment, Wikaspedia application in agriculture .The visits were greatly empowered the participants on digital innovations

During hands on training, Web page development, Preparing jingles, QR Codes development, Google forms preparation, Usage of Plantix app, Rapid Soil Testing Kit KISAN LINK APP and operation of Drone etc had been demonstrated and the participants could able to acquire skills and practice, which in turn made them apply at their back home



During Drone session in the training programme



On the occasion of valediction, Dr.M.Jagan Mohan Reddy, Director, EEI felt that, the technologies such as remote sensors, drones, precision irrigation systems, and GPS-guided machinery, as well as the use of data analytics, AI, and machine learning to make informed decisions about crop management and farm resource allocation. He also mentioned that, the Digital Agriculture Mission, approved in September 2024 with a budget of ₹2,817 crore, aims to establish a comprehensive digital ecosystem for Indian agriculture. The mission focuses on creating Digital Public Infrastructure (DPI) for agriculture, enhancing transparency and efficiency in government programs, and supporting evidence-based policy making. Key initiatives include AgriStack, a farmer-centric digital platform, and the Digital General Crop Estimation Survey (DGCES). He

has appealed all the participants to apply the learnings to increase the speed and precision in transfer of technology.

During the feedback, the participants expressed that, the training programme was great experience of learning. They had practical exposure and hands on experience of developing web pages. It has been an amazing experience in learning innovations in digital agriculture. The programme has been coordinated with excellence in providing valuable inputs, usefully discussions, sharing of wonderful experiences and updated knowledge from eminent speakers

Nineteen (19) middle level extension officials of Agriculture of Kerala state were attended the training programme, which was coordinated by Dr. K. Madhu Babu, Professor, EEI, Hyderabad

Next Gen Extension Approaches for effective Transfer of Technology

Next-generation extension approaches in agriculture emphasize moving beyond traditional top-down dissemination to farmer-centric, collaborative, and knowledge-driven systems that enhance productivity and sustainability. These approaches leverage digital technologies such as mobile phones, online platforms, and data analytics to provide timely, tailored information and foster virtual learning. They adopt participatory methods that involve farmers in technology development, build community ownership, and strengthen trust through local collaboration. Extension services are reinforced through capacity building, continuous knowledge sharing, and financial support mechanisms that encourage adoption. Multi-stakeholder partnerships, including public private collaborations, play a vital role in creating enabling ecosystems for technology transfer. Importantly, these approaches prioritize context-specific solutions, address socio-economic dimensions such as gender and equity, and focus on long-term sustainability to ensure that agricultural innovations remain relevant, inclusive, and impactful.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Next Gen Extension Approaches for effective transfer of technology for the faculty of ANGRAU, Andhra Pradesh from 04th to 08th August, 2025 at EEI, Hyderabad.

Content covered in the programme was- Next-Gen Extension Approaches- An Overview, Application of GSTs

(Geo Spatial technologies) for effective Agro Advisory Services, Next-Gen Extension Models, Innovative training methodologies, Strengthening farmer centric Linkages with Agri-Tech Start-ups and FPOs, Artificial Intelligence, IoT and Data Analytics for effective ToT, Hands on experience on designing Digital applications for speed and precision in ToT, Evolving Trends in Agricultural Extension: From Traditional to Digital, GoI initiatives to facilitate Next Gen Extension Approaches for effective ToT, Visit to Electronic wing, Visit to the TELAGE (Technology Enhanced Learning for Agriculture Education) lab, NAARM, Building Networks and Partnerships to meet the emerging challenges in attaining Sustainable agriculture, Agri Media skills

During ice breaking exercise, "Pass the Ball" icebreaker was conducted, which involved participants sitting or standing in a circle and passing a ball while stating their name and a fun fact or answer to a question. It's a simple way to encourage interaction and help people get to know each other, especially in larger groups. The "Balloon Caterpillar" game was a team-building activity where participants formed a line, holding balloons between them, and navigate a course while trying to keep the balloons from falling. It emphasized coordination, trust, and teamwork.

As part of the inauguration Dr.M.Yakadri, Director of Extension in his inaugural address mentioned that today, we stand at a critical juncture in agricultural development where traditional extension methods are being

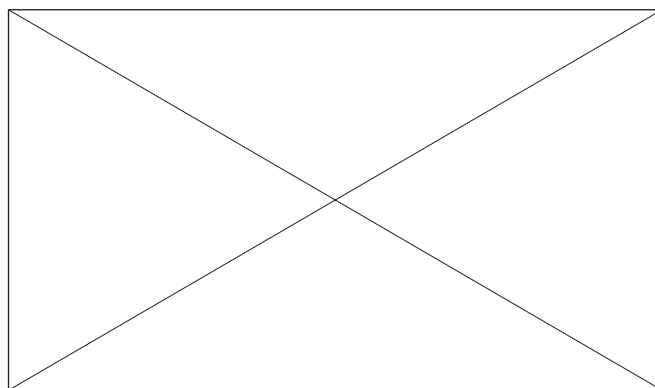
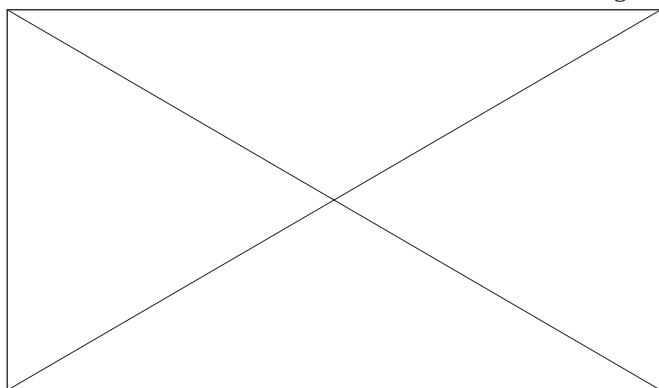


complemented and enhanced by innovative, digital, and participatory approaches to reach our farming communities more effectively. The role of extension in agriculture has evolved significantly over the years from merely disseminating information to facilitating knowledge exchange, fostering innovation, and empowering farmers to make informed decisions. With rapid advancements in technology, such as digital platforms, mobile-based advisories, e-learning modules, and precision farming tools, the opportunities to enhance the reach and impact of extension services have expanded tremendously. Dr.M.Jagan Mohan Reddy, Director,EEI in his inaugural address emphasized the critical role of modernizing agricultural extension services to effectively transfer technology to farmers. by highlighting the need for extension professionals to adapt to new technologies, adopt innovative methodologies, and foster collaboration for sustainable agricultural development. The Director also stressed the importance of leadership within extension services and the need to improve community impact through effective knowledge transfer.

Dr.M.Jagan Mohan Reddy, Director,EEI in his Valedictory remarks highlighted the program's success in equipping participants with modern tools and methodologies for effective technology transfer, emphasizing its role in fostering sustainable agricultural development and improved livelihoods for farmers. He also acknowledged the contributions of participants, and resource persons in encouraging continued learning and also insisted on the application of the acquired knowledge in the concerned state of the participants. He also felt that, the technologies such as remote sensors, drones, precision irrigation systems, and GPS-guided machinery, as well as the use of data analytics, AI, and machine learning to make informed decisions about crop management and farm resource allocation. He also mentioned that, the Digital

Agriculture Mission, approved in September 2024 with a budget of ₹2,817 crore, aims to establish a comprehensive digital ecosystem for Indian agriculture. The mission focuses on creating Digital Public Infrastructure (DPI) for agriculture, enhancing transparency and efficiency in government programs, and supporting evidence-based policy making. Key initiatives include AgriStack, a farmer-centric digital platform, and the Digital General Crop Estimation Survey (DGCES). He has appealed all the participants to apply the learnings to increase the speed and precision in transfer of technology.

Field visits were organised to electronic wing and TELAGE lab. The Electronic Wing is the primary facilitator of the "Rythu Nestham Live" program, a video conference where farmers can interact with agricultural experts to resolve their field problems in real-time. The wing produces various media formats like video capsules, DVDs, and supports agricultural programs on public and private TV channels. They also produce content for agricultural portals and information kiosks. The wing plays a key role in the "Rythu Nestham Live" program, a video conferencing initiative connecting farmers with experts. The Technology Enhanced Learning for Agriculture Education (TELAGE) lab at the National Academy of Agricultural Research Management (NAARM) is a facility designed to enhance the quality of teaching and learning in agricultural education through the use of technology. It offers various services, including digital content development, video recording, and virtual classroom capabilities. During hands on training, Web page development, Preparing jingles, QR Codes development, Google forms preparation, Usage of Plantix app, Rapid Soil Testing Kit KISAN LINK APP and operation of Drone etc had been demonstrated and the participants could able to acquire skills and practice, which in turn made them apply at their back home





During the feedback, participants highlighted the relevance of the training programme and practical application to their work. Feedback emphasized the program's success in updating knowledge on innovative extension models and improving skills for technology dissemination. Specific suggestions included incorporating

more location-specific examples and case studies, as well as focusing on more hands on experience.

Sixteen (16) faculty of ANGRAU were attended the training programme, which was coordinated by Dr. D. Shireesha, Assistant Professor, EEI, Hyderabad

Climate-resilient interventions in Animal husbandry sector for the officers of Department of Animal husbandry, Telangana

Climate change (heat waves, erratic rainfall, droughts, floods, new disease patterns) is already affecting livestock productivity, feed availability and animal health in India. Building resilience keeps incomes sustainable, protects animal welfare and reduces vulnerability of smallholder livelihoods.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Climate-resilient interventions in Animal husbandry sector for the officers of Department of Animal husbandry, Telangana from 19th to 23rd August, 2025 at EEI, Hyderabad.

Content covered in the programme was- Climate Resilient Animal husbandry- An overview, Climate smart dairy enterprise, Value addition to dairy to combat climate change, Climate-resilient Smart Feeding techniques, Climate-Resilient Housing for Dairy, Climate-resilient interventions in Poultry, High yielding fodder varieties in the context of resilience to climate change, Gender mainstreaming and budgeting, GoI schemes and programs in Animal Husbandry sector, Farmers Indigenous technologies for Climate resilience in Animal Husbandry

During ice breaking exercise, Number game and Balloon Caterpillar were performed by trainees, later learnings were drawn. The importance of leadership, team

work, communication, foresightedness, decision making , time management, creativity, cooperation and coordination for success of team work is unearthed in this session.

Dr. M. Yakadri, Director of Extension, PJTAU and Dr. M. Jagan Mohan Reddy, Director, EEI, Hyderabad graced the inauguration. Speaking on the occasion, Dr. M. Yakadri said that resilience to climate change in animal husbandry is vital for India as millions of farmers depend on livestock for their livelihoods. By adopting resilient practices farmers can reduce risks and sustain production. Dr. M. Jagan Mohan Reddy, Director, EEI opined that climate change resilience not only safeguards rural incomes but also ensures food and nutritional security for the nation in the face of climate uncertainties to attain the goal of Viksit Bharat.

During valediction, Dr. M. Jagan Mohan Reddy, Director, EEI, Hyderabad appealed the trainees to Implement the learnings back home by sharing the new learnings such as climate-resilient housing, new fodder varieties, proper water and disease management and use of hardy breeds with fellow officers and farmers which ensures improved productivity and sustainable livelihoods.



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. R. Vasantha, Professor & Course Coordinator, EEI along with participants are seen



Participants were offered hands on holding on milk quality testing at SIDs farm



A field visit was conducted to Livestock units (Dairy, rabbit, poultry, dairy, quail, sheep, goat etc) at PVNRTVU, Rajendranagar, SIDS Dairy farm, Shadnagar, Electronic wing, PJTAU, Rajendranagar, Hyderabad

Participants opined that learnings from this training such as smart housing and feeding, poultry and farmers traditional knowledge are very useful for them in their back home. They have planned to share these learnings in ensuing farmer awareness meetings. Few others indicated

that they will sensitize farmers on new fodder varieties and clean milking practices taught in the training. Trainees expressed that they learnt marketing and branding strategies during SIDS farm visit

Nineteen (19) Veterinary officers of Dept. of Animal Husbandry, Telangana were attended the training programme, which was coordinated by Dr. R. Vasantha, Professor, EEI, Hyderabad

Climate-Resilient Interventions in Animal husbandry sector

Climate change (heat waves, erratic rainfall, droughts, floods, new disease patterns) is already affecting livestock productivity, feed availability and animal health in India. Building resilience keeps incomes stable, protects animal welfare and reduces vulnerability of smallholder livelihoods. Climate impacts on livestock in the form of Heat stress → lower milk yields, reduced fertility, mortality risk, Fodder scarcity (droughts / erratic rainfall) weight loss, lowered productivity, Increased disease vectors and emerging/shifted disease windows, Coastal flooding / salinity affecting grazing and water for coastal systems.

In view of the above, the Extension Education Institute (EEI), Hyderabad organized an On campus training program titled "Climate-Resilient Interventions in Animal husbandry sector" for the officers of Department of Animal Husbandry, Karnataka State" from 28th August to 02nd September, 2025.



Dr. K. Madhu Babu, Professor, EEI, and Dr. m. Jagan Mohan Reddy, Director, EEI, Hyderabad addressing participants during inaugural programme

Contents covered in the programme were - Climate Resilient Animal husbandry- An overview, Climate smart Dairy Enterprise, Value addition to dairy to combat climate change, Climate-resilient Smart Feeding techniques,

Climate-Resilient Housing for Dairy, Climate-resilient interventions in Poultry, High yielding fodder varieties in the context of resilience to climate change, Gender mainstreaming and budgeting, GoI schemes and programs in Animal Husbandry sector, QR Codes Development, Google forms development

The Ice breaking exercise, has facilitated in creating flexible congenial environment for exchange of ideas and cross learning's facilitated in working in teams for effective learning.



Field visit during training programme at Sids farm, Shamshabad

The hands-on training on the participants were taught on how to prepare QR Codes and development google forms which made the participants developing online tools.

During inauguration, Dr.M.Yakadri, Director of Extension, PJTAU illustrated the importance of training programme While interacting with the participants he has suggested to comprehend various interventions to combat the climate change ill effects in Animal Husbandry.

Dr. M. Jagan Mohan Reddy, Director, EEI stressed the need to understand the triggers for climate change in extension officers need to focus on delivering climate



resilient interventions by blending with local knowledge of the farmers

During the valedictory session, Dr.M.Jagan Mohan Reddy, Director, EEI appealed all the participants to realise the changes due to climate change among the line stock emission of green house gases etc., he also told tat, the

trainees should enhance the resitience of farmers to face the climate change in Animal Husbandry.

Eighteen (18) trainees participated from the Department of Animal Husbandry, Karnataka State. The program was coordinated by Dr. K. Madhu Babu, Professor, EEI, Hyderabad.

Drones Applications in Agriculture

Drones are unscrewed aerial vehicles (also known as UAVs), which are used for surveillance in various industries. Till now, they were primarily used by companies working in industrial sectors such as mining and construction, army, and hobbyists. But now, drone technology is increasingly available for use in various sectors of agriculture as well. Though the technology is still nascent in India, many companies are trying so that it is easily available to Indian farmers and ready to be used to increase efficiency in agricultural production. The use of drone technology in agriculture can help reduce time and increase the efficiencies of the farmers. The use of drones in the agricultural sector is only expected to rise as the industry matures, and so it is good to know how to use this technology judiciously. The areas of applications of drones in agri and allied sectors are Soil and field analysis, Crop monitoring, Plantation, Livestock management, Crop spraying, check crop health, avoid overuse of chemicals, prepare for weather glitches and Monitor the growth etc.

Launched on 11th, March, 2024, Namo Drone Didi scheme is a Government of India initiative under the Sashakt Nari-Viksiti Bharat programme. Its objective is providing rural women with the skills to become drone pilots for agricultural purposes. PM Narendra Modi participated in Sashakt Nari Viksit Bharat programme, witnessing the agricultural drone demonstrations conducted by Namo Drone Didis at the Indian Agricultural Research Institute, Pusa, New Delhi. As the Indian agricultural sector is moving towards automation, and innovative solutions this scheme serves as a backbone improving women's economic empowerment and financial autonomy, especially in rural areas

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on **Drones Applications in Agriculture** for the officers of Department of Agriculture, Telangana State from 08th to 12th September, 2025 at EEI, Hyderabad.

Content covered in the programme was - problems and prospects of expanding drone use in Agriculture- An entrepreneur's experience, Drone: the green technology for future agriculture and its applications, Challenges in drone based applications in Agriculture, Drone rules, regulations and policy implications in India, Drone Based Package of Practices for Wet Direct Seeded Rice – Innovations and Challenges, Standard Operating Procedures and safety guidelines for Pesticide applications using drones, Type certified Agri-Drones in India - Specifications – Pros & Cons, Drones and AI: A new combination for crop protection, Rural franchise opportunities for drone-based spraying, Opportunities for drone based entrepreneurship & license requirements – through PJTSAU drone academy, Drone applications in animal herd management and health monitoring, Role of NABARD in strengthening FPOs through drone applications in Agriculture, Gender Budgeting for mainstreaming of gender in Agri and allied sectors, GOI Schemes, Programs for promotion of drones in Agri and allied sectors, Back home Planning and strategies to popularize Drone application by the Participants and presentations

As part of the inauguration, Dr.M.Jagan Mohan Reddy, Director, EEI: While speaking on the occasion felt that drones are not new and same can be effectively. We have ventured in to9 the unmanned operation of vehicles such as drones. Our responsibility is to create awareness among the farming community about drone usage not only for spraying but also for other purposes in agriculture, he said.

Ice breaking facilitates trainees to get adjusted to the training environment and make them to interact with fellow trainees freely. It enables participants to feel comfortable in the teaching learning process

The visits at both the sites made the participants to get acquainted with Drone pilot training, Various SOPs i



operating drones. The visits facilitated the participants to have hands on experience in operating drone on trial basis with the help of concerned drone pilot and technician.

During hands on training, Web page development, Preparing jingles, QR Codes development, Google forms preparation, Usage of Plantix app, Rapid Soil Testing Kit KISAN LINK APP and operation of Drone etc had been demonstrated and the participants could able to acquire skills and practice, which in turn made them apply at their backhome.

Dr. M. Jagan Mohan Reddy, Director, EEI: While speaking on the occasion he has requested the trained officers to share the knowledge among farmers as this is the growing subject however there are some gaps to take forward in complete shape. Our land holdings are marginal



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. K. Madhu Babu, Professor & Course Coordinator, EEI addressing participants in the inaugural programme

and we have to know how to customise, he opined. He further advised the participants to write a report on each session and share the same to the higher officials of the Department.

During the feedback, The programme has been organised with utmost accuracy and efficiency in order to meet the objectives. Great experience, confidence gained and will be communicated accordingly to the stakeholders. This training is very big eye opener and all the sessions were good. The boarding and lodging arrangements are very well managed.

Fourteen (14) middle level extension officials of Agriculture of Kerala state were attended the training programme, which was coordinated by Dr. K. Madhu Babu, Professor, EEI, Hyderabad.



Dr. M. Jagan Mohan Reddy, Director, EEI and Dr. K. Madhu Babu, Professor & Course Coordinator, EEI distributing certificates to the trainees in the valedictory programme

Antimicrobial resistance and Livestock health management and extension strategies

Antibiotic resistance or antimicrobial resistance (AMR) in livestock is a budding global concern that threatens both human and animal health. The overuse and misuse of antibiotics in livestock production has led to an increased propensity for the development of AMR strains in animals, which can be spread to humans through the consumption of contaminated animal products, direct contact, or environmental exposure. Antibiotics in livestock are used for growth promotion, disease prevention and control, and metaphylactic use. The role of livestock and the environment as reservoirs for resistant pathogens, their impact on human health, chronic infections, allergic reactions, toxicity, and the development of untreatable diseases is important to understand AMR. Widespread use of antibiotics and the potential

consequences of AMR, collaborative global efforts, increased public awareness, coordinated regulations, and advancements in biological technology are required to mitigate the threat, AMR poses to human and animal health. Regulatory solutions and the development of new therapeutic alternatives like antimicrobial peptides and bacteriophage therapy, and preventive measures such as DNA and mRNA vaccines, are future perspectives.

Keeping this in view Extension Education Institute, Hyderabad organized a 5 day On campus training programme on Antimicrobial resistance and Livestock health management and extension strategies for the officers of Department of Animal Husbandry, Karnataka State from 16th to 20th September, 2025 at EEI, Hyderabad.



Content covered in the programme was - Antimicrobial stewardship over view, livestock management Anti-microbial resistance in livestock sector Anti-microbial resistance in Animal food systems Feeding strategies for climate smart livestock farming Alternate therapies for disease management Digital technologies for animal health monitoring and management. Extension strategies to address AMR, One health Legal & Regulated frame work related to Antibiotics use.

Dr.K.Madhu Babu, Professor(AL-15) and Director I/c: While speaking during inaugural programme stated that, Antimicrobial resistance (AMR) occurs when microbes like bacteria and viruses no longer respond to drugs meant to kill them, making infections harder to treat. Infection control and prevention (IPC) is a set of practices, such as improving hygiene and handwashing, to stop the spread of all infections, including those caused by AMR pathogens, and therefore reduce the need for antimicrobials in the first place. Together, IPC and careful antimicrobial use are the most effective ways to combat AMR. Further he added that, AMR is the ability of germs to defeat the medicines designed to kill them. This can turn once-treatable infections into life-threatening illnesses. How it happens: Microbes can naturally change over time, and this process is accelerated by human activity like the overuse and misuse of antimicrobials in humans, animals, and agriculture. Untreatable infections increase the risk of disease spread, severe illness, disability, and death are the consequences. It poses a major global health threat. Infection Control and Prevention (IPC) A set of practices to prevent the spread of infections, particularly in healthcare settings. IPC measures reduce the need for antimicrobial treatments by preventing infections from happening in the first place. Further he has highlighted the key practices viz: Improving hygiene, especially hand hygiene Ensuring hospital and environmental hygiene, Promoting routine

vaccinations, Implementing safe food preparation, he added.

Ice breaking exercises made the participants flexible in interactions and adjusting to learning environment. The exercises helped the participants to easily work in groups and develop strategies for effective implementation of learned techniques of antimicrobial resistance.

This dairy farm is unique in its functioning for screening of milk to find out any microbes and impurities in the milk by testing it at different levels careful maintain hygiene and quality of milk. The visit enlightened the participants about various factors that effects the quality of milk.

Dr.K.Madhu Babu, Professor(AL-15) and Director I/c: While speaking during Valedictory programme felt that, Every infection prevented means one less use of an antimicrobial drug, which slows the development and spread of resistance. Strong IPC is crucial: IPC is considered the most effective approach to control the spread of AMR.A combined effort: Tackling AMR requires a combination of strong infection prevention measures and the "rational use" of antimicrobials, meaning using them only when necessary and as prescribed. Further he has requested the participants to apply the learned knowledge at back home for further creating awareness on the subject which need of the hour. Periodical updating on the application of learned knowledge at back home is needed.

During the feedback, The programme was organised in a befitting manner. The contents covered were highly useful.

Twenty (20) middle level extension officials of Animal Husbandry of Karnataka state were attended the training programme, which was coordinated by Dr.E.Srinivas, Professor, EEI, Hyderabad.



Dr. K. Madhu Babu, Professor & Dr. E. Srinivas, Professor, Course Coordinator, EEI addressing participants in the inaugural programme



Dr. K. Madhu Babu, Professor & Dr. E. Srinivas, Professor, Course Coordinator, EEI distributing certificates to the trainees in the valedictory programme



Farmer Field Schools for Animal Husbandry Practices

The Extension Education Institute (EEI), Rajendranagar, Hyderabad, organized a five-days on campus training programme on “Farmer Field Schools for Animal Husbandry Practices” from 23rd to 27th September, 2025, for 12 officers of the Department of Fisheries & Animal Resources Development, Government of Odisha. The programme aimed to build participants' capacity in implementing participatory and field-based learning models for Animal Husbandry farmers.

The training was inaugurated by Dr. M. Jagan Mohan Reddy, Director, EEI, who emphasized the importance of Farmer Field Schools (FFS) as a platform for experiential learning and sustainable livestock development. Dr. M. Preethi, Professor & Course Coordinator, welcomed the participants and outlined the objectives and structure of the programme.

During the course, participants were exposed to various aspects of FFS approaches, climate-smart livestock practices, fodder production, gender integration, and

government schemes through lectures, interactive discussions, and field visits. Exposure visits to livestock units, the Electronic Wing of PJTAU and to Web site designing and web page publication which enriched their practical understanding.

In the valedictory session, Dr. Jagan Mohan Reddy appreciated the participants' enthusiasm and highlighted the need to enhance the contribution of agriculture and allied sectors to national growth to achieve the vision of Viksit Bharat. He urged officers to apply the learning for the benefit of farmers and rural communities.

The programme concluded with post-evaluation, back-home planning, and valedictory proceedings, followed by a group photograph. Participants expressed appreciation to EEI for the well-structured and insightful programme and expressed their gratitude for the enriching and practical learning experience that will help them strengthen FFS initiatives in their respective regions.



Dr. M. Jagan Mohan Reddy, Director, EEI, Dr. M. Preethi, Professor, Course Coordinator EEI & Dr. P. Vijaya Lakshmi, Professor addressing participants during inaugural programme



Field visit to Electronic Wing, ARI, PJTAU, Rajendranagar





Group Photo



Certificate Distribution to participants during valedictory programme

Innovations in Livestock Extension System

The Extension Education Institute (EEI), Hyderabad organized an on-campus training programme on **"Innovations in Livestock Extension System"** from 23rd to 27th September 2025 for the Officers of Department of Fisheries & ARD, Odisha State. A total of 16 officers participated in the programme from the Department of Fisheries & ARD, Odisha state. Dr. P.Vijaya Lakshmi, Professor, EEI Hyderabad coordinated the programme.

Dr. M. Jagan Mohan Reddy, Director, EEI, inaugurated the programme, emphasizing the importance of Innovations in Livestock Extension System. The training covered vital topics including Supply and value chain management in livestock sector, Climate smart approaches in livestock sector, Entrepreneurship models in poultry sector, Sheep and goat sector, Modern pig farming systems for the betterment of livelihoods, Opportunities and

challenges of FPOs in livestock sector and Role of FFS in livestock sector.

During the programme participants were taken to different livestock units such as Rabbit, Poultry, Dairy, Emu, Sheep and Goat units and interacted with concerned scientists and clarified their doubts. Participants also visited Electronic Wing, PJTAU, Rajendranagar and undergone hands on training on video jingles and prepared video jingles on livestock management.

The valedictory session was graced by Dr. M. Jagan Mohan Reddy, Director, EEI. Dr. Reddy urged participants use the learnings at back home for the benefit of farming community. Participants expressed that the programme was very useful and field visits helped them to understand innovations in livestock sector.

Off Campus Training programmes

Digital Solutions for Effective Transfer of Technology in Agriculture

Digitalization and IT revolution has changed every aspect of our life but agriculture and allied sectors are the areas where its application still remains largely unexplored, even though India alone having 720 million mobile phone users with 320 million users from rural areas. Capacity building of Extension functionaries in the area of digital solutions constitutes most crucial component that need to be focused.

In view of the above, the Extension Education Institute (EEI), Hyderabad organized an Off campus training program titled "Digital Solutions for Effective

Transfer of Technology in Agriculture" for the Officers of Agriculture, Animal Husbandry, Agricultural Engineering etc., Kerala State" from 02nd to 05th July 2025.

Contents covered in the programme were - Overview on Digital Initiatives in Agriculture, Various digital solutions useful for teaching faculty of KAU, Sensitization on Cybercrimes, Autocad and Virtual reality 5. GOI initiatives and schemes Practical, Hands on Training on Usage of Plantix app (Pest and Disease diagnostic App), Experiential learning on transfer of technology through Infographs, talking posters developed using CANVA,



Development of website and creation of webpage, Development of QR codes, Working through innovative digital tools: Google forms.

During Ice breaking exercise, Fish and fisherman and balloon caterpillar icebreakers were conducted to unearth team skills like coordination, cooperation, communication, leadership, creativity, decision making skills etc.

The participants were made, visits Digitized field of Sri Prashanth is visited. He is using SIMPLYFAGRI ERP solutions integrated Dashboard, Agriculture planning, Chat bot, labour movement and farm machinery lending app and drones for cultivating organic paddy in 8.5 acres with the help of Jaivik organic NGO in Elavenchery village, Nenmarum block of Kerala state. ERP team comprising of 3 software professionals and two BSc(Ag) students are operating the software and Agricultural components in pilot basis. He explained in detail the opportunities and challenges in digitized organic Agriculture.

Hands on training was given to scientists of Kerala Agricultural University on 1) website development and webpage designing, 2) use of pest and disease diagnostic app: PLANTIX, 3) CANVA for designing infographs, talking posters, powerpoint presentations and Shortfilm editing 4) development and administration of picture and video integrated google forms and QR codes 5) Augmented Virtual reality and 6) practical demonstration of Autocad for landscape designing.



Dr. R. Vasantha and Dr. P. Vijaya Lakshmi Professors & Course Coordinators addressing the participants during valedictory session

During inauguration, Binoo P. Bonny, Director of Extension, KAU and Professor and Head Central training Institute, graced the inaugural. Speaking on the occasion, Director of Extension, KAU opined that majority of small holders remain unreached of the critical digital services. The impact of IT in unlocking value for the unreached farmers and improved access to critical services yet need to be demonstrated in our country.

During the valedictory session, Binoo P. Bonny, Director of Extension, KAU and Professor and Head Central training Institute, graced the valediction. Director of Extension, KAU congratulated all the trainees for learning new digital solutions like CANVA, website development, google forms and Autocad. She requested the trainees to make use of these learnings in their professional work for accurate and faster dissemination of information.

Trainees from Animal husbandry and Agriculture said that though they are using google forms, many add-on features explained in class were very useful to them. They also indicated that Website development is also very new to them and excellent as they can develop website for their projects. They felt that Autocad and QR codes are also very useful for them.

Twenty two (22) trainees participated from the Department of Agriculture, Animal Husbandry, Agricultural Engineering etc., Kerala state. The program was coordinated by Dr. P. Vijayalakshmi and Dr. R Vasantha, Professors, EEI, Hyderabad.



Dr. R. Vasantha and Dr. P. Vijaya Lakshmi Professors & Course Coordinators, EEI conducting the ice breaking session to the participants

Digital Solutions for Effective Transfer of Technology in Agriculture

Digital solutions accelerate the transfer of agricultural technology by enabling real-time, wide-reaching, and personalized information delivery. They

enhance farmer training, support climate-smart practices, strengthen extension services, and improve market access. This leads to increased productivity, sustainability, and



Dr. E. Srinivas and Dr. N. Praveen, Professors, EEI, Hyderabad addressing participants during inauguration

income, empowering farmers and bridging the gap between research and field application.

In view of the above, the Extension Education Institute (EEI), Hyderabad organized an Off campus training program titled "Digital Solutions for Effective Transfer of Technology in Agriculture" for the faculty of UAS, Dharwad, Karnataka State " from 4th to 7th August 2025.

Contents covered in the programme were - Overview on Digital Initiatives in Agri. Sector; Web Portals for Agri. Sector; AI Instruments & Tools in Agri. Technology; Geospatial Technologies and Decision Support Systems in Crop Management; Mobile-Based Advisory Services for Farmers; Using Social Media for Agri. Extension: Best Practices and Strategies; Digital Marketing Apps for the Agri. Sector; GOI schemes and initiatives in Digital applications; Gender budgeting for mainstreaming of gender in Agri. and allied sectors.

An ice-breaking session was conducted session with balloons energizing the participants and fostering the connections. Each person pops a balloon containing a fun question or task, encouraging interaction and laughter. It breaks initial hesitation, promotes teamwork, and creates a lively atmosphere, making everyone feel comfortable, engaged, and ready to participate in the event ahead.

A field visit was conducted to the polyhouse farm of focused on organic cultivation, mushroom cultivation and orchid flower production. The environment was conducive for growth, showcasing healthy crops and efficient water management through farm ponds. The integration of organic practices highlighted sustainable agriculture's

benefits, enhancing yield and promoting biodiversity in the farming ecosystem.

During inauguration, the coordinators briefed about the programme narrating the transformative impact of digital initiatives in agriculture, which are revolutionizing the approaches in farming and related activities. The integration of technology is essential for enhancing productivity, ensuring sustainability, and supporting farmers in making informed decisions and it is essential in present context.

During the valedictory session, the coordinators felt that, the training program has equipped the participants with cutting-edge knowledge and skills in various areas, including, web portals for the Agri Sector; AI instruments & tools in agri technology, Geospatial technologies and Decision Support Systems in agri management Mobile-based farm advisory services, Success stories of agri entrepreneurs, Government of India Schemes and Initiatives in Digital Applications and Back Home Planning

Participants felt that, the training program was well-structured and covered a wide range of topics, including government of India schemes and initiatives in digital applications. They were appreciated the interactive sessions and group discussions, which helped to learn from their peers. They were confident that they could able to apply these skills to make a positive impact among the farming community.

Eighteen (18) trainees were participated from the Departments of Agricultural Entomology, Horticulture, Soil Science, Agronomy, Extension Education of UAS, Dhwarwad. The program was coordinated by Dr. E. Srinivas and Dr. N. Praveen, Professors, EEI, Hyderabad.



Participants were witnessing the demonstration on drones

Value Addition in Pisciculture for Odisha Fisheries Officers

The Extension Education Institute, Hyderabad organised a four-days off-campus training programme on **Value Addition in Pisciculture** for Odisha State Fisheries Officers in collaboration with the Directorate of Fisheries,

Cuttack, Odisha, from 11th-14th August 2025. A total of 20 officers from different districts of Odisha representing inland, marine, and aquaculture sectors attended the programme.



The inauguration, held on 11 August 2025, was graced by Sri Jagadish Panda, Deputy Director of Fisheries (Training), Directorate of Fisheries, who emphasised the need for capacity building of fisheries officers and highlighted that this year, Rs. 8 crores had been allocated for training by the Directorate. He added that the Directorate is committed to building competent human resources at all levels and assured full support for capacity-building initiatives in the state. He appealed to all trainee officers to pay close attention and derive maximum benefit from the training.

Sri Subrat Ku Dash, Deputy Director of Fisheries and General Manager, OPDC, Bhubaneswar, praised the positive reputation of EEI Hyderabad's training programmes and stressed the importance of strengthening the fisheries value chain in Odisha. He further noted that value addition not only ensures better income for farmers but also opens new market opportunities, thereby improving livelihood security.

Dr. M. Preethi, Professor, EEI and course coordinator, outlined the need and importance of the training programme, while Dr. D. Shireesha, another course coordinator, proposed the vote of thanks. Post inaugural,

the programme commenced with need assessment and ice-breaking sessions.

The programme featured eight technical sessions and a full-day field visit to Sibra Sea Food Park, where participants received hands-on training in preparing value-added products with prawns, shrimp, and fish. During the valedictory, participants expressed highly positive feedback about the training, especially appreciating the field visit. They noted that the practical exposure enhanced their confidence to replicate similar practices at the field level and expressed that the resource persons' sessions were engaging and relevant to their official duties. They suggested that more such hands-on and exposure visits should be included in future training programmes to further enrich their learning.

The programme was locally coordinated by Smt. Pragyan Priyadarshini Mohaul, AFO (training) and Sri Amiya Ranjan Nayak, AFO and Nodal Officer from Directorate of Fisheries, Cuttack.

To ensure effective monitoring, the programme incorporated a series of Google Forms to capture participant inputs for a 360-degree evaluation of the training. The event concluded successfully with certificate distribution to all participants.

Managerial skills for Organisational Excellence

Managerial skills are critical for ensuring organisational excellence as they strengthen leadership, strategic planning, financial management, and effective decision-making among officers. By fostering teamwork, communication, and stakeholder engagement, officers can enhance service delivery and ensure participatory governance. Competencies in innovation, technology management, and change handling further enable the department to address emerging challenges such as climate change, market dynamics, and resource sustainability. With strong monitoring, accountability, and people-centered approaches, managerial skills empower fisheries officers to drive efficiency, transparency, and long-term growth, thereby contributing to sustainable fisheries development and improved livelihoods in the state. Hence a 4 day offcampus training was organised to enhance the managerial skills for the officers of Department of Fisheries, Odisha.

In view of the above, the Extension Education Institute (EEI), Hyderabad organized an Off campus training program titled "Managerial skills for

Organisational excellence for the officers of Department of Fisheries, Odisha State" from 09th to 12th September, 2025.

Contents covered in the programme were - Building & Leading High Performing Teams, Decision making & Problem-Solving Skills, Hands on experience on Digital Communication skills, Hands on experience on AI Driven Managerial Skills, Fisheries related apps and portals, Strategic leadership, Visit to Brahmakumaris, Stress and Time Management Skills, Emotional Intelligence.

During Ice breaking exercise, A Number Line Ice-Breaking Activity was conducted to engage participants and set a lively tone for the training. This interactive exercise not only helped participants reflect on their own skills but also encouraged openness, interaction, and sharing of perspectives, creating a friendly and participatory learning environment. The Fish and Fisherman Ice-Breaking Activity was conducted to energize the participants and promote teamwork. In this activity, participants were divided into pairs, with one acting as the "fish" and the other as the "fisherman." On the facilitator's signal, the fisherman tried to catch the fish



through fun movements and light role-play, after which roles were switched. The activity created a lively atmosphere, broke down initial hesitations, and encouraged bonding among participants, making them more comfortable and engaged for the training sessions ahead.

The hands-on training on digital communication skills enhanced participants' ability to effectively use modern tools such as websites, presentations, and social media. Through practical exercises and demonstrations, participants gained confidence in creating impactful content, improving professional communication, and strengthening outreach and service delivery using digital platforms like websites. The hands-on training on AI-driven managerial skills provided participants with practical exposure to using artificial intelligence tools for decision-making, planning, and organisational management. Participants learned how AI applications can



Dr. M. Preethi, Professor, EEI, and Dr. D. Shireesha, Assistant Professor, EEI, Hyderabad addressing participants during inaugural programme

enhance data-driven insights, improve communication, streamline resource management, and support strategic leadership. The experience enabled them to adopt innovative approaches for greater efficiency, transparency, and excellence in managerial functions.

During inauguration, the training on Managerial Skills for Organisational Excellence was inaugurated by Sri Subrat Kumar Das, Deputy Director of Fisheries, and Sri Narsing Mund, Deputy Director of Fisheries. In their inaugural remarks, they highlighted the importance of strengthening managerial competencies among fisheries officers to complement their technical expertise. They emphasized that effective leadership, strategic planning, financial prudence, and communication are crucial for achieving organisational goals and delivering better services to stakeholders. They also stressed the need to

adopt innovative and participatory approaches to address emerging challenges in the fisheries sector. Both dignitaries encouraged participants to actively engage in the sessions, gain hands-on experience, and apply the learnings in their professional roles to contribute towards sustainable fisheries development in Odisha. The training on Managerial Skills for Organisational Excellence was inaugurated by Dr. M. Preethi, Professor, EEI, and Dr. D. Shireesha, Assistant Professor, EEI. In their addresses, they emphasized the growing need for fisheries officers to complement their technical expertise with strong managerial competencies to meet the challenges of a dynamic and resource-sensitive sector. They highlighted that leadership, team management, decision-making, and effective communication are critical drivers of organisational success. Stressing the importance of adaptability, innovation, and digital integration, they encouraged participants to actively engage in the sessions, acquire practical insights, and apply them in their professional roles. Both resource persons underlined that such training not only enhances individual efficiency but also contributes in strengthening the Department of Fisheries in achieving sustainable development goals and better service delivery to stakeholders.

During the valedictory session, During the valedictory session of the training on Managerial Skills for Organisational Excellence, Sri Subrat Kumar Das, Deputy Director of Fisheries, and Sri Narsing Mund, Deputy Director of Fisheries appreciated the active participation and commitment of the officers throughout the program. They highlighted that the skills gained in leadership, planning, communication, and innovation would greatly contribute to improving efficiency, accountability, and service delivery within the Department of Fisheries. Emphasizing the importance of continuous learning, they



Dr. M. Preethi, Professor, EEI, and Dr. D. Shireesha, Assistant Professor, EEI, Hyderabad distributing certificates during valedictory programme



encouraged participants to apply the managerial insights and practical tools acquired during the training to strengthen organisational performance and support sustainable fisheries development in Odisha. Both dignitaries expressed confidence that the training would empower officers to take on emerging challenges with greater professionalism and vision. In the valedictory session of the training on Managerial Skills for Organisational Excellence, Dr. M. Preethi, Professor, EEI, and Dr. D. Shireesha, Assistant Professor, EEI, the course coordinators, congratulated the participants for their enthusiastic involvement and constructive interaction throughout the program. They highlighted that the training equipped officers with essential managerial competencies such as leadership, planning, communication, and innovation, which are vital for enhancing organisational performance. The coordinators encouraged participants to apply the knowledge and hands-on skills gained during the sessions in their day-to-day professional responsibilities, thereby strengthening efficiency, accountability, and service delivery in the fisheries sector. They also expressed appreciation for the support of the Department of Fisheries

and conveyed best wishes for the participants' continued success in contributing to sustainable fisheries development in Odisha.

The officers from the Fisheries sector of Odisha expressed that the training on Managerial Skills for Organisational Excellence was highly relevant and practical. They appreciated the focus on leadership, decision-making, team building, and stress and time management, which would help them improve efficiency and service delivery in their respective roles. The hands-on sessions and interactive discussions & games enhanced their confidence to adopt modern managerial approaches and apply them in field situations. Participants conveyed that the program provided valuable insights for strengthening organisational performance and supporting sustainable fisheries development in the state.

Twenty (20) trainees participated from the Department of Fisheries, Odisha State. The program was coordinated by Dr. M. Preethi, Professor, EEI, and Dr. D. Shireesha, Assistant Professor, EEI, Hyderabad.

Natural Farming for Sustainable Agriculture

Training on natural farming is essential to build the knowledge, skills, and confidence of faculty of OUAT to disseminate eco-friendly and sustainable cultivation practices. It helps participants understand the principles, techniques, and scientific basis of natural inputs like Jeevamrut, Beejamrut, Panchagavya, and bio-extracts. It created awareness about cost reduction, income enhancement, and market opportunities for naturally grown produce. Moreover, such training fosters attitudinal change towards ecological farming, encourages peer learning, and strengthens community-based natural farming movements. Hence this training played a crucial role in transforming conventional agriculture into a sustainable, low-cost, and climate-resilient system.

In view of the above, the Extension Education Institute (EEI), Hyderabad organized an Off campus training program titled "Natural Farming For Sustainable Agriculture for the faculty of OUAT, Odisha from 9th - 12th September 2025.

Contents covered in the programme were - An overview on natural farming for sustainable agriculture, Role of FPOs and NGOs in promotion of natural farming, Natural farming to ensure nutritional security, Practices in

natural farming, Digital tools for natural farming- Development of infographs for publicizing natural farming products and development of QR codes for sale of products, Successful cases and experiences in natural farming, Orientation on National Mission on Natural Farming (NMNF), PGS certification and marketing in natural farming, Cost economics in natural farming vs conventional farming, Challenges, solutions and strategies for sustainability of natural farming, Natural farming practices adopted by farmer in real field situation

During Ice breaking exercise, Number game, fish and fishermen ice breaking exercises were facilitated.



Dr. R. Vasantha and Dr. E. Srinivas, Professors, EEI, Hyderabad during Ice Breaking session



Trainees performance was analysed during the exercises and importance of planning for any task, time management, decision making, qualities needed for an effective leader, importance of listening and proper communication were explained to them.

During inauguration, Dr. Mishra, Dean of Extension and Dr. Sarbanidas, Joint Director of Extension graced the inauguration. Dr. Mishra speaking on the occasion said that Natural farming is vital for ensuring sustainable agriculture, environmental health, and farmer well-being. It minimizes the dependence on costly external inputs like chemical fertilizers and pesticides by using locally available resources such as cow dung, cow urine, green manure, and plant-based preparations. He suggested all participants to interact with all speakers and clarify the doubts.

During the valedictory session, Dr. Mishra, Dean of Extension and Dr. Sarbanidas, Joint Director of Extension graced the valedictory. Addressing the gathering, Dr. Mishra suggested the trainees to demonstrate the inputs taught in the training to farmers for making Agriculture sustainable through natural farming.



Dr. R. Vasantha and Dr. E. Srinivas, Professors, EEI, Hyderabad addressing during valedictory programme

Some of the faculty of KVKs of OUAT said that they will demonstrate technologies like Navadhanya, seed pelletization, Ghana, drawa jeevamruts etc for the farmers of their jurisdiction. They felt that visit to farmers field is very useful to them as they have learnt about Solar panel based drawajeevamrut preparation.

Twenty (20) trainees participated from the Department of Fisheries, Odisha State. The program was coordinated by Dr. R. Vasantha and Dr. E. Srinivas, Professors, EEI, Hyderabad.

Extension Strategies for promotion of Natural farming

Natural Farming is a chemical-free farming system rooted in Indian tradition enriched with modern understanding of ecology, resource recycling and on-farm resource optimization. It is considered as agro-ecology based diversified farming system which integrates crops, trees and livestock with functional biodiversity. It is largely based on on-farm biomass recycling with major stress on biomass mulching, use of on-farm cow dung-urine formulations; maintaining soil aeration and exclusion of all synthetic chemical inputs. Natural farming is expected to reduce dependency on purchased inputs. It is considered as a cost-effective farming practice with scope for increasing employment and rural development. There is every need to enhance the capacity of extension officials on natural farming to educate the practitioners for better implementation of natural farming.

In this connection, a four day Off-Campus Training programme was conducted on Extension Strategies for promotion of Natural farming from 16th – 19th September, 2025 for the Department of Agriculture officials of Puducherry.

The contents covered in the programme were- Natural Farming – An Overview Natural farming Vs Organic farming, Validation of Package and Practices in Natural Farming, Benefits of Natural Farming & Nutritive Cycle

Theory in Natural Farming, Global, National and Local Stakeholders Initiatives in Natural Farming, Scope of Bee keeping in Natural Farming, Successful Cases and Experiences in Natural Farming, Digital platforms in the service of Natural farmers, Integration of Allied Sectors in Natural Farming, Experiences sharing by a Natural farming practicing farmer, Field visit to the farms of the farmers like Vetrichelvan (National Awardee-Yazhi Integrated farm), Sri Sithar and Sri Veerappan to witness various crops grown and the scope of integrated farming system in practicing the natural farming, Up scaling Natural farming through FPOs, Natural Farming and Certification, Innovations in Pest Management using Pheromones as Mating Disruption Tool, GoI programmes and schemes, Extension strategies for promotion of Natural farming, and Back Home Planning.

Dr. M.Jagan Mohan Reddy, Director, Dr.N.Praveen, Professor and Course Coordinator, EEI, Hyderabad, and Sri Joseph Albert, Deputy Director, SAMETI, Puducherry inaugurated the programme on 16th September, 2025. Dr. M.Jagan Mohan Reddy, Director said that, there is every need to support the farming community to practice the natural farming towards sustainable agriculture. Several methods like demonstrations, exposure visits, training programmes, social media may be on boarded to impress the farmers about natural farming.



Valediction of the programme was graced by Shri Choudhary Mohammed Yasin, I.A.S, Secretary, Agriculture, Puducherry on 19th September, 2025 and exhorted that, success cases of natural farming practitioners may be documented to convince other farmers, the practices of natural farming should be validated and recommended to farmers to derive maximum benefit. Market for these kind of products may be explored to get maximum profits for the farmers.

Participants felt that, the training programme has sensitized them the logistics involved in natural farming, and the field visits have exposed them the practicalities involved in natural farming.

Twenty officials from the Department of Agriculture, Puducherry were attended the programme, which was coordinated by Dr. M.Jagan Mohan Reddy, Director, Dr.N.Praveen, Professor, EEI, Hyderabad.

Next Gen Extension approaches for effective Transfer of Technology

Next-generation extension approaches for effective technology transfer in agriculture and allied sectors emphasize leveraging digital technologies, fostering participatory methods, and building strong partnerships to enhance farmer productivity and sustainability. These approaches move beyond traditional top-down dissemination models to prioritize dairy farmer needs and promote collaborative, knowledge based solutions.

1. Leveraging Digital Technologies:

- **ICT Integration:** Utilizing mobile phones, internet platforms, and other digital tools to reach a wider audience and provide timely information on new technologies. Data
- **Analytics:** Employing data analytics to understand farmer needs, track technology adoption, and disseminate extension messages effectively.
- **Online Platforms:** Creating online platforms for knowledge sharing, access to resources, and virtual training sessions.

2. Participatory Approaches:

- **Farmer-Centric Approach:** Involving farmers in the research and development process to ensure that technologies are relevant and meet their specific needs.
- **Community Ownership:** Fostering a sense of ownership among farmers by actively engaging them in the extension process.
- **Collaborative Engagement:** Working with local organizations and communities to build trust and ensure the successful adoption of new technologies.

3. Strengthening Extension Services:

- **Capacity Building:** Providing training for extension agents and farmers on new technologies, their applications, and best practices.
- **Knowledge Sharing:** Establishing mechanisms for continuous knowledge sharing and.

- **Financial Support:** Exploring financial support mechanisms like subsidies, grants, or credit facilities to encourage technology adoption.

Keeping this in view, a four day Off-campus training programme was organized on 'Next Gen Extension approaches for effective Transfer of Technology' from 23rd to 26th September, 2025 to the officials of department of Dairy Development, Dairy Training Institute, Calicut.

Content covered in the programme was- Next-Gen Extension Approaches- An Overview, Application of GSTs (Geo Spatial technologies) for effective Dairy Advisory Services Agri-Media Skills Nex-Gen Extension models in Dairy sector Building networks and partnerships to meet the emerging challenges in attaining sustainable farming Innovative training methodologiess, Strengthening farmer centric linkages with Agri-Tech Start-ups and FPOs Artificial Intelligence, IoT and Data Analytics for effective ToT, Hands on experience on designingg Digital applications for speed and precision in ToT Evolving Trends in Agricultural Extension: From Traditional to Digital GoI initiatives to facilitate Next Gen Extension approaches for effective ToT.

During inauguration, Sri.Varkey George, Principal Dairy Training Centre. While speaking on the occasion Mr. George has explained about the opportunity having



Dr. K. Madhu Babu, Dr. E. Srinivas, Professors & Course coordinators EEI, Hyderabad and Sri. Varkey George, Principal Dairy Training Centre addressing participants during inauguration programme



arranged for learning various digital innovations for the effective use by the dairy extension officers for speedy and accurate sensitization, which makes extension officers trustworthy has requested the participants make use of this opportunity.

During valedictory, Sr.Varkey Gerge, Principal Dairy Training Centre and Dr.K.Madhu Babu, Professor, EEI: Sri.Varkey George: Expressing his satisfaction over conducting an effective training programme, suggested the participants to prove themselves change in attitude and equipped with latest knowledge on digital innovations. He has extended thanks to the organisers for their meticulous planning and execution of the programme Dr.K.Madhu Babu, Professor and Programme Coordinator while speaking on the occasion has appreciated all the participants for their keen interest in learning and gaining hands on experience. He has suggested the participants to effectively apply learned knowledge and update the progress through periodical google forms. He has extended thanks to GoI for making the extension force vibrant through organizing such an important training programme.

Participants were very much impressed with the Excellent scheduling, worthy interactions and potential knowledge resource made them equipped with wonderful learned knowledge.

The programme was organised for the twenty officers of Department of Dairy Development, Dairy Department, Calicut, which was coordinated by Dr.K.Madhu Babu, Professor, Dr.E.Srinivas, Professor, EEI, Hyderabad.



Group photo

Collaborative training programme with MANAGE

'Ensuring Nutritional Security Through Agri - Food systems'

Nutritional security is achieved through agri-food systems by promoting diversified, bio-fortified crops and sustainable farming practices, which ensure access to sufficient, safe, and nutritious food for an active life. This requires transforming food systems to be more resilient, environmentally stable, and economically viable through strategies like crop diversification, reducing waste, and integrating local food networks. Policy interventions and consumer education on dietary diversity and food safety are also crucial for improving nutritional outcomes and ensuring overall food system sustainability.

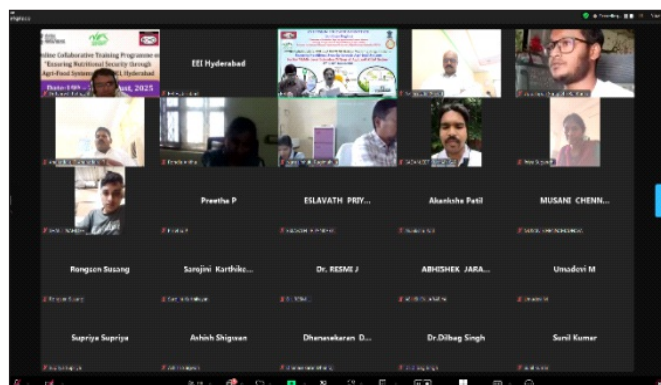
Keeping this in view, the Extension Education Institute, Southern Region, Hyderabad has organised a collaborative training programme with MANAGE on Ensuring Nutritional Security through Agri - Food systems from 19th – 23rd August, 2025.

The contents covered in the programme are- Transforming Agri-Food Systems for Nutritional Security and Role of EAS, Nutrition Sensitive Agriculture: Converging Agriculture, Health and Education Sectors, Animal-Sourced Foods, Aquaculture and Livestock in Agri-Food Systems, Horticultural Bio - diversity and Underutilized Crops for Nutritional Security, ICT and

Behavior Change Communication for Nutrition Improvement, Mainstreaming Agri-Food Systems in Achieving the Sustainable Development Goals (SDGs), Food Waste Management for Nutritional Security, Food fortification, Safety and Post-Harvest Practices for Nutritional Security, Caste Studies from Agri - Nutri Smart villages from across India, Leveraging Farmer Producer Organizations (FPOs) for Nutri-Agri Enterprises, Innovations and Startups in the Nutrition-Agriculture Interface, Climate Resilience and Nutritional Outcomes in Agri-Food systems, Building Capacities and Human



Dr. M. Yakadri, Director of Extension, EEI, Dr. M. Jagan Mohan Reddy, Director, EEI and Course Coordinator, EEI addressing participants during inaugural programme



Participants during training programme on the board

Resources for Nutrition-Sensitive Agriculture and Working through innovative digital tools; Google forms and Blog.

As part of the programme, Dr. M. Jagan Mohan Reddy, Director, EEI, Southern Region, Hyderabad, said that, there is every need to revisit and restructure our food systems, accordingly supply and value chains have to be modified to address the nutritional security at global level.

Participants were expressed that, the training programme has enlightened on how nutri sensitive agriculture is a food based approach to agricultural development, understood challenges in adopting nutrition-sensitive practices, how agricultural extension services provide the critical connection between agricultural innovation and farmers' adoption of improved practices, tailoring extension for nutrition-sensitive agriculture, and capacity building of farmers towards nutri sensitive agriculture,

Dr.M.Jagan Mohan Reddy, Director, EEI, Southern Region, Hyderabad and Dr.Naresh, Academic Associate, MANAGE were coordinated the programme. 112 no of participants comprising scientists of agricultural universities, ICAR institutions, officials of development departments, representatives of FPOs, startups, faculty and students of agricultural colleges pan India were participated in the programme.

Strengthening Post Harvest Management in Agri and allied sectors through Farmer Producer Organizations

Post-harvest management and value addition, especially when implemented through Farmer Producer Organizations (FPOs), are crucial for the agricultural and allied sectors. They reduce losses, enhance quality and nutritional value, increase farmer income, and create market access, ultimately boosting food security and supporting sustainable agriculture. FPOs, by enabling farmers to collectively manage post-harvest processes and add value to their produce, overcome challenges faced by individual small-scale farmers.

Here's a more detailed look at the importance:

1. **Reducing Post-Harvest Losses:** Post-harvest losses are a significant problem in the agricultural sector, leading to wastage and economic losses for farmers.
 - FPOs can facilitate proper handling, storage, and transportation of agricultural products, minimizing losses due to spoilage and damage.
 - By adopting efficient post-harvest techniques, FPOs can preserve the quality and nutritional value of produce, ensuring it reaches consumers in a fresh and safe state.
2. **Value Addition:** Value addition involves transforming agricultural products into more marketable and profitable forms. FPOs can enable farmers to process their produce, such as making jams, pickles, juices, or other processed food products. This reduces reliance on

selling raw produce at lower prices and allows farmers to capture a larger share of the market value.

3. **Increasing Farmer Income:** By reducing post-harvest losses and adding value to their produce, FPOs can help farmers increase their incomes. They can also facilitate access to better market prices and opportunities, particularly for smallholder farmers.
4. **Enhanced Market Access and Export Potential:** FPOs can provide farmers with access to organized markets and trade networks, including export opportunities. By pooling resources and adopting standardized practices, FPOs can increase the volume and quality of their produce, making it more attractive to buyers..
5. **Food Security and Economic Growth:** Efficient post-harvest management and value addition contribute to food security by ensuring that more produce is available for consumption and reducing wastage. It also stimulates economic growth by creating jobs in the food processing and marketing sectors and increasing farmers' incomes.
6. **Role of FPOs in Post-Harvest Management:** FPOs provide a platform for farmers to collectively manage post-harvest processes, sharing resources and expertise. They can invest in infrastructure, such as cold storage facilities and processing equipment, to improve



post-harvest handling and value addition. FPOs can also provide training and technical support to their members on best practices for post-harvest management. In conclusion, post-harvest management and value addition through FPOs are essential for the sustainable development of the agricultural and allied sectors, contributing to food security, economic growth, and improved livelihoods for farmers. Objectives of the training.

By the end of the training the participants will be able

1. Equip the participants with the knowledge, skills, and motivation necessary to promote the Post-Harvest Management in Agri& Allied sectors through FPOs
 2. Apply the knowledge and skills in Post-Harvest Technologies in Agri& Allied sectors through FPOs
 3. To gain the knowledge on Registration, packaging, branding and IT enabled marketing of agri and allied products and establish strong market linkages for FPOs
 4. To promote Export of Agri& Allied products for Profitable Agriculture through FPOs
- Infrastructure and technologies for post-harvest operations through FPOs
 - Produce handling and packaging for market appeal enhancement by the FPOs
 - Backstopping FPOs by NABARD for post-harvest management
 - Secondary Agriculture, historic foot prints to Modern practices with the FPOs
 - Primary Processing

Keeping this in view Extension Education Institute, Hyderabad and MANAGE has planned to organize a five day collaborative online training programme on Strengthening Post Harvest Management in agri and allied sectors through Farmer Producer Organizations from 24th – 28th June, 2025 in ECHO Platform.

During the inauguration, the training program was inaugurated by Dr.Yakadri, Director of Extension, PJTAU and Dr. M. Jagan Mohan Reddy, Director, EEI. While introducing about the importance of training programme being organized in collaboration with MANAGE, Hyderabad, Dr.M.Jagan Mohan Reddy, Director, EEI emphasized the importance of FPOs for over all and sustainable development of Agriculture. He has requested the trainees to support FPOs for their excellence in promoting post-harvest management. Dr.Yakadri, Director of Extension, PJTAU while speaking on the occasion, informed the participants about the scenario in which most of the commodities are being wasted after harvest. This

necessitated us to create awareness on post harvest management and value addition in order to cut the waste and also create good market for value added products, which in turn bring profits to the farmers. Dr.Yakadri has appreciated the efforts made by EEI in collaboration with



Dr. M. Yaladri, Director of Extension, EEI, Dr. M. Jagan Mohan Reddy, Director, EEI and Dr.S. Chandra Shekar, Professor & Course Coordinator i/c, EEI addressing participants during inaugural programme

MANAGE for scheduling wonderful programme to suit the needs of participants.

Content covered in the programme was- Role of FPOs in enhancing value through improved post-harvest management, Good Agriculture Practices (GAP) for post-harvest efficiency for FPOs, Role of APEDA in strengthening post-harvest management through FPOs, Infrastructure and technologies for post-harvest operations through FPOs, Produce handling and packaging for market appeal enhancement by the FPOs, Backstopping the FPOs by NABARD for post-harvest management, Secondary Agriculture, historic foot prints to Modern practices with the FPOs, Primary Processing and value addition by FPOs, Market readiness and market linkages through FPOs, Logistics and supply chain optimization by the FPOs, Extension strategies to promote post-harvest management by the FPOs, Post-Harvest Management and Value Addition in Dairy sector by the FPOs, Post-Harvest Management and Value Addition in Fisheries sector by the FPOs, GOI Programmes and schemes in Agri and Allied Sectors and stress management.

On the occasion of valediction, A day before closure of the programme, Sri. N. Sevam, Joint Director from Govt of India has visited EEI and addressed the participants. While speaking on the occasion Sri. Sevam has appreciated the participants for registering the programme in big number and said that the programme is relevant to find conditions. He has also appreciated the organizers for planning good programme involving eminent speakers During valedictory, Dr.M.Jagan Mohan Reddy, Director, EEI felt that, Post harvest losses in our country are equal to GDP of

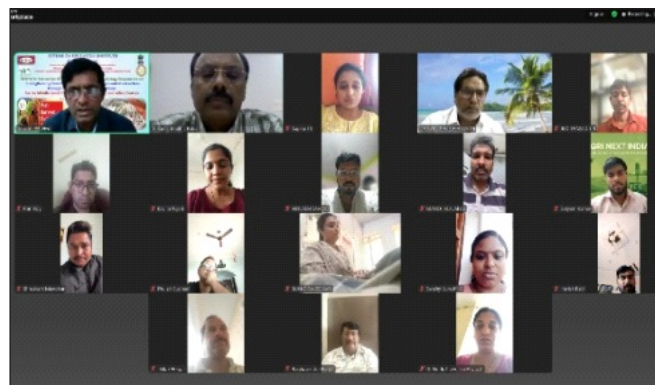


many of the countries, if we wont address this it will effect food and nutrition security of the country. We have to understand why this catastrophic situation is prevailing. We need to address storage, transport aspects of commodities. One of the important activities of value addition and value chain is based on consumer preference, he added. Food safety standards, branding and quality is also important in the process. Most of the exports the developed countries are thoroughly structured for quality standards. Hence it is high time to minimize post harvest losses to increase farmers income and correcting nutritional security of globe. The onus is on middle level extension officers to utilize the services of FPOs formed village level. They have to facilitate collective marketing and address the important activity of Post harvest management and value addition. He has requested all the participants to organize training programmes to create awareness in this direction.

During the feedback, the participants expressed that, an excellent programme organized on Post harvest management through FPOs. To enhance rural livelihoods. The DOs and DONTs became very clear in the programme in

mentoring FPOs. The speakers were meticulously selected and the programme is highly useful.

Seventy five (75) middle level extension officials of Dept. of Agril, Dairy Development, Animal Husbandry, Sericulture, Forestry, NGOs, SAUs of Tamilnadu, AP, Telangaana, Karnataka, Kerala, Madhya Pradesh, Punjab states were attended the training programme, which was coordinated by Dr. K. Madhu Babu, Professor, EEI, Hyderabad.



During training programme trainees on the board and Dr. K. Madhu Babu, Professor & Course coordinator, EEI are seen

Webinars

SDGs in Agriculture - Pathways to a Resilient and Sustainable Future”

The Extension Education Institute, Hyderabad, has organized a thought-provoking webinar on “ECHO – SDGs in Agriculture - Pathways to a Resilient and Sustainable Future” on 28th July 2025. The webinar aimed to foster a holistic understanding of the Sustainable Development Goals for Resilient and Sustainable Future.

Dr. P. Vijaya Lakshmi, Professor, EEI, Hyderabad, extended a warm welcome to the esteemed speakers and participants representing agriculture and allied sectors from Southern region. Dr. K. Madhu Babu, Professor EEI, gave a brief overview of the webinar theme, importance of Sustainable Development Goals to a Resilient and Sustainable Future.

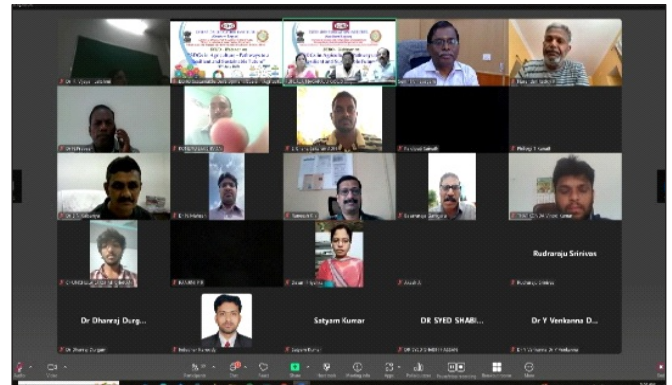


Dr.M Yekadri, Director of Extension, PJTAU, Rajendranagar, Hyderabad gave introductory remarks and stressed the importance of sustainable development goals. He stated that SDGs recognize that global challenges are interconnected and require integrated solutions. They move beyond traditional development approaches by emphasizing the inter connectedness of economic, social, and environmental dimensions. He suggested that we should use the available resources judiciously and preserve for future generations.

Session I: Technological Advancement in delivering SDGs in Agriculture.

Speaker: Dr. S. Senthil Vinayagam, CEO & Head, Education Systems Management Division, ICAR - NAARM, Rajendranagar, Hyderabad.

Dr. Senthil Vinayagam highlighted the importance of SDGs in Agriculture and stressed that how to reduce poverty, bring sustainability in water conservation, climate resilience, effective utilization of land through multiple cropping. He also stressed the reducing chemical farming through organic and natural farming, agro ecological regenerated agriculture and digital agriculture.



The sessions were very informative and thought provoking, and well-received by the 48 participants from agri and allied sectors of Southern Region. The programme concluded with a formal vote of thanks proposed by Dr. P. Vijaya Lakshmi, thanking the speakers for their valuable contributions and participants for their active participation. Later, the trainees attempted a survey to record their feedback on the webinar.

The Extension Education Institute, Hyderabad, successfully organized a thought-provoking national webinar on **“ECHO – Crop & Weather Insurance in India – Challenges and the Way Forward”** on 12th August, 2025. The webinar aimed to Farmers in India face significant agricultural risks due to the vagaries of nature. One of the most effective mechanisms to mitigate such risks is a robust and reliable agricultural insurance system. Although crop insurance has existed in India since 1972, it has been plagued by several issues such as:

- Lack of transparency
- High premium rates
- Delay in conducting crop cutting experiments
- Non-payment or delayed payment of claims

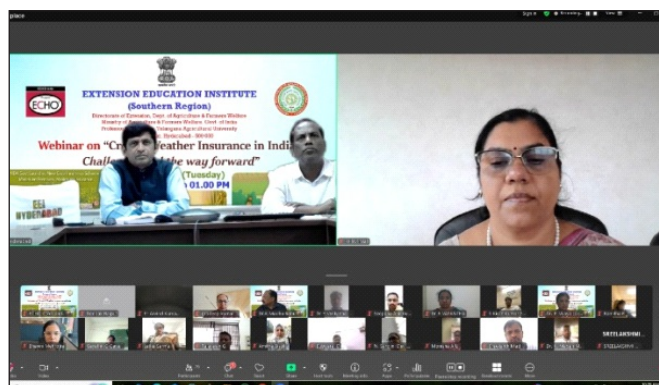
To address these concerns, the Pradhan Mantri Fasal Bima Yojana (PMFBY) despite its progressive intent, the scheme faced numerous challenges in its first year of implementation, including the extension of cut-off dates for registration, leading to high premium rates and administrative bottlenecks. In light of these challenges, EEI, Hyderabad, in collaboration with the Government of India, organized a national-level webinar on “Crop & Weather Insurance in India – Challenges and the Way Forward” on 12th August, 2025. The webinar aimed to:

- Understand the current issues in crop and weather insurance
- Facilitate discussion among stakeholders
- Identify actionable strategies for improving the system

A total of 105 participants attended the webinar, representing various Institutions from Agri and Allied sectors of current states, staff and students of state Agricultural universities. The diversity in participant backgrounds led to rich discussions and valuable exchanges of knowledge and experiences.

The webinar addressed by speakers Smt. Pallavi Mali, Lead Lead-Capacity Building n Knowledge Management, (CPMU-PMFBY), MoA &FW, GoI, New Delhi and Mr. Pradeep Rajendran, Insurance Products and Compliance, Analyst (CPMU-PMFBY), MoA &FW, GoI, New Delhi, who have delivered the topics on Over view of Crop Insurance programme --PMFBY and RWCIA and Crop & Weather Insurance in India – Challenges and the Way forward respectively. The Webinar highlighted the following aspects like.

1. Impact of Climate Change on Agriculture and the Need for Crop Insurance
2. Overview of Crop Insurance Programmes – PMFBY and RWBCIS (Restructured Weather Based Crop Insurance Scheme)
3. Types of Risks Covered and the Role of State Governments
4. Dispute Management between State Governments and Insurance Companies
5. Role of Insurance Companies in the Farmer Application Process
6. Claim Calculation and Settlement Mechanisms

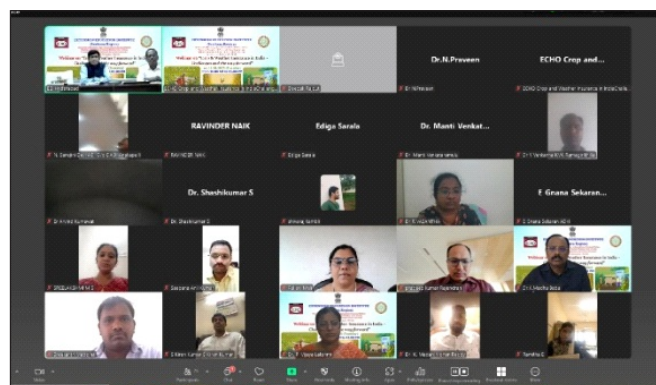


Dr. M. Jagan Mohan Reddy, Director, EEI, Hyderabad and Dr. N. Praveen, Professor, EEI along with Guest speaker Smt. Pallavi Mali, Lead Lead-Capacity Building n Knowledge Management, (CPMU-PMFBY), MoA &FW, GoI, New Delhi addressing participants in the webinar

The rich experience and insights contributed significantly to the success of the sessions, providing participants with practical knowledge and policy-level understanding. The program received overwhelmingly positive feedback. Participants appreciated the:

- Relevance and depth of the content
- Clarity of presentations
- Quality of coordination and organization

Many participants shared real-world challenges faced by farmers due to adverse weather conditions, and emphasized the need for greater awareness and accessibility of insurance schemes.



Participants on the board during Webinar

Dr. M. Jagan Mohan Reddy, Director, EEI, has stressed the need for widespread adoption of crop and weather insurance in India. He urged all stakeholders to ensure that farmers benefit from insurance schemes to counter the effects of:

- Climate change
- Recurring disasters in agri and allied sectors
- Disturbances in farmers livelihoods

The webinar proved to be a significant step toward enhancing understanding, addressing challenges, and charting a collaborative way forward for crop and weather insurance in India. EEI remains committed to supporting such initiatives that safeguard the interests of farmers and contribute to the resilience of the agricultural sector

Natural Farming – a Sustainable Approach to Prosperity

Natural farming nurtures soil health and biodiversity by avoiding chemicals and relying on nature's cycles, it reduces costs, enhances resilience, and promotes safe, nutritious food production, this sustainable approach leads to prosperity to farmers, communities, and the environment.

The primary objectives of the webinar were:

1. To create awareness on the principles and practices of natural farming.
2. To highlight success stories and field experiences of farmers who have adopted natural farming.
3. To discuss the role natural farming for sustainable Agriculture
4. To deliberate the role of natural farming in quality food systems and ensure nutritional security.

The program commenced with a warm welcome address by Dr. E. Srinivas, Professor EEI, Hyderabad and

introductory remarks were given by Dr. M. Jagan Mohan Reddy Director of EEI, Hyderabad. In his opening remarks, he has emphasized the urgent need to rethink conventional agricultural practices that heavily rely on chemical inputs. He noted that natural farming is not just a method of cultivation but a movement towards resilience and prosperity.

The technical sessions were structured around four key themes delivered by eminent speakers Shri K Prakash. Asst. Director of Agriculture, Farmers Training Centre, Kakinada, Andhra Pradesh, and Shri P. Narender Reddy, Founder President Niramaya Society, Chairman of TDF Jaikisan Project.

Principles and Practices of Natural Farming – Experts detailed the scientific basis of natural farming, explaining how techniques such as *Jeevamrutha*, *Beejamrutha*, *Mulching*, and *Cow-based bio-inputs* restore soil fertility, improve microbial activity, and reduce dependence on costly external inputs.



Economic and Environmental Benefits – Case studies presented during the session highlighted how farmers adopting natural farming witnessed reduced production costs, higher net income, and improved soil health. Speakers also emphasized its role in mitigating climate change by lowering greenhouse gas emissions and enhancing carbon sequestration.

Success Stories from the Field the participants of Natural farming A sustainable approach to prosperity shared their inspiring journeys of transitioning from conventional to natural farming. Their experiences showcased how diversified cropping, ecological balance, and reduced indebtedness have brought both prosperity and dignity to their lives.

Scaling Up through Policy and Extension Support – Discussions focused on the strategies required to mainstream natural farming. This included capacity building of extension workers, farmer-to-farmer learning, and convergence of schemes at the state and district levels.

133 participants were interacted directly with speakers. Officers and agriculture scientists raised practical questions about cost economics of production, pest management, market linkages under natural farming. Extension professionals stressed the need for strong institutional support, community-based organizations, and digital platforms to spread awareness and training.

Key Takeaways

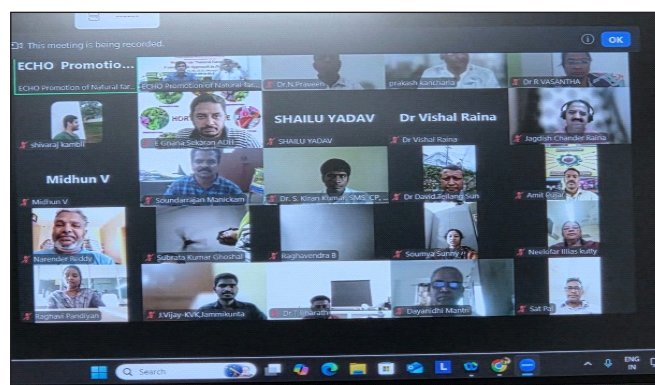
- ✓ Natural farming offers a low-cost, high-return model for small and marginal farmers.
- ✓ It ensures long-term soil fertility, water conservation, and biodiversity protection.

- ✓ Collective action from farmers, government bodies, and civil society is crucial for scaling up.
- ✓ Strong policy backing, incentives, and extension support can accelerate adoption of natural farming.

Conclusion

The webinar concluded with closing remarks and vote of thanks by Dr. E. Srinivas, Professor, EEI, Hyderabad. The speakers reiterated that natural farming is more than a technique it is a pathway to sustainable prosperity and human health. By reducing input costs, ensuring food safety, and protecting the environment, natural farming stands as a beacon of hope for the future of Indian as well as global agriculture.

This initiative by EEI, Hyderabad, reflects the unwavering commitment of India to strengthen farmer livelihoods while safeguarding ecological balance. The event successfully inspired participants to take forward the message of natural farming into their respective fields and communities, marking a significant step towards a greener, healthy, and more prosperous India.



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