



Seed Connect

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News from India and Around the World

[India, UAE sign free trade deal expected to double trade to \\$100 billion in 5yrs](#)

(Hindustan Times)

India and the United Arab Emirates (UAE) signed a free trade pact that is expected to almost double two-way trade to \$100 billion in the next five years during a virtual summit between Prime Minister Narendra Modi and Abu Dhabi Crown Prince Sheikh Mohammed bin Zayed Al Nahyan. Two memorandums of understanding (MoUs) signed between Indian and UAE entities were announced at the summit – a MoU between Agricultural and Processed Food Products Export Development Authority (APEDA) and DP World & Al Dahra for a food security corridor initiative and another between India's Gift City and Abu Dhabi Global Market on cooperation in financial projects and services.

[For 'climate smart' agriculture](#)

(The Indian Express)

In the backdrop of the 2070 carbon neutrality target set by India at the CoP26 in Glasgow, the Union Budget for 2022-23 has listed "climate action" and "energy transition" as one of the four priorities for the Amrit Kaal. Finance Minister Nirmala Sitharaman made a few announcements in this context, including an additional allocation of Rs 19,500 crore for solar PV modules. She also talked of co-firing of 5-7 per cent of biomass pellets in thermal power plants, "sovereign green bonds" and a "battery-swapping policy". These are positive steps towards making the energy and transport sectors less polluting.

[India, Philippines reaffirm strong commitment to multi-faceted partnership](#)

(The Hindu)

The two sides agreed to make efforts to further expand economic cooperation as well as trade and investment links in a range of areas such as agriculture, infrastructure, health and pharmaceuticals, tourism, ICT and science & technology. They expressed satisfaction in recent initiatives to step up cooperation in emerging areas such as fintech, blue economy, renewable energy, space, cyber security and traditional medicine.

[India Dispatches First Wheat Aid Shipment To Afghanistan](#)

(Successful Farming)

India dispatched the first in a series of aid shipments containing wheat to Afghanistan as the country faces poverty and hunger since the takeover by the Taliban last year. The first convoy of 50 trucks carrying 2,500 metric tonnes of wheat left the north Indian city of Amritsar after a ceremony attended

by India's foreign secretary Harsh Vardhan Shringla, India's foreign ministry said in a statement. "India remains committed to its special relationship with the people of Afghanistan," the statement said. In total, India plans to send 50,000 tonnes of wheat to Afghanistan on an infrequently used land route through Pakistan.

[Bayer ends Monsanto dispute, reapplies to cultivate GM cotton seeds in India; how this may help farmers](#)

(CNBC TV 18)

According to farm policy experts, the use of GM cotton seed variety will not only boost yields and bring down the cost of cultivation, it could also act as an antidote to the widespread infestation of the pink bollworm pest. The pink bollworm pest has caused damage to crops, affecting the income of farmers in the past few years. Industry body estimates show that the pest attack has infected nearly 20-30 percent of the country's 12-13 million hectares of cotton cultivated area.

[Modi launches 100 agricultural drones across the country](#)

(Hindustan Times)

Prime Minister Narendra Modi on Friday virtually launched 100 Made in India agricultural drones across the country, which carried out farm operations in unique simultaneous flights. The PM labelled it a "milestone" for Indian agriculture. The drone blitz is said to be, by far, the largest collective agricultural drone exercise in the country. The prime minister said new technologies would bring a "world of opportunities for farmers and youth". A raft of recent policy relaxations and incentives, including proposals in the Union budget 2022-23, have opened up India's vast agriculture sector for commercial use of drones, or unmanned aerial vehicles.

[India to replace diesel by renewable energy in agriculture by 2024, says Power minister](#)

(The Economic Times)

India will replace use of diesel in farming with renewables by 2024 and, union power and renewable energy minister R K Singh said. He said the country targets to make the agriculture sector diesel-free in the next two years. He urged that all states should develop specific action plans to achieve the assigned targets. Singh chaired a virtual meeting with additional chief secretaries and principal secretaries of power in states for collaboration between the Central and state governments for achieving energy transition goals.

[Walmart Foundation announces agriculture grant](#)

(The Hindu)

The Walmart Foundation on Wednesday announced a grant of over ₹4 crore to assist farmers across six States in India to manage supply chain disruptions caused by the pandemic as well as sustain their farming operations. The grant will be presented to the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and its partner organisations that are supporting their local communities as they respond to COVID-19. With this new grant, ICRISAT will partner with eight other organisations, including Tanager, Professional Assistance for Development Action (PRADAN), TrickleUp, International Fertilizer Development Center (IFDC), Grameen Foundation India, Digital Green India, TechnoServe and Heifer International, to further scale up their efforts on the ground towards building support and resilience for India's farmers.

[Tax on Agriculture: GST applicable on seeds used in agriculture say two tax rulings](#)

(The Economic Times)

The Telangana Authority of Advance Ruling (AAR) has said in two rulings that seeds are not "agricultural produce" and should attract goods and services tax (GST), a development that could create complications for the agriculture sector in the future. In both the rulings, the AAR said that "seed" is treated separately from "grain".

[Nabard credit projections give thrust to MSME, agriculture](#)

(The Telegraph)

The regional office of the National Bank for Agriculture and Rural Development (Nabard) projected a credit potential of Rs 34,458.13 crore for priority sectors in Jharkhand for the next financial year (2022-

23) which is 20.23 per cent more than Rs 28,643.64 crore that was projected for the current fiscal (2021-22). This was revealed in the Nabard focus paper that highlighted potential-linked credit plan for property sectors such as agriculture and MSME during its annual state credit seminar in Ranchi.

[Asia Rice-Vietnam Rates Rise As Activity Picks Up, India Market Subdued](#)

(Successful Farming)

Prices of rice exported from Vietnam rose to a two-month high this week as market activity picked up again following the holidays, while low demand kept Indian rates near a one-month low. Vietnam's 5% broken rice <RI-VNBKN5-P1> was offered at \$400 per tonne, the highest since mid-December and up from \$395 a week ago. "Prices have edged up slightly as trading activity is resuming following the Lunar New Year Holiday and demand is seen picking up," a trader based in Ho Chi Minh City said, adding that traders were buying moderate amounts from farmers ahead of the upcoming winter-spring harvest. Some traders said they will be joining a tender issued by South Korea's state-backed Agro-Fisheries & Food Trade Corp to purchase an estimated 72,200 tonnes of rice.

[IIT Roorkee launches KISAN mobile to send agricultural advises](#)

(India Today)

IIT Roorkee organised a regional farmers' awareness program under Gramin Krishi Mausam Sewa (GKMS) project and in continuation of the series of 'Azadi ka Amrit Mahotsav'. Farmers from Haridwar, Dehradun, and Pauri Garhwal districts participated in the program. Farmers and other stakeholders were sensitized about the Agromet Advisory Services jointly provided by the AMFU Roorkee and India Meteorological Department (IMD). A mobile App 'KISAN' has been launched for easy access to these services for farmers on their mobile phones.

[World Bank offers \\$115 million loan for rejuvenating watersheds in India](#)

(The Print)

The World Bank will provide \$115 million (Rs 869 crore) loan to fund a programme in India that will help national and state institutions adopt improved watershed management practices to increase farmers' resilience to climate change, promote higher productivity and better incomes, the Union Finance Ministry said. The Government of India, the State Governments of Karnataka and Odisha and the World Bank have signed the agreement for the programme called 'Rejuvenating Watersheds for Agricultural Resilience through Innovative Development Programme'. India has one of the largest watershed management programmes in the world. The new programme will further boost the watershed management system in the country.

[Fears for farming as groundwater plummets in northern India](#)

(The Third Pole)

At the recent polls in Punjab and western Uttar Pradesh, free electricity for groundwater irrigation was a major promise of all political parties. But enabling further extraction of groundwater in these breadbaskets does not change the fact that they are drying up. The same picture is evident in adjoining areas of Haryana, the rest of Uttar Pradesh and Bihar. This is worrying given the four states cover most of the Indus and Ganga basins in India and are the most populous and important food-growing areas in the country.

[Farmers employ AI-powered drones to fight crop diseases, insects](#)

(Mint)

Institutes, farmers and agricultural enterprises in India are employing technologies such as unmanned aerial vehicles (UAVs) and artificial intelligence (AI) tools to improve farm yields. Researchers at IIIT Naya Raipur, for instance, have partnered with the Indira Gandhi Agriculture University in Raipur to develop a drone-based crop health forecasting solution that uses AI to identify insects and diseases that commonly afflict crops, and suggest quick and accurate remedies. According to the institute, its forecasting solution will help farmers deal with crop diseases in a timely manner and curb overuse of pesticides, which is rampant due to the lack of accurate information about the extent of crop infection.

[PM Modi exhorts India Inc to make agriculture sector 'modern and smart'](#)

(CNBCTV18)

Stressing the need for reducing imports of edible oils and pulses, Prime Minister Narendra Modi asked corporates to come forward and help farmers in increasing domestic production of these essential food items. Addressing a webinar on positive impact of the Union Budget 2022 on the agriculture sector, the Prime Minister exhorted Indian business houses to help in branding and promotion of Indian millets. He also talked about "a huge opportunity" for the corporate world in the field of nano-fertiliser which is going to be a "game changer". The Prime Minister called upon start-ups and private investors to create a pan-India network of soil testing labs and said there is a need to create awareness among farmers so that they keep getting their farm soils tested on a regular basis.

[Mandatory natural farming will starve India](#)

(The Times of India)

On 17 February 2022, Anil Ghanwat will launch a civil disobedience movement to demand the lifting of the genetically modified (GM) crop moratorium in India. He will also release a detailed Feed India Paper which provides the rationale for the movement. The Paper argues that only biotechnology can feed India and that natural farming will starve India. I outline below the main reasons why organic food is fine for those who want it, but a disaster if forced on the nation. What exactly is organic or natural farming? These are production methods of farming that abjure "standard" chemical fertilisers and pesticides but are allowed to use bio-fertilisers and bio-pesticides. These methods can be applied to any seed, including traditional, heirloom, hybrid high-yielding or even (surprisingly) to GM seeds.

New Research

[Responsible artificial intelligence in agriculture requires systemic understanding of risks and externalities](#)

(Nature)

Global agriculture is poised to benefit from the rapid advance and diffusion of artificial intelligence (AI) technologies. AI in agriculture could improve crop management and agricultural productivity through plant phenotyping, rapid diagnosis of plant disease, efficient application of agrochemicals and assistance for growers with location-relevant agronomic advice. However, the ramifications of machine learning (ML) models, expert systems and autonomous machines for farms, farmers and food security are poorly understood and under-appreciated. Here, we consider systemic risk factors of AI in agriculture. Namely, we review risks relating to interoperability, reliability and relevance of agricultural data, unintended socio-ecological consequences resulting from ML models optimized for yields, and safety and security concerns associated with deployment of ML platforms at scale. As a response, we suggest risk-mitigation measures, including inviting rural anthropologists and applied ecologists into the technology design process, applying frameworks for responsible and human-centred innovation, setting data cooperatives for improved data transparency and ownership rights, and initial deployment of agricultural AI in digital sandboxes.

[Government of Canada announces up to \\$182.7 million to partner organizations to help farmers lower emissions and improve resiliency to climate change](#)

(Yahoo)

Canadian farmers are key players in building a healthy environment and a more sustainable agriculture sector in Canada. Today, to support farmers in their efforts to tackle climate change, the Honourable Marie-Claude Bibeau, Minister of Agriculture and Agri-Food, along with Francis Drouin, Parliamentary Secretary to the Minister of Agriculture and Agri-Food and Member of Parliament for Glengarry–Prescott–Russell, announced federal funding of up to \$182.7 million for 12 recipient organizations to deliver the On-Farm Climate Action Fund across Canada.

[University of Minnesota building a precision agriculture research complex](#)

(DRG News)

The University of Minnesota is planning a \$220 million research complex near Austin, Minnesota, to study precision agriculture. The university says the goal is to put the state on the cutting edge of farm and food technology. Plans for the Future of Advanced Agricultural Research Minnesota (FAARM) center includes fields, research and innovation space, and workforce development efforts. "This will expand our vision and scope for the work we already do," says Brian Buhr, Dean of the College of

Food, Agricultural, and Natural Resources. Research at the complex will pursue scientific solutions to adapt and delve into artificial intelligence, robotics, and other technologies alongside a focus on “health intersections between people, animals, crops, plants, soil, water, and the environment.”

[New federal funding to enrich USask digital agriculture research](#)

(University of Saskatchewan)

Data-driven processes and decisions are increasingly important in the agriculture sector. Although large amounts of farm and plant data are being collected by growers and scientists, the ability to create actionable information from these large datasets remains a key challenge. To fill this gap in the rapidly expanding digital agriculture sector, the USask team, led by Dr. Lingling Jin (PhD), assistant professor of computer science in the College of Arts and Science, and GIFS research leaders, Dr. Ian Stavness (PhD), Research Chair in Computational Agriculture, and Dr. Leon Kochian (PhD), Canada Excellence Research Chair in Global Food Security, will use the new funds to build the Green SkEye platform. This innovative infrastructure combines state-of-the-art computing and plant imaging hardware to analyze plant populations in greenhouses at an unprecedented level of detail. “At USask our researchers are working hard with the future in mind, and that means developing technologies that can contribute to greater food security around the globe,” said Vice-President Research at USask, Baljit Singh. “We appreciate this investment, which allows us to help us attract and retain world-class expertise.”
