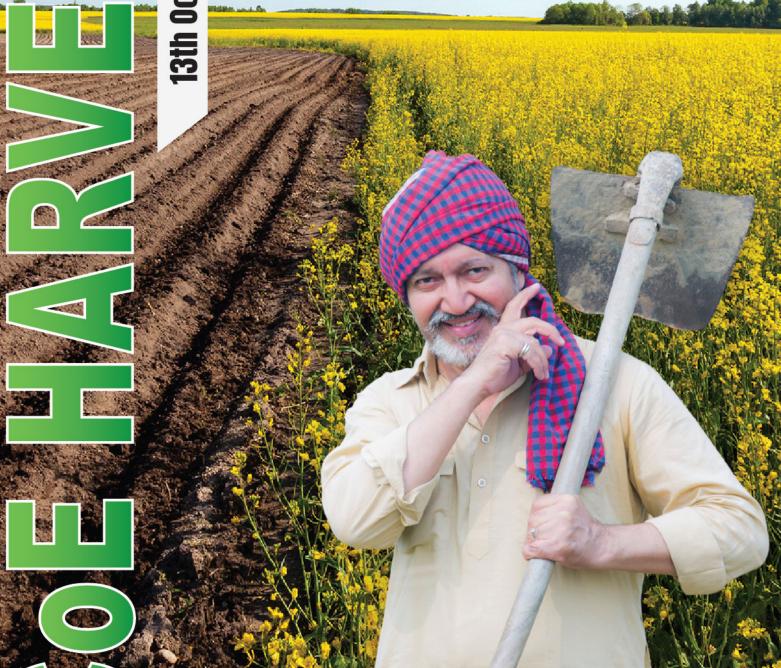






CEASI
CENTRES OF EXCELLENCE FOR AGRICULTURE SKILLS IN INDIA







CEHSI
Centre of Excellence for
Horticulture Skills in India

www.ceasi.in

LEADERSHIP INSIGHTS



Dear Readers,

It is a privilege to reach you through our weekly newsletter, which reflects the pulse of CEASI working under the aegis of ASCI, our collective journey toward skill development and sustainable agriculture. Every story we share here is a testament to the dedication of our teams, partners, and farming communities.

Our mission remains clear: to empower farmers and agri-professionals with the skills, knowledge, and technology they need to thrive in a changing world. By combining innovation with grassroots engagement, we are laying the foundation for a more productive, resilient, and inclusive agricultural sector.

I invite you to read, learn, and actively participate in the opportunities this newsletter presents. Your involvement is what transforms ideas into impact.

Dr. Satender Singh Arya Chief Executive Officer



Dear Readers.

CEASI weekly newsletter is not only a summary of activities. Rather it is a platform to exchange ideas, celebrate achievements, and strengthen our shared vision for the future of Indian agriculture and its allied sectors like Dairy, Horticulture, Farm Mechanisation, Climate resilience, to name a few. Each edition carries stories of innovation, collaboration, and progress from across the agriculture domain and across geographies.

As we move forward, our focus will continue to be on sharing knowledge, latest developments, building capacity, and sharing success stories at every level from the farmer's field to the policymaker, ensuring that modern tools, techniques, and best practices reach those who need them most.

I agree that this newsletter is at its nascent stage. I encourage the readers and stakeholders to stay engaged with the initiatives, trainings, and updates featured here, and to share the salient achievements and developments that can be published herein. Your ideas for improvement of coverage, publication frequency, new sections to be included and feedback will be of immense importance to make it a model periodical that will provide opportunities to grow stronger and together.

Jaswant Singh Kalsi Chief Operating Officer

ABOUT CEASI

Who We Are:

"Centre of Excellence for Agriculture Skills in India (CEASI)" is an autonomous organization working under the aegis of "Agriculture Skill Council of India (ASCI)", which is working under Ministry of Skill Development & Entrepreneurship (MSDE) for skilling and capacity building of farmers, wage workers, self-employed professionals, extension workers etc. engaged in organized and unorganized segments of Agriculture & Allied sectors.

CEASI is an apex organization of Centres of Excellence in various sub-sectors of agriculture viz.

- Centre of Excellence for Dairy Skills in India(CEDSI)
- Centre of Excellence for Horticulture Skills in India(CEHSI)
- Centre of Excellence for Farm Mechanization Skills in India(CEFMI)
- Centre of Excellence for Climate Resilient Agriculture(CoECRA)
- Centre of Excellence for Artificial Intelligence in Agriculture(CoE-AI)

What We Do:

Skilling & Capacity Building:

Building capacity based on stakeholder needs in agriculture and allied sectors.

Knowledge Management:

Developing QPs, NOS, skill gap reports, and newsletters to support workforce standards.

Research:

Conducting industry research to identify needs and bridge skill gaps as per industry demands.

Advocacy & Advisory Services:

Creating networks to share innovations and address sectoral challenges.

Our Vision

An autonomous institution of excellence committed to developing a highly skilled workforce in agriculture, driving innovation, technological advancement, and sustainable practices to enhance the prosperity and resilience of Indian agriculture.

Our Mission

To emerge as the leading organization for skill development in cutting-edge agricultural practices, both nationally and globally, fostering holistic sector growth through sustainability, profitability, capacity building, knowledge dissemination, policy advocacy, and innovative research.

CEASI's Impact:

CEASI is driving transformative change in Indian agriculture by empowering individuals, enhancing skills, and uplifting communities across the country.

- 15+ States
- ▶ 15 FPOs Trained & Supported
- 20,000 Agri / Dairy Professionals Upskilled

- ▶ 5000+ Entrepreneurs Skilled
- 3000+ Women Empowered
- 30,000+ Lives Impacted

FARM MECHANIZATION INSIGHTS

CHHATTISGARH LAUNCHES WOMEN-FRIENDLY ELECTRIC TRACTOR PILOT AT IGKV



Chhattisgarh has initiated a pilot programme to test women-friendly electric tractors at the Swami Vivekanand College of Agricultural Engineering and Technology, Indira Gandhi Krishi Vishwavidyalaya (IGKV), Raipur. The week-long initiative, held from October 6 to 10, is led by the state transport department and aims to evaluate the feasibility of electric tractors in real farming conditions. The pilot features the CSIR-PRIMA ET 11 tractor, developed by CSIR-CMERI, with technical and knowledge support from the institute and Shakti Sustainable Energy Foundation.

The tractor is designed keeping small and marginal farmers in mind and supports women-friendly use with ergonomic controls, low noise, minimal vibrations, and solar charging compatibility. It offers four hours of field operation or six hours of haulage per charge, a towing capacity of 1.5 tonnes, and a maximum speed of 22 kmph. Data collected during the pilot will help assess operational efficiency, cost-effectiveness, and adaptability in small-scale farming systems. The project promotes eco-friendly mechanization and encourages greater participation of women farmers in agriculture.

TELANGANA PURSUES LEADERSHIP IN DIGITAL AGRICULTURE



Telangana is accelerating efforts to establish itself as a leader in digital agriculture bu leveraging Artificial Intelligence (AI), the Internet of Things (IoT), and data-driven technologies. Industries and IT Minister D. Sridhar Babu highlighted that the state aims to make agriculture more profitable, sustainable, and climate-resilient while reducing input costs and promoting efficient resource use. Following discussions with Germanu's Fraunhofer Heinrich Hertz Institute (HHI), the Minister emphasized the need to empower small and marginal farmers through precision farming tools like soil sensors, Al-based advisory

systems, drone-based monitoring, and early warning systems for pest or weather risks. Telangana currently provides livelihoods to over 55 percent of its population through agriculture, making technological transformation crucial. The Minister also reviewed the 'Accelerating Climate-Resilient Agriculture' project implemented in Vemulawada's pilot villages with Fraunhofer HHI support and encouraged its statewide expansion. The meeting was attended by senior officials from Telangana and representatives from Germany, reinforcing a collaborative approach to modernizing agriculture through innovation and partnerships.

FARM MECHANIZATION INSIGHTS

ODISHA LAUNCHES PILOT AGRI-TECH SMART FARMS IN FOUR DISTRICTS



The Odisha government has rolled out an Agri-Tech Smart Farm (ATSF) initiative across four districts—Semiliauda (Koraput), Sukinda Sakhigopal (Puri), and Chakuli (Jajpur), (Bargarh)—to demonstrate technology-led Developed farming models. under public-private partnership (PPP) model, the pilot covers more than 600 hectares with a total planned investment of around Rs 66 crore. Each smart farm will integrate micro-irrigation, precision farming, protected cultivation, drones, IoT-based crop monitoring, and post-harvest facilities. Semiliauda will be the largest site, spanning 352.58 hectares for

multi-crop smart agriculture, while Sukinda will focus on export-oriented plantation crops and floriculture. Sakhigopal will promote high-value horticulture, including Kagazi lemons and coconuts, and Chakuli will emphasize organic and natural farming systems. Private partners will manage activities such as drone services, hydroponics, sericulture, tech-enabled dairy, horticulture, and prawn farming. Each site will allocate up to 25 percent of land to agro-tourism facilities with eco-lodges, agri-trails, and cultural outlets. The project seeks to integrate technology, entrepreneurship, and sustainability to modernize Odisha's agricultural sector.

RAJASTHAN FARMERS TO BENEFIT FROM MECHANIZATION UNDER PM DHAN-DHANYA KRISHI YOJANA



Prime Minister Narendra Modi launched the Pradhan Mantri Dhan-Dhanua Krishi Yojana to aaricultural productivity boost mechanization across low-performing districts in India. Under the scheme, eight districts in Rajasthan-Barmer, Jaisalmer, Jodhpur, Bikaner, Pali, Jalore, and Churu—have been selected based on low cropping intensity and limited irrigation. Rajasthan Chief Minister Bhajan Lal Sharma said the project would diversification, promote crop irrigation, and integrate departments like agriculture, animal husbandry, dairy, and rural development for holistic implementation. A

major component of the scheme is farm mechanization support for small and marginal farmers. Assistance will be provided for machinery such as seed drills, harvesters, and tractors along with micro-irrigation systems like drip and sprinklers to improve water efficiency. Soil testing and Soil Health Cards will guide optimal machinery and nutrient use. Storage and post-harvest infrastructure, including warehouses, silos, cold storage units, and packaging centers, will also be created at local levels. The programme aims to enhance productivity, reduce manual labor, and support sustainable agriculture in dryland regions of Rajasthan.

HORTICULTURE INSIGHTS

TELANGANA TARGETS MAJOR GROWTH IN HORTICULTURE SECTOR



Hyderabad: Telangana is set to significantly expand its horticulture area, which currently covers only about 7% of the state's cultivable land—well below neighboring southern states. In 2023-24, horticultural crops were grown on 11.91 lakh acres, yielding 42.58 lakh metric tonnes, and contributing 30% to the state's agricultural gross value output. Major crops include mango, sweet orange, guava, pomegranate, tomato, brinjal, chilli, oil palm, and turmeric, reflecting the sector's rising economic importance.

However, with mango and sweet orange occupying nearly 87% of the fruit-growing

area, crop diversification remains a key focus. Vegetable cultivation has shown a mild decline over the past decade, but the state's Horticulture Perspective Plan 2035 envisions gradual area expansion and farmer transition to oil palm and other high-value crops. The shift marks a steady transformation towards a more diversified and value-driven farm economy in Telangana.

GUJARAT'S CENTRES OF EXCELLENCE DRIVING HORTICULTURAL ADVANCEMENT



Gandhinagar: Gujarat's horticulture sector is witnessing significant progress through the establishment of Centres of Excellence (CoEs) under the Mission for Integrated Development of Horticulture (MIDH). Out of 58 CoEs approved across the country, four are dedicated to fruits and vegetables in Gujarat. These centers are developed with bilateral cooperation from countries such as Israel, the Netherlands, and New Zealand, and with technical support from Indian research institutions including the Indian Council of Agricultural Research.

The Centre of Excellence for Protected Cultivation and Precision Farming at Vadrad, Sabarkantha, has produced over 1.4 crore high-quality vegetable seedlings and conducted 18 frontline demonstrations annually to promote advanced farming practices. More than 1.13 lakh farmers and officers have benefitted through training and exposure visits. Similarly, the Centre of Excellence for Vegetables and Citrus at Visnagar, Mehsana, features modern protected cultivation infrastructure, supporting the adoption of scientific and climate-resilient horticultural techniques across the region.

HORTICULTURE INSIGHTS

MADHYA PRADESH LAUNCHES GREEN REVOLUTION 2.0 WITH FOCUS ON NATURAL FARMING AND AGRI-ENTREPRENEURSHIP



Bhopal: Madhya Pradesh has unveiled a comprehensive roadmap to promote natural and organic farming, strengthen horticulture, and empower rural youth through agri-entrepreneurship. The initiative aims to transform the state's agricultural landscape by integrating sustainable practices, innovation, and market-driven approaches. Each district will identify farmers for adopting natural farmina with technical auidance monitoring support, while local haat bazaars and weekly markets will actively promote organic produce for better market linkage.

The state also plans to boost horticultural crops such as banana, tomato, orange, and rose by developing processing infrastructure and marketing networks. A strong focus has been placed on creating youth-led enterprises in dairy, fisheries, and climate-resilient crops. Efforts are being intensified to curb stubble burning through scientific solutions and promote crop residue management. With coordinated efforts among agriculture, horticulture, animal husbandry, and cooperative departments, Madhya Pradesh aims to build a resilient and sustainable rural economy.

DELHI TO GET 17 NEW FORESTS COVERING 195 ACRES



Delhi is set to welcome 17 new forests across nearly 195 acres, including 15 city forests called Namo Van and two dense Miyawaki forests in southwest Delhi. Plantation work is scheduled to begin next month, transforming largely barren lands into green pockets. These forests urban enhance greenery, temperature, improve air quality, and provide with more recreational spaces. citizens Locations include Rohini, Narela, Alipur, Satbari, and Maidangarhi, with each site designed to feature at least ten tree species to support biodiversitu.

The two Miyawaki forests, covering 6.02 acres at Kharkhari Jatmal and 11.21 acres at Jainpur, will employ high-density native saplings for rapid growth and higher carbon sequestration, maturing within a few years. City forests will follow conventional spacing, taking four to five years to establish. The initiative emphasizes native species and layered ecosystems to ensure functional forest development, marking a major step toward a greener and cleaner Delhi.

DAIRY INSIGHTS

INDIA GEARS UP FOR 'WHITE REVOLUTION 2.0' TO BOOST DAIRY PRODUCTIVITY AND EXPORTS



India is gearing up for the second 'White Revolution' with renewed focus on enhancing dairy productivity, value addition, and export potential, according to Meenesh C. Shah, Chairman of the National Dairy Development Board (NDDB).

Speaking at a State-level seminar jointly organized by NDDB and the Kerala Cooperative Milk Marketing Federation (Milma), Mr. Shah said the initiative termed White Revolution 2.0 aims to strengthen dairy cooperatives across the country and increase milk procurement to over 10 crore litres per day within the next five years.

He emphasized that improving productivity through better breeding, animal health, and nutrition programs is key to meeting this goal. NDDB is also prioritizing efforts to curb milk adulteration and expand the share of the organized dairy sector from 65% to 70%.

The seminar highlighted the importance of developing value-added products and preparing India's dairy sector to capture a greater share of the global export market in the coming decades.

₹947 CRORE DAIRY PROJECTS INAUGURATED TO STRENGTHEN INDIA'S SELF-RELIANCE AND RURAL LIVELIHOODS



India's dairy and livestock sector is set for significant growth with the inauguration of projects worth ₹947 crore and the foundation laying of another valued at ₹219 crore. These initiatives were launched as part of a larger agricultural investment package aimed at advancing self-reliance and rural prosperity under two major schemes the Pradhan Mantri Dhan Dhanya Krishi Yojana (PM-DDKY) and the Mission for Aatmanirbharta in Pulses.

The newly inaugurated projects are designed to enhance productivity, animal health, and infrastructure in the dairy and allied sectors,

while promoting diversification through livestock, fisheries, and beekeeping. The initiatives also emphasize animal disease prevention, with over 125 crore free vaccinations administered to control major diseases such as foot-and-mouth.

These efforts align with the broader national goal of making rural India modern, resilient, and economically empowered by strengthening non-farm income sources and creating sustainable opportunities for farmers and landless households across the country.

DAIRY INSIGHTS

NDDB AND MOTHER DAIRY LAUNCH SECOND PHASE OF DAIRY DEVELOPMENT PROJECT IN VIDARBHA AND MARATHWADA



The National Dairy Development Board (NDDB), in collaboration with Mother Dairy, is set to launch the second phase of its dairy development project across 19 districts of Vidarbha and Marathwada. The initiative aims to strengthen the dairy value chain, promote milk collection, and enhance farmers' income through improved livestock productivity and better fodder management.

Farmers will receive high milk-yielding cows and buffaloes, along with reproductive supplements and feed additives to improve milk fat and SNF (solids-not-fat) content. The scheme also

provides subsidies for perennial fodder cultivation, distribution of electric chaff cutters, silage, and training on modern dairy management practices.

The project, approved following discussions between Union Minister Nitin Gadkari and State Minister Pankaja Munde, seeks to boost self-employment and rural entrepreneurship by expanding the network of organized milk procurement and production. The initiative is expected to significantly benefit farmers in Vidarbha and Marathwada by creating sustainable livelihoods and addressing economic challenges in the region.

ICAR-NDRI ORGANIZES ANIMAL HEALTH AND INPUT DISTRIBUTION CAMP TO EMPOWER FARMERS IN TRIPURA



The ICAR-National Dairy Research Institute (NDRI), Eastern Regional Station, Kalyani, West Bengal, organized a one-day Animal Health and Input Distribution Camp at Bagma Agri Producer Company Limited (BAPCL), Gomati District, Tripura, under the NDRI-NEH Project. The initiative focused on improving livestock health, productivity, and farmers' income in the North Eastern region.

Dr. Ashok Santra, Principal Scientist at NDRI, emphasized the growing importance of integrated farming amid climate change challenges, underscoring the interdependence

of agriculture and animal husbandry in enhancing rural livelihoods.

The event witnessed participation from local leaders, senior NDRI scientists, and over 120 livestock farmers from Gomati, South Tripura, Khowai, and Sepahijala districts. Farmers received chicklets, ducklings, mineral mixtures, feed, and veterinary supplies.

Dr. Santra encouraged adopting scientific livestock practices for higher profitability, while BAPCL's Managing Director, Sudip Majumder, expressed gratitude to NDRI for its continued support. An interactive session on disease control and animal nutrition concluded the program.

GENERAL AGRICULTURE INSIGHTS

MEITY LAUNCHES AI AND SENSOR-BASED SOLUTIONS FOR DAIRY, CROP QUALITY, AND WASTE MANAGEMENT



he Ministry of Electronics and Information Technology (MeitY) has launched advanced electronics and IT-based technologies under the AgriEnIcs programme to enhance dairy farming, crop quality monitoring, and municipal solid waste management. Developed by C-DAC Kolkata in collaboration with IIT Kharagpur, ICAR-NDRI Kalyani, academic institutions, research labs, and industry partners, these solutions aim to improve productivity, ensure accurate quality assessment, and support sustainable practices.

Key dairy innovations, now transferred to M/s Handholders Global, Bhubaneswar, include a wearable cattle health monitoring system, Go-P, to track physiological changes for optimal

insemination timing, and MAST-D, a device to detect mastitis in milk. For crop quality, M/s Agnext Technologies, Punjab, received Grain-Ex for pulse quality assessment, CT-Vieu for dry red chilli evaluation, and RIGE-Sense for automated rice quality analysis.

In environmental monitoring, C-DAC Kolkata introduced a portable sensor-based odour monitoring device for municipal waste sites, offering real-time emission tracking to support efficient waste management and public health protection.

INDIA SET TO BECOME WORLD'S FOOD BASKET WITH NEW AGRICULTURAL INITIATIVES



New Delhi: India is on track to become the world's food basket with ambitious initiatives aimed at boosting farmer welfare, enhancing food security, and promoting self-reliance in agriculture. As the Rabi sowing season begins, the government is set to launch major programs focusing on increasing production, productivity, and cultivated area, particularly in pulses. Since 2014, foodgrain production has grown by 40%, achieving self-sufficiency in wheat and rice, while exports have crossed 4 crore tonnes. The Pulse Self-Reliance Mission aims to expand cultivation from 27.5 to 31 million hectares by 2030-31 and raise productivity from 880 kg to 1,130 kg per

hectare.

To support farmers, 1,000 processing units will be established for local value addition, and certified seeds will be distributed through mini kits. Targeted measures in 100 low-productivity districts will improve irrigation, storage, credit access, and crop diversification. The programs, supported by robust research and monitoring mechanisms, are expected to enhance overall national production, farmer incomes, and long-term food security.

CEASI ACTIVITIES

CEASI SHOWCASES DAIRY & AGRI INITIATIVES AT IDH SUTRA 2025 EXHIBITION

The Centre of Excellence for Agriculture Skills in India (CEASI) had the privilege to participate in the IDH Sutra 2025 Exhibition, a premier event that convened leading organizations, innovators, and policymakers from across the agriculture CEASI's dairu sectors. and participation underscored its commitment to driving transformation through skill development, innovation, and sustainability within India's agri-food systems.

At the CEASI pavilion, the focus was on showcasina impactful interventions and forward-looking initiatives across the entire value chain. The exhibition highlighted four key thematic areas - Climate-Resilient Agriculture, Sustainable Dairy Development, Development & Farmer Empowerment, and Innovation in Agri-Tech & Mechanization. Through interactive displaus, visual presentations, and discussions, CEASI presented its integrated approach to enhancing farmer livelihoods, promoting sustainable practices, and strengthening institutional capacity at the grassroots level.

The event served as a dynamic platform for collaboration and idea exchange, enabling CEASI to engage with industry leaders, government bodies, development agencies, and farmer organizations. These interactions opened new avenues for partnerships aimed at building resilient, technology-driven, and inclusive agri-food systems.

CEASI extends heartfelt thanks to IDH Sutra 2025 for providing this valuable opportunity and to all visitors who took the time to interact with our team and learn about our ongoing programs and collaborations. Moving forward, CEASI remains dedicated to empowering farmers, fostering innovation, and contributing to India's sustainable agricultural growth and





CEASI ACTIVITIES

CENTRE OF EXCELLENCE FOR HORTICULTURE SKILLS IN INDIA IMPLEMENTS 3-DAY TRAINING PROGRAMS UNDER MIDH

The Centre of Excellence for Horticulture Skills in India (CEHSI) is successfully implementing a series of 3-day field-based training programs under the Mission for Integrated Development of Horticulture (MIDH), with the support of the Haryana State Horticulture Development Agency (HSHDA). This initiative aims to strengthen the horticulture ecosystem by enhancing the practical skills and technical expertise of farmers, rural youth, and budding agri-entrepreneurs.

The training programs are designed to cover a wide range of horticulture-related job roles, including Vegetable Grower, Organic Grower, Mushroom Grower, Protected Cultivation Grower, Post-Harvest Loss Management Technician, Master Gardener, Beekeeper, Tropical and Subtropical Fruit Grower, and Floriculturist, amona others. Each session integrates classroom-based learning with on-field demonstrations to ensure participants gain both theoretical understanding and hands-on experience.

These training programs are being conducted across multiple districts of Haryana—Jhajjar,

Kurukshetra, Karnal, and Panchkula—focusing on region-specific horticultural practices. The curriculum emphasizes modern cultivation techniques, resource-efficient production systems, post-harvest management, and sustainable farming methods aligned with MIDH's objectives of increasing productivity and profitability in the horticulture sector.

So far, around 160 participants have successfully completed the training across different districts. The initiative has received overwhelming participation and positive feedback from farmers, rural youth, and community members. The ongoing sessions continue to create significant impact by building local capacity, promoting sustainable livelihoods, and equipping participants with skills relevant to emerging opportunities in the horticultural value chain.

Through these programs, CEHSI continues to play a pivotal role in fostering skill-based education and driving innovation in India's horticulture sector, contributing to the vision of a more productive, sustainable, and resilient agricultural ecosystem.





CEASI ACTIVITIES

CEHSI CURRENTLY CONDUCTING 5-DAY RESIDENTIAL TRAINING CUM EXPOSURE VISIT FOR WOMEN FARMERS FROM HIMACHAL PRADESH

The Centre of Excellence for Horticulture Skills in India (CEHSI), in collaboration with Department of Horticulture, Himachal Pradesh, and under the Mission for Integrated Development of Horticulture (MIDH), is currently conducting a five-day residential Training cum Exposure Visit for 31 women farmers from Himachal Pradesh in Karnal, Haryana. The program is ongoing and actively engaging participants through a mix of classroom learning hands-on field demonstrations strengthen practical skills and technical knowledge.

Key training modules include Post-Harvest Loss Management, Good Agricultural Practices (GAPs), and Cluster-Based Farming, with sessions designed to be immediately applicable and scalable at the participants' home locations. Classroom discussions provide conceptual clarity on quality management and value-chain linkages, while field demonstrations translate theory into practice, helping participants adopt resource-efficient and sustainable horticulture techniques.

As part of the exposure component, participants are visiting leading horticultural institutions across Haryana, including the Integrated

Beekeeping Development Centre (IBDC), Ramnagar; Centre of Excellence for Vegetables (CEV), Gharaunda; Centre for Subtropical Fruits (CSTF), Ladwa; Maharana Pratap Horticultural University (MHU); and the Horticulture Training Institute (HTI). These visits are showcasing modern cultivation technologies, post-harvest handling systems, integrated pest and pollinator management, and successful cluster-farming models in practice.

The ongoing program emphasizes peer learning, confidence building, and direct interactions with subject-matter experts and extension professionals, enabling participants to discuss local challenges and practical solutions. Early feedback from attendees has been positive, with many expressing readiness to replicate learned practices in their villages.

combinina residential trainina with institutional exposure, CEHSI aims to expand opportunities livelihood and promote gender-inclusive growth in the horticulture sector. The initiative, now underway, reaffirms CEHSI's commitment to empowering women farmers as change agents for a more productive. resilient. and sustainable horticultural landscape.







CEASI

CENTRES OF EXCELLENCE FOR AGRICULTURE SKILLS IN INDIA

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