





CEHSI
Centre of Excellence for
Horticulture Skills in India

www.ceasi.in

### **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-Al)

#### 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**

## **NEW RESEARCH CENTRE** IN **HYDERABAD** TO SUPPORT SUSTAINABLE FARMING PRACTICES



A new agriculture research and extension centre is set to be established in Hyderabad through a collaboration between the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and a private sector farm equipment manufacturer. The centre aims to support sustainable agriculture by advancing research on crop-specific mechanisation, soil health, and water-use efficiency.

The facility will focus on validating innovations such as machine-harvestable crops across different ecological zones and will offer

training in the use and upkeep of farm machinery. It also plans to promote integrated mechanisation models suited to small and marginal farmers.

The centre will provide a platform for knowledge exchange among farmers, researchers, institutions, and other stakeholders. It will also demonstrate community-based approaches such as digital custom hiring models, which allow shared access to machinery.

This initiative is intended to reduce chemical inputs, ease labour demands, and support environmentally responsible farming, contributing to broader goals of sustainable rural development.

## CROPIN AND WIPRO PARTNER TO APPLY AI IN AGRICULTURE AND FOOD SUPPLY CHAINS



A new collaboration between agri-tech firm Cropin and technology services provider Wipro aims to explore the application of artificial intelligence (AI) in addressing challenges within the agriculture and food supply sectors. The partnership will focus on improving transparency, traceability, and resilience across agri-food value chains.

According to a joint statement, the initiative seeks to respond to sector-wide concerns such as fragmented data systems, unpredictable weather conditions, and increasing regulatory requirements, including those related to

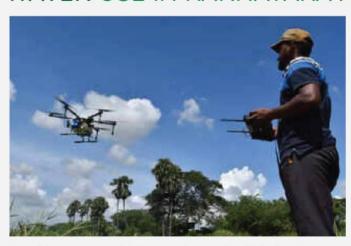
environmental standards. The companies will work together to develop AI-based solutions that support data integration and operational decision-making in agriculture and allied industries.

The partnership comes at a time when agricultural supply chains are increasingly affected by climate change, market disruptions, and policy shifts. Efforts will be directed toward developing tools that support compliance, risk mitigation, and sustainability goals across various parts of the agri-food system.

The announcement reflects broader efforts to modernise agriculture through digital tools and data-informed practices.

#### **FARM MECHANIZATION INSIGHTS**

# DRONE TECHNOLOGY ENHANCES YIELDS AND CUTS WATER USE IN KARNATAKA AGRICULTURE



A study by the University of Agricultural Sciences (UAS), Bengaluru, has demonstrated significant benefits of using drones in agriculture, particularly for finger millet (ragi) and pigeon pea (tur dal). Conducted between 2023 and 2025 across ten districts in southern Karnataka, the study reports increased crop yields and a nearly 90% reduction in water usage during agrochemical application.

The research introduced a locally developed Standard Operating Procedure (SOP) for drone use, specifying spray height, volume, timing, and chemical types. Field trials across multiple

locations and soil types showed a 5% yield increase for ragi and 10% for tur dal, with water usage reduced from 500 to 55 litres per hectare.

The study also addressed labour shortages and environmental concerns, highlighting reduced chemical exposure risks. Researchers noted the unique adaptation of drone parameters for local conditions, differing from national guidelines.

The findings point to drones as a viable tool for improving efficiency, sustainability, and productivity in smallholder farming systems.

## UNION AGRICULTURE MINISTER ENGAGES WITH GROUNDNUT FARMERS IN GUJARAT



Union Agriculture Minister Shri Shivraj Singh Chouhan visited groundnut fields in Manekvada village, Junagadh district, as part of his outreach to understand the challenges and practices of farmers in Gujarat. During the visit, he interacted directly with farmers and participated in field activities such as weeding and hoeing of groundnut crops.

The discussions focused on groundnut seed varieties, input use, cultivation practices, and irrigation issues. Farmers shared their experiences with seasonal fluctuations, input costs, and market access. The Minister also

reviewed modern farm technologies, including drone applications and other equipment, and sought feedback on their usability and impact from the farmers.

Shri Chouhan took particular interest in Gujarat's improved groundnut variety 'Girnar-4' and engaged with agricultural officials to understand its characteristics and performance.

The visit is part of a broader effort to assess ground-level agricultural practices and gather insights from farmers to inform future policies and interventions in the sector.

#### HORTICULTURE INSIGHTS

### WEST BENGAL SCALES UP INVESTMENT DRIVE IN FOOD PROCESSING AND HORTICULTURE



West Bengal is intensifying its efforts to attract investments in food processing and horticulture by promoting modern farming technologies, advanced planting materials, model nurseries, organic farming, and robust post-harvest management systems. The state is focusing on expanding cold chain infrastructure, promoting protected cultivation, and strengthening value addition capacities. Plans are underway to enhance maize cultivation by 60,000 hectares over the next three years to meet the growing demand for animal, poultry, and fish feed, while also prioritizing women's empowerment in agriculture, where they form 70% of the

workforce.

With an annual production of around 163 lakh tonnes of vegetables and 40 lakh tonnes of fruits, West Bengal offers vast opportunities for investment in logistics, cold chains, and exports. The government is supporting tissue culture in crops like banana, pineapple, blueberry, and ginger, promoting partnerships between farmers, FPOs, and entrepreneurs. In FY25 alone, over 24,000 food processing units were established, reflecting the state's growth momentum in this sector.

# COLD CHAIN **TRAINING WORKSHOP** EMPOWERS HORTICULTURE OFFICERS AND ENTREPRENEURS IN KASHMIR



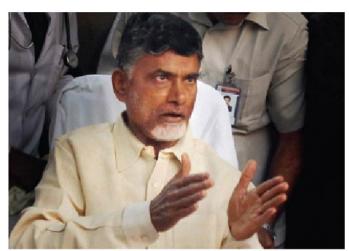
A one-day workshop on updated engineering guidelines and minimum system standards for cold chain implementation was held at the Directorate of Horticulture, Kashmir, focusing on strengthening post-harvest infrastructure in the Valley. The training brought together horticulture officers, private entrepreneurs, and industry stakeholders, with expert sessions covering practical implementation, operational standards, and addressing existing gaps in cold chain systems. The workshop aimed at equipping participants with the latest knowledge under the Mission for Integrated

Development of Horticulture (MIDH), promoting modern post-harvest practices and efficient cold chain management.

Industry leaders, including Controlled Atmosphere Store operators and Chamber of Commerce representatives, shared insights on present challenges and future opportunities in the sector. A comprehensive guideline book on engineering standards for cold chain components was formally presented to the department. Participants were assured of continued support and extensive handholding for farmers and entrepreneurs engaged in post-harvest activities. The event witnessed active participation from horticulture officers, industry associations, and private sector representatives across the region.

### HORTICULTURE INSIGHTS

## ANDHRA PRADESH UNVEILS VISION 2047 BLUEPRINT FOR ECONOMIC GROWTH



Andhra Pradesh has outlined an ambitious roadmap, aiming to emerge as India's leading state by 2047 with a targeted Gross State Domestic Product (GSDP) of USD 2.4 trillion and export earnings of USD 450 billion. The vision emphasizes global achieving standards through enhanced industrial arowth. infrastructure development, and international competitiveness. The blueprint highlights the state's strengths - dynamic human resources, fertile agricultural land, and a strategic coastline — with plans to establish ports every 50 km, expand airports, and develop a world-class road network to position Andhra

Pradesh as a future logistics hub.

The state also focuses on upgrading human capital through skill development and collaborations with global institutions. A key futuristic initiative includes launching quantum computing by January 2026 in partnership with leading tech companies. Plans are underway to create a "Quantum Valley" in Amaravati, positioning the state at the forefront of innovation. With a commitment to industrial growth, Andhra Pradesh pledges proactive support to investors and entrepreneurs in realizing this vision

# INDIA'S HORTICULTURE PRODUCTION HITS RECORD HIGH WITH SURGE IN POTATO AND BANANA OUTPUT



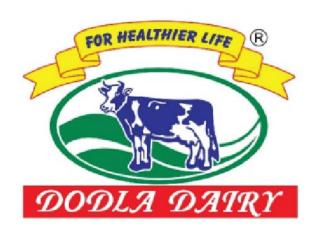
India's horticulture production has touched a new peak of 367.72 million tonnes in the 2024-25 crop year, registering a 3.66% increase over the previous year's 354.74 million tonnes. This significant rise is largely attributed to record potato production exceeding 60 million tonnes and a notable 6.5 million tonne increase in onion output. Higher productivity, rather than expansion in cultivated area, played a key role in boosting the overall production.

The total area under horticulture crops saw a marginal rise of 1.81 lakh hectares, reaching 292.67 lakh hectares. Despite the limited

increase in area, production grew by nearly 13 million tonnes, highlighting improved yields and better crop management practices. The consistent growth in horticulture, driven by key crops like potato and onion, underscores India's strengthening position in agricultural production and its potential for further growth in the sector. These trends reflect a positive outlook for the country's food security and agri-based economy.

### DAIRY INSIGHTS

### DODLA DAIRY ACQUIRES OSAM DAIRY TO BOOST JHARKHAND'S DAIRY SECTOR



Dodla Dairy Limited has acquired Osam Dairy, based in Ranchi, for ₹271 crore, marking a significant expansion into eastern India. The acquisition includes Osam's extensive network of 1,000 milk collection centres, 19 chilling units, and daily procurement of 1.1 lakh litres of milk from over 25,000 farmers.

This move integrates Osam's rural infrastructure with Dodla's national dairy network, improving access to markets and processing facilities. Dairy farmers in Jharkhand are expected to benefit from enhanced price realisation, faster payments,

and modern processing systems.

Dodla Dairy, with over three decades in the sector, operates in five states and distributes dairy products across 13 states. The inclusion of Osam's operations strengthens its presence in eastern India and streamlines milk supply chains.

The acquisition is projected to boost rural incomes, improve milk collection efficiency, and open employment avenues in the region. It signals a promising transformation for Jharkhand's dairy ecosystem, aligning infrastructure with expanding market demands.

### **ODISHA** PARTNERS WITH **NDDB** TO STRENGTHEN DAIRY SECTOR



Odisha has partnered with the National Dairy Development Board (NDDB) to strengthen its dairy sector. As part of the initiative, OMFED will provide 4,000 high-yield cows and establish a cow dung biogas plant to support over 15 lakh dairy farmers.

Under the Kamdhenu Yojana, the state plans to distribute 10,000 cows and extend financial assistance to 70% of farmers. The aim is to raise milk production from the current 72 lakh litres to 274 lakh litres by 2047.

Key infrastructure upgrades are underway, including installation of milk tanks, packaging

units, and staff quarters at OMFED's Arilo plant. OMFED's growing range of dairy products is also contributing to youth employment.

A recent agreement will ensure the supply of 30 MT of ghee for the preparation of Mahaprasad at the Jagannath Temple. The collaboration is expected to significantly enhance productivity, sustainability, and livelihoods in Odisha's dairy ecosystem.

#### **DAIRY INSIGHTS**

## ASSAM EXPANDS PURABI DAIRY PLANT TO STRENGTHEN DAIRY SECTOR



The West Assam Milk Producers' Cooperative Union Ltd. (WAMUL) has initiated the expansion of its Purabi Dairy plant in Panjabari, Guwahati, doubling its milk processing capacity from 1.5 lakh litres per day (LLPD) to 3 LLPD. The ₹104 crore project, part of a MoU signed between WAMUL and NDDB during the Advantage Assam 2.0 Summit, aims to enhance rural livelihoods and dairy infrastructure.

The expansion includes new production units for pasteurised pouch milk (2 LLPD), ice cream (20 TLPD, expandable to 30 TLPD), and other dairy products (70 TLPD). This initiative falls

under the Assam Dairy Development Plan, which targets processing 10 LLPD across the state.

The Panjabari plant, previously upgraded under the World Bank-funded APART project, reached full capacity within 18 months, prompting further expansion. The upgraded facility is expected to boost milk collection, processing efficiency, and market access, reinforcing Assam's cooperative dairy movement and meeting rising consumer demand for dairy products.

### NDRI ACHIEVES BREAKTHROUGH WITH IVF CALF FROM CLONED GIR COW



In a major scientific milestone, ICAR-National Dairy Research Institute (NDRI) has successfully produced a Gir calf using in-vitro fertilisation (IVF) from a cloned donor cow, significantly reducing the cattle breeding cycle by nearly 10 months. The calf, born to a Sahiwal surrogate, represents the second generation from the elite cloned donor "Ganga" within just 39 months—well ahead of the conventional 46–50 month interval.

Ganga, India's first cloned Gir cow, was created through handmade cloning and matured by 18 months. Oocytes were retrieved using

non-surgical ovum pick-up (OPU), fertilised with semen from a superior Gir bull, and the resulting embryo implanted into the surrogate.

This marks India's first integration of cloning and IVF for elite indigenous breed multiplication. Scientists say this innovation can fast-track elite animal reproduction, boost productivity, conserve native germplasm, and produce high-quality bulls for AI programs. The success strengthens India's efforts toward self-reliance in the dairy sector through advanced reproductive biotechnology.

### **GENERAL AGRICULTURE INSIGHTS**

# BIOSTIMULANTS UNDER REGULATORY LENS TO ENSURE FARMER BENEFIT AND MARKET TRANSPARENCY



Biostimulants, substances that enhance plant and productivity, are officiallu arowth classified separately from fertilisers and pesticides. These products stimulate plant physiological processes, improve nutrient uptake, and boost yield and stress tolerance. Despite their growing market, concerns over their efficacy and unfair selling practices prompted the government to review their regulation. The Fertiliser Control Order (FCO), amended in 2021, brought biostimulants under formal regulatoru control. mandatina manufacturers to obtain proper registration for production and sale.

Previously sold without strict oversight, biostimulants now require comprehensive testing and official approval. The government had allowed provisional registrations with periodic extensions, but this relaxation ended in June 2024. Companies holding provisional certificates can no longer sell their stock without formal registration. The move aims to protect farmers' interests, curb forced sales practices, and ensure only effective, quality products reach the market. With the biostimulant market projected for strong growth, this regulatory tightening is expected to foster transparency and responsible business practices in the sector.

# INDIA AND ARGENTINA STRENGTHEN AGRICULTURAL TIES IN SECOND JOINT WORKING GROUP MEETING



India and Argentina held the second meeting of their Joint Working Group (JWG) on Agriculture Cooperation, reaffirming their commitment to deepen collaboration in agriculture and allied sectors. The virtual meeting was co-chaired by Shri Devesh Chaturvedi, Secretary, Department of Agriculture & Farmers' Welfare, and Mr. Sergio Iraeta, Secretary of Agriculture, Livestock, and Fisheries of Argentina.

Discussions focused on expanding cooperation in key areas including agricultural mechanisation, plant breeding, genome editing, pest management, and

climate-resilient farming. Opportunities for joint research and knowledge exchange were highlighted as essential to improving productivity and farmer welfare in both countries.

The agenda also covered horticulture, oilseeds and pulses value chains, precision agriculture, carbon credit mechanisms, biopesticides, and locust control. Indian officials shared insights into recent policy measures promoting digital agriculture, risk mitigation, and financial inclusion for farmers.

Senior representatives from various Indian ministries and research institutions participated, underscoring the strategic importance of this bilateral partnership in agriculture.

### **GENERAL AGRICULTURE INSIGHTS**

# 'DHAN-DHAANYA KRISHI YOJANA' APPROVED TO BOOST AGRICULTURE IN 100 LOW-PERFORMING DISTRICTS



The Government has approved the 'Dhan-Dhaanya Krishi Yojana' for a six-year period starting 2025-26, focusing agricultural improvement 100 in low-performing districts across India. These districts will be selected based on low productivity, low cropping intensity, and limited access to credit.

The scheme aims to enhance productivity, promote crop diversification, and support sustainable practices. It includes infrastructure upgrades such as irrigation, storage at block and panchayat levels, and improved credit

access.

A key feature is the convergence of 36 existing schemes from 11 departments under a unified framework, supported by states and private sector partnerships. Decentralised planning will be driven by local committees involving progressive farmers, aligning strategies with agro-ecological needs.

A three-tier monitoring system will be established, with district-level committees preparing area-specific plans. Performance will be tracked monthly through 117 Key Performance Indicators via a digital dashboard. Central Nodal Officers and NITI Aayog will oversee review and implementation to ensure efficiency and accountability.

## CASHEW FARMING EXPANDS IN GADCHIROLI, PROMISES BETTER INCOME FOR FARMERS



Farmers in Gadchiroli district, Maharashtra, are turning to cashew farming to improve their income. In Kotta Konda village, farmer Dokka Mattami has planted 200 cashew trees and hopes to double his income in two years when the trees are ready to harvest.

The district, once known only for paddy farming, is now seeing change. With help from the state agriculture department and the Cashew and Cocoa Board of Kerala, 608 hectares of land have been brought under cashew cultivation in the last three years.

Officials say Gadchiroli's hot and humid climate

is perfect for cashew and other tropical fruits. Better roads and improved security have made it easier for farmers and officials to reach remote villages.

The government is also planning to grow mango, guava, custard apple, and tamarind in the region. A large nursery in Kasansur village now supplies saplings to farmers. The goal is to turn Gadchiroli into a major fruit-growing area in eastern Maharashtra.

### **CEASI ACTIVITIES**

### 3 DAY DAIRY FARMER ENTREPRENEUR TRAINING HELD IN BARABANKI BY CENTRE OF EXCELLENCE FOR DAIRY SKILLS IN INDIA (CEDSI)

The Centre of Excellence for Dairy Skills in India, in collaboration with Skill Green Global organized a three-day training program in Barabanki district, Uttar Pradesh, from July 15 to 17, 2025. The initiative was part of a focused effort to empower rural youth and farmers under the Dairy Farmer Entrepreneur job role. The program aimed to enhance participants' understanding of scientific dairy farming practices, promote mechanization in dairy operations. and build entrepreneurial capabilities for sustainable livelihood development. Over the course of the training,

beneficiaries received hands-on exposure to key areas such as cattle management, fodder production, hygiene and sanitation, financial planning, and the use of appropriate mechanized tools in dairy farming. The program emphasized the integration of modern practices with traditional knowledge to improve productivity and profitability. This initiative is a significant step toward fostering rural entrepreneurship and ensuring the inclusive growth of the dairy sector in Uttar Pradesh and beyond.





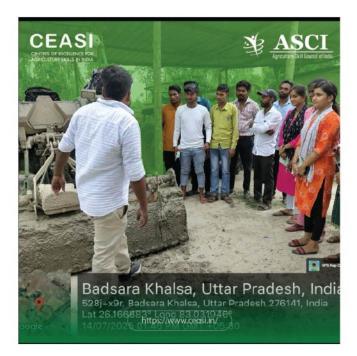
# CEASI, IN COLLABORATION WITH ASCI, ROLLS OUT AGRICULTURE MACHINERY DEMONSTRATOR TRAINING PROGRAM

The Centre of Excellence for Agriculture Skills in India (CEASI), in collaboration with the Agriculture Skill Council of India (ASCI), is conducting the Agriculture Machinery Demonstrator Training Program to skill and empower 250 beneficiaries in Uttar Pradesh. This program is designed to equip participants with practical knowledge and hands-on expertise in the operation, maintenance, and demonstration of advanced agricultural machinery.

Focusing on rural youth, agri-entrepreneurs, and farm service providers, the program aims

to build a cadre of trained professionals who can serve as agents of change in promoting mechanized, efficient, and climate-smart farming practices. The training includes sessions on modern equipment such as seed drills, harvesters, power weeders, and precision tools, along with modules on safety, troubleshooting, and minor repairs.

By bridging the skill gap in the mechanization ecosystem, this initiative contributes to enhancing farm productivity, reducing manual drudgery, and supporting India's vision of sustainable and technology-driven agriculture.





# CEFMI IN COLLABORATION WITH ESCORTS KUBOTA HOSTS THREE-DAY FPO TRAINING IN KURUKSHETR

The Centre of Farm Mechanization Skills in India, in collaboration with Escorts Kubota Limited, is conducting a three day residential training program for Farmer Producer Organizations (FPOs) from 21–23 July 2025 at Kurukshetra. Designed specifically for FPO board members and CEOs, this intensive workshop will strengthen both leadership and technical capacities to advance mechanized agriculture at the grassroots.

On the first day, participants will explore effective governance models, board roles, organizational structures, and transparent decision making laying a strong institutional foundation. The second day provides hands-on experience with tractors, attachments, and other advanced farm

machinery, where attendees master operation techniques, safety protocols, and routine maintenance. The final day focuses on agri\(\text{\Sigma}\) business financing, covering credit appraisal methods, working capital management, and strategies to forge productive linkages with banks and other financial institutions.

By combining expert led classroom sessions, live field demonstrations, and peer networking, the program aims to bridge critical skill gaps, boost farm productivity, and foster resilient, climate smart agribusiness across India. Participating FPOs will receive certification upon successful completion, recognizing their enhanced capabilities to drive mechanization and sustainable, inclusive growth in their communities.





### **CEASI ACTIVITIES**

## EMPOWERING SUSTAINABLE SUGARCANE FARMING IN AYODHYA THROUGH THE SASHWAT MITHAS INITIATIVE

As part of the Sashwat Mithas initiative, the Centres of Excellence for Agriculture Skills in India, in collaboration with UPL SAS Limited, sustainable are promoting sugarcane cultivation in Ayodhya. So far, 415 farmers have been surveyed to assess current practices and identify improvement areas. Insights from these surveys have guided the establishment of village level demonstration plots showcasing efficient water usage, soil health management, and organic input application. To foster community participation and peer learning, the team has conducted 50 farmer meetings and 4 field days where

participants discuss challenges with experts and observe climate resilient techniques in action. Through rigorous field research, interactive sessions, and live demonstrations, this initiative empowers growers to adopt eco friendly, resource conserving methods that boost yields, protect ecosystems, and support climate smart agriculture. Ultimately, the program aims not only to enhance sugarcane productivity but also to establish a scalable model for ecological balance and long term agricultural sustainability across the Ayodhya region.







# CEASI

CENTRES OF EXCELLENCE FOR AGRICULTURE SKILLS IN INDIA

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