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India is earning ₹2,10,093 crore from agriculture export

STATESMAN NEWS SERVICE
NEW DELHI, 17 DECEMBER

India is exporting Rs 68645 crore more than what it is importing in the agriculture sector, said Union Agriculture Minister Narendra Singh Tomar here on Friday.

Giving details of the export and import figure, the Minister said India exported agriculture products worth Rs 2,10,093 crore as against the import of Rs 1,41,448 crore during 2020-21 crores.

He said India is mainly importing vegetable oils, pulses, cashew nuts, fresh fruits and spices, but the government is trying to cut its import bill by making India self-reliant in pulses under the National Food Security Mission. Similarly, the Government is also trying to reduce its import bill



on edible oil by augment availability of edible oil through National Mission on Edible Oils-Oil Palm (NMEO-OP), he said while replying to a question in the Rajya Sabha.

Besides, under Rashtriya Krishi Vikas Yojna (RKVY), funds are being provided to States for improving the production of pulses. NFSM-Oilseeds programme is being implemented to improve pro-

duction of essential edible oils in the country. National Mission on Edible Oils-Oil Palm (NMEO-OP) has been launched with the aim to augment the availability of edible oil in the country by harnessing area expansion, increasing crude palm oil production to reduce the import burden.

On the spice front also, the Government has taken steps

to address high import of turmeric by organizing cultivation of varieties with high curcumin content in clusters in suitable areas. Further to meet the growing demand of raw cashew nuts in the country, Centre is trying to increase the cultivation area with high yielding varieties, high density planting, and by rejuvenation of senile orchards, the Minister said.

Centre trains more than 9.8 lakh farmers for organic farming: The Union Ministry for Agriculture and Farmer's Welfare has trained more than 9.8 lakh farmers for Organic Farming and to provide end to end support to organic farmers in the country during the past three years, claimed Union Agriculture Minister Narendra Singh Tomar here on Friday.

Centre has been promoting organic farming through dedicated schemes of Paramparagat Krishi Vikas Yojana (PMKVY) and Mission Organic Value Chain Development in North East Region (MOVCDNER), the Minister said while replying to a question in Rajya Sabha here on Friday. He said both the schemes provide end to end support to organic farmers from organic production to certification and marketing including post harvest management support like processing, packaging, and storage.

While the PKVY was implemented in all the States across the country to promote organic farming in cluster mode, the MOVCDNER is implemented in all the North Eastern States for promotion of certified organic production.

NITI Aayog, AIM & UNCDF announce first Agritech cohort

STATESMAN NEWS SERVICE
NEW DELHI, 21 DECEMBER

NITI Aayog, Atal Innovation Mission (AIM) and the United Nations Capital Development Fund (UNCDF) today rolled out their first AgriTech challenge cohort for its ambitious innovative Agri-tech programme that aims to help smallholder farmers across Asia and Africa to address their challenges in the aftermath of the pandemic.

NITI Aayog, AIM in partnership with UNCDF, Bill & Melinda Gates Foundation and Rabo Foundation launched a South-South innovation platform to enable a cross-border exchange of innovations, insights and investments in July this year 2021. Through this platform, cross-border collaborations

among emerging markets across India, Indonesia, Malawi, Malaysia, Kenya, Uganda, Zambia would be enabled.

For its first platform AgriTech Challenge Cohort and Agri-Fintech innovators, applications were invited to facilitate their expansion to the international markets through two tracks - Main track and AIM track.

A total of 10 high-growth innovators have been selected in the Main track, out of a total of 100 applications. The key objective of the main track applications was 'Expansion Support solution pilot in the chosen international market.'

Speaking during the virtual announcement of the cohort, NITI Aayog VC Rajiv Kumar, said "In India, more than 50%

of the population is dependent on agriculture and it contributes to about 15-18% of the GDP. As agriculture is a sector that emotionally appeals to the masses, Indian agencies are prompted to undertake policy measures to stimulate the industry landscape. We at NITI Aayog are leaving no stone unturned to improve the agriculture sectoral landscape and we will continue till the milestones are achieved and beyond."

The Cohort represents a diverse range of solutions across the value chain of the smallholder farmer, including soil analysis, farm management & intelligence, dairy ecosystem, carbon credits, solar-based cold storage, digital marketplace, fintech, livestock insurance, among others.



Director, Inclusive Finance Practice Area, UNCDF Henri Dommet said "UNCDF has been working towards leaving no one behind in the digital era, particularly in the least developed countries. Our engagement in Asia and Africa is anchored on collaborative initiatives to improve the lives of the vulnerable and help achieve SDGs. The synergies and learning opportunity between the two regions is

immense, underscored by a thriving innovation ecosystem that is working to address many shared challenges. The South-South Platform is a co-created effort in this direction to enable the exchange of knowledge and solutions, with Agritech Challenge as the inaugural initiative. We are delighted to welcome the cohort and work with them in facilitating their solution adoption to benefit the smallholder

farmers in Asia and Africa."

Over the coming weeks, the selected participants will receive support to enable their international expansion through direct industry linkages, target market and sector understanding, investor connects, insights to scale up across borders and the opportunity to receive a financial grant. In his address, Mission Director, Atal Innovation Mission, NITI Aayog, Chinan Vaishnav said, India's innovation ecosystem has matured rapidly over the last decade and the creativity and vigour of Indian entrepreneurs and researchers can play a critical role in solving some of the toughest societal challenges. The Agritech Challenge focuses on improving the financial health of smallholder farmers and will work towards help-

ing the participants build and test their solution in the new market, as part of UNCDF's work under the Global Centre for Financial Health, with subsequent support on scaling the solution as well."

The challenge is also engaging with AIM-incubated early-stage innovators under a dedicated AIM-track, to help build readiness for international expansion. An additional 15 promising AIM-incubated innovators have been selected across irrigation technology, fintech, online marketplace, smart farming, cold storage, among others. They will receive support to explore expansion through masterclasses by global experts and opportunities to engage with industry mentors.

Consolata Acayo, Assistant Commissioner, Agricul-

tural Information and Communications, Ministry of Agriculture, Animal Industry and Fisheries, Government of Uganda said the Ministry is keen on the value of this South-South cooperation especially enabling innovations from India and what they can add to the Ugandan agritech ecosystem as they strive to address persistent challenges in the agriculture sector.

Moreover, there were over 130 innovators who applied to join the challenge with solutions addressing key productivity, climate risk and supply chain gaps for smallholder farmers. A select set of solutions were presented to a global jury comprising industry, banking and ecosystem leaders from Asia and Africa, to form the cohort of the Agritech Challenge.

Pesticides: Panel backs govt proposal

AMID INDUSTRY concerns, a parliamentary panel on Tuesday said the proposed penalty and jail term for violation of the Pesticide Management Bill, 2020, are "essential" to check the sale of fake and spurious pesticides.

Andhra govt signs MoU to boost sustainable farming in state

Hyderabad: The Andhra Pradesh government has signed an MoU with the Food and Agriculture Organization and the Indian Council of Agriculture Research on a project for strengthening the capacities of the state in supporting farmers to adopt sustainable cultivation.

Agriculture Minister Kurasala Kannababu said the government is keen on convincing farmers to grow alternative crops instead of paddy. For this, Rythu Bharosa Kendras — one-stop procurement centres for agricultural items in the state — will be revamped.

ENS

Record foodgrains output likely in 2022

Farm laws repeal and price rise are bitter pills for agriculture sector

NEW DELHI: India achieved record foodgrains production this year but the withdrawal of three agri-reform laws and spike in cooking oil prices cast a shadow on the country's resilient agriculture sector that is on course for better harvest in 2022 despite pandemic blues.

While soaring production of foodgrains that also helped the government provide free additional rations for COVID-hit poor families for many months together came as a relief, the passing year will be remembered for the long drawn farmers' protest at Delhi borders against the three laws and subsequent repeal of the legislations.

The Indian agriculture sector, which was among the few segments that remained robust amid the pandemic gales, is expected to register a growth rate of 3.5 per cent in the current financial year ending March 2022. Foodgrains production hit an all-time high in the 2020-21 crop year that ended in June at 308.65 million tonnes. The production could reach 310 million tonnes in the current crop year.



The government procured huge quantities of wheat, rice, pulses, cotton and oilseeds at the Minimum Support Price (MSP)

for the benefit of farmers. During 2020-21, paddy and wheat procurement reached a record 894.18 lakh tonnes and 433.44 lakh tonnes, respectively. Procurement of pulses touched 21.91 lakh tonnes, coarse grains 11.87 lakh tonnes and oilseeds 11 lakh tonnes, as per official data.

As production and procure-

ment continued smoothly, the farmers' agitation, which started in November 2020, finally ended this month after Parliament passed a Bill on the first day of Winter Session on November 29, to repeal the three contentious farm laws. The Supreme Court had stayed implementation of these laws in January itself. Farmers unions are claiming victory after they forced the Centre to accede to their demands. In contrast, economists and government officials see it as a setback in ushering in reforms in the agricultural marketing system.

The jury is still out on the merit of these three laws.

"We were expecting one-fifth of the country's farmers to benefit from the implementation of the three farm reforms. We completely lost that opportunity. However, I feel the setback is only temporary," Niti Aayog

Member Ramesh Chand said. Had farm laws been implemented, the Niti Aayog member said, "it would have helped achieve the target of doubling farmers income to a large extent. We had put nearly 20 per cent increase in income on implementation of the farm laws".

The three laws, passed by Parliament in September 2020, were aimed at giving marketing freedom to farmers beyond notified mandis. A framework for contract farming and regulating supply of essential commodities only under extraordinary circumstances were the other main objectives.

Chand said, the overall performance of the agricultural sector has been robust this year. "The agri-growth rate is intact. This year, we expect 3.5 per cent growth rate in agriculture by the end of March 2022, same as last year's level," he said. PTI

NITI Aayog bats for organic farming

HANS NEWS SERVICE
MULUGU

A team of NITI Aayog officials led by its Vice-Chairman Dr Rajiv Kumar has on Wednesday asserted that the Central government would extend all its support for the comprehensive development of Jayashankar-Bhupalpally and Mulugu districts.

Conducting a review meeting at Mulugu, Dr Rajiv Kumar emphasized the need for taking up organic farming. The onus is on administration to sensitise the farmers about the importance of organic farmers.

"Mulugu district has a vast scope for development as it has several historical temples and laidback destinations, especially Ramappa temple which was recently recognized as a World Her-



NITI Aayog Vice-Chairman Dr Rajiv Kumar conducting a review meeting in Mulugu on Wednesday

itage Site by UNESCO. In addition to this, the district also has Medaram, the abode of Sammakka Saralamma tribal deities, and River Godavari," he added.

NITI Aayog Special Secretary Dr K

Rajeshwara Rao said they had come to analyse and take steps to improve the standards of education, health and agriculture in Mulugu and Jayashankar-Bhupalpally districts in

the next two decades. Both these backward districts will be adopted by the Centre, he said, referring to the plans to develop the region. Further, he added that the NITI Aayog is ready to assist both the districts if the administration comes up with viable projects.

Stating that Mulugu is a predominantly tribal district, Collector S Krishna Aditya said that they were making use of the available resources and funds for the improvement of health, education, agriculture and water resources, skill development and infrastructure sectors.

Later the team visited Ramappa temple at Palampet village. Bhupalpally district collector Bhavish Mishra, Bhadrachalam ITDA project officer Gautham P and Mulugu additional collector Ila Tripathi were among others present.

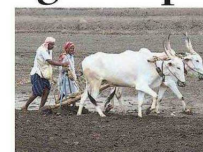
Deepak Fert arm to invest Rs 2,200 cr on chemical unit in Odisha

Smartchem Technologies Ltd, a wholly-owned subsidiary of Deepak Fertilisers and Petrochemicals Corp Ltd, will invest 22 bln rupees in its upcoming ammonium nitrate plant in Gopalpur, Odisha, the company said in a release. The upcoming plant will have capacity of 377 ktpa and is expected to be completed by August 2024. With this plant, the company aims to capture domestic demand for ammonium nitrate and tap into export opportunities as well, it said. The plant is located at Tata Steel Industrial Park, which is near major mining hubs and the Gopalpur port.

As farmers shift to oilseeds, wheat acreage drops 2%

OUR BUREAU
New Delhi, December 10
Wheat sowing in the current rabi season dropped 2.4 per cent to 248.67 lakh hectares (lh) as of December 10 from the year-ago period, mainly due to farmers shifting to other crops in Haryana, Gujarat and Bihar. Other wheat-growing States recorded either the same area as last year or higher.

"The shifting to mustard from wheat is very clear this year because of high prices of the oilseed crop since last year. Government should take a cue from this trend on its crop diversification plan as price is the main driver to motivate farmers," said AK Singhal, a



trader in Hapur, who deals with grains and pulses. The wheat acreage in Uttar Pradesh, too, may marginally fall from last year's 99 lh at the end of the season, he said. Currently, it has reached 73.55 lh, marginally higher from year-ago period. Over 82 per cent of the normal

sowing area of 625.14 lh under all winter-sown crops has been covered and it is up by two per cent from the year-ago period. Total area under all crops recorded at 513.25 lh (503.63 lh).

Mustard output
The acreage of mustard/rapeseed has jumped by 23.8 per cent at 81.66 lh from 55.97 lh. For 2021-22, the government had set a target of 75.8 lh with a production of 12.24 million tonnes (mt), which will be, in all likelihood, breached. Mustard output was 10.1 mt in 2020-21. Total area under oilseeds have jumped to 88.5 lh (72.13 lh), mainly because of higher area under mustard.

SJM urges Agri Ministry to ban use of glyphosate

PNS ■ NEW DELHI

The Rashtriya Swyamsevaka Sangh (RSS) affiliate Swadeshi Jagran Manch (SJM) on Saturday urged the Ministry of Agriculture to ban the use of Glyphosate, which had been declared carcinogenic by the International Agency for Research on Cancer (IARC). A petition with 201609 signatures of people favouring a complete ban on the weedicide has been submitted to Union Minister for Agriculture and Farmers Welfare Narendra Singh Tomar on Saturday.

"Glyphosate is blatantly being used for illegally grown Herbicide Tolerant (HT) cotton (HT soya was also reported from Gujarat) and this has been going on for years with the full knowledge of the Genetic Engineering Appraisal Committee and State Governments, but it continues unabated and with open defiance of the law of the land," the SJM said in its petition.

"In fact, the government order in July 2020 stating that 'No person shall use Glyphosate except through Pest Control

Operators (PCOs)' may end up with actually legalizing and endorsing the use of Glyphosate by promoting a proliferation of PCOs. The said order is meaningless and will be impossible to implement based on experience with inability to control other illegal practices like illegal HT crops with which glyphosate is presently being used. Given the meaningless order and incapability to implement, it will result in increased damage to consumer health, farmer interests, farm workers livelihoods and ecology," the SJM said in its petition.

"There are more than one lakh cases pending against Monsanto/Bayer company for damages by the users of its Glyphosate based herbicide after they (the litigants) developed ten different types of cancer including non Hodgkins Lymphoma (NHL)," it said.

The delegation told the minister that although this weedicide is allowed to be used in tea gardens, Kerala state which is a major tea growing state has asked for a ban on Glyphosate, West Bengal, again a tea growing state has restrict-

ed Glyphosate use to only six tea growing districts and several other states including Punjab, Maharashtra, Andhra Pradesh and Telangana have moved towards banning of Glyphosate due to their concerns for consumers, farmers and environment.

Glyphosate is reportedly being used both for weed control as well as to desiccate crops prior to harvesting and there is strong opposition to it on both these grounds as glyphosate and its adjuvants are absorbed by the plant and consumed by humans, with serious health consequences. Glyphosate is a known carcinogen and endocrine disruptor and is linked with several serious illnesses.

Glyphosate contaminates soil and water, results in the destruction of useful plant species which are the food of the poor who eat uncultivated greens (so called weeds) growing in, or alongside the main crop, and reduces the population of beneficial insects which are vital for securing long term crop yields as pollinators and pest controllers.

'Agri exports double income of farmers'

CITY BUREAU
Hyderabad

Telangana State Planning Board vice-chairman B Vinod Kumar stressed the need for continuing the Agriculture Export Policy (AEP) as agricultural exports are expected to play a pivotal role in doubling farmers' income.

He said the scheme for implementation of Agriculture Export Policy has received budget allocation of Rs 100 crore under the union Budget 2021-22, which should give a fillip to implementation of the policy.

Addressing a workshop on 'Export Potential of Agricultural Commodities in India with reference to Telangana' here, Vinod Kumar said the recent trends in the international trade scenario and related shifts in India's foreign trade policy have had far-reaching consequences for India's general agricultural sector, especially agricultural exports.

He asserted that quality production, post-harvest management, and supply chain linkages between industry and farms deserve special attention.

Anti-dumping duties doubled during peak Covid, WTO report shows

But most nations went easy with new trade curbs

AMITI SEN

New Delhi, December 11

Countries, led by the US, India and China, doubled their use of anti-dumping measures in the pandemic period (July 2020-June 2021) against cheap inflow of certain goods, such as steel and chemicals, but most nations demonstrated restraint in the imposition of new trade restrictive measures related to the pandemic, numbers collated by a recent WTO report show.

Fall in demand

Experts say that the sharp increase in anti-dumping measures is mainly due to a fall in demand in the exporting country caused by the pandemic leading to unutilised capacities and lowering of export prices.

The WTO allows imposition of anti-dumping measures in the form of additional duties on items that are imported at prices lower than in the home country of the exporter. A country imposing anti-dumping duties has to also establish that the dumping of the item is causing injury to the domestic producers in the importing country.



In the July 2020-June 2021 period, the US imposed 59 anti-dumping measures, up from 29 a year ago, India imposed 32 up from 9 and China imposed 28 compared to 10 measures the year before, according to the WTO Director-General's annual overview report on trade-related developments.

A total of 213 anti-dumping measures were imposed by all members in the July 2020-June 2021 period compared to 118 in the year-ago period. In 2020, a total of 433 remedial actions were initiated, which included 355 anti-dumping actions, and they were mostly in sectors including organic chemicals, iron and steel and plastics.

"The sharp increase in anti-dumping measures is surely emanating from the pan-

demia as it has created excess capacities in several sectors with falling demand. When there are huge unutilised capacities and demand takes a hit, prices go down and manufacturers tend to export their products at low prices," explained FIEO Director General Ajay Sahai. Hence, it is easier to establish that dumping has taken place and take measures against it.

However, members have shown restraint in their use of new trade restrictive measures related to the pandemic during the review period and are supporting the recovery by continuing to roll back restrictions adopted earlier in the crisis, the report said.

As of mid-October 2021, 205 Covid-19-related trade facilitating measures with an estimated trade coverage of \$112 billion are still in force compared to 56 trade-restrictive measures with an estimated trade coverage of \$92 billion, it added.

Many economic support programmes for Covid relief have been phased out or adjusted to take into account new circumstances and to prepare for the post-pandemic recovery.

Insect hits 9L acres of chilli crop in south India; experts point to use of pesticide

SREENIVAS JANYALA
HYDERABAD, DECEMBER 11

A NEW species of insect is damaging the chilli crop in several states in south India. Thrips Parvispinus, an invasive insect from Indonesia first seen in 2015, has spread rapidly, affecting chilli crop in nearly 9 lakh acres in Telangana and Andhra Pradesh.

Scientists at Prof Jayashankar Telangana State Agricultural University said the infestation is also seen in Tamil Nadu and Karnataka. "All the places where chilli is grown is infested by this species...The infestation is so severe that we found 20-25 insects on each bud or flower," said Dr R Jagadeeshwar, Director of Research, at the university. Officials in both states said they were awaiting final recommendations from scientists of Institute of Horticulture Research, Bengaluru, who visited both states recently.

A team of scientists from Prof Jayashankar University and IIHR, Bengaluru, also visited several fields and gave suggestions to farmers to tackle the infestation.

"Due to excessive use of pesticides, the insect has developed resistance...It has spread to vegetable crops, including drumstick trees also, and has been seen on cotton plants at some places...The quality and yield of chilli crop will be affected this season," Dr Jagadeeshwar said.

Farmers in Warangal and Khammam in Telangana, and in Guntur, Prakasam and Anantapur

in Andhra Pradesh have uprooted the infested crop and sown alternative crops such as Bengal gram, Horticulture Department officials in both the states said.

Dr T V K Singh, former Dean of Agriculture at Prof Jayashankar University, said the infestation flared up from the first week of November. "Initially, it was mistaken for mites and farmers used wrong pesticides which led to the flare-up. This new species of Thrips arrived in papaya from Indonesia in 2015. No systematic research has been done on it so far. It needs a lot of study to gain control over the infestation," he said.

Telangana Deputy Director of Horticulture K Venugopal, who accompanied the team of scientists, said Thrips infestation was extensive in all the areas they visited. "We also observed mite infestation, and viral diseases. Farmers were using fungicides and pesticides in excessive quantities without realising that it was helping the insect," he said.

In Andhra Pradesh, Additional Director (Horticulture) M Venkateshwarlu said chilli crop in Guntur, Prakasam, Krishna and Kurnool district were hit by Thrips. "The problem was severe in Guntur but we launched a drive as early as November's first week, asking farmers not to use too much pesticide and recommended use of neem oil and neem cakes. Very little is known about this new invasive species and it requires research," he said.

FULL REPORT ON
www.indianexpress.com

Agri-based units' hiring up by 8% in Jan-Nov

SUBRAMANI RA MANCOMBU

Chennai, December 27

Agriculture-based industries increased their hiring, particularly through online resources, in the first 11 months of this year, with agritech, hybrid seeds, fertilizers and the crop protection segments witnessing robust recruitment growth.

According to employment website Monster.com, e-recruitment by the industries increased by an average of 8.2 per cent during January-November this year with recruitment being highest in April when it increased 20 per cent.

The increase in hiring by the agriculture sector is in line with a study made by the National Employability Through Apprenticeship Program (NETAP) that said 55 per cent of the employers in the sector planned to make recruitments in agriculture and agrichemical units in the second half of this year.

Sekhar Garisa, Monster.com CEO, told *BusinessLine* that the

agro-based industries witnessed ups and downs this year but observed an overall positive trend.

After a lull during August-October, when e-recruitment increased by a meagre one per cent, it increased by five per cent in November. Last November, hiring had dropped two per cent.

Garisa said apart from agritech, seeds, fertilizers and crop protection segments, services aligned to warehouses and cold storages saw an uptick in hiring. "So did jobs related to agricultural and processed food products exports. External demand is also driving exports in this sector," he said.

Maharashtra hires more

The agriculture sector will likely witness major growth with growers moving towards organic farming and digital transformation, the Monster.com CEO said, responding to a question if the trend would sustain.

Nearly 60,000 agro-based in-



Sekhar Garisa, CEO, Monster.com

dustries - large, medium and small - had recruited personnel this year with over 10,000 firms in Maharashtra hiring new hands, followed by Tamil Nadu (over 6,000) and West Bengal (over 5,000).

Most agro-based industries looked for workers, while other recruitments were for purchase, research hands and scientists, farm managers, agriculture and environmental engineers, marketing executives, analysts, breeders, including animals, biochemists, and business development executives and agronomists. Garisa said the situation in the agriculture sector

was improving after it faced a major shortage of labour during the pre-Covid period. "Workers had shifted to non-farm sectors in search of a better livelihood before the pandemic set in," he said.

However, the Covid pandemic had altered the scenario drastically due to uncertainty in jobs and fixed source of income in sectors such as construction.

"Workers began trickling back to agriculture. Many initiatives have also been taken by the Indian Government to strengthen agri-technology," the Monster.com CEO said.

In addition, the release of new plant varieties by research institutions resulted in reducing efforts needed to cultivate crops.

Earlier, NETAP said 1.77 lakh apprenticeships were created in the first half this year, while robust hiring was expected in the second half with the market recovering from the economic concerns emanating from the Covid pandemic.

Dhanuka to use drones to spray fertilisers, pesticides

Will invest ₹200 crore in two phases at its Dahej facility

KV KURMANATH
Hyderabad, December 28

Dhanuka group, a crop protection and pharmaceutical manufacturer, plans to roll out drone-based services for farmers.

The firm expects to deploy at least 30-40 pilots by next kharif season to launch drone-based services, including spray of pesticides, fertilisers and analyse soil health.

The services will be launched through Dhanuka Agri Services, a new business window opened by the company.

"We have got the license to offer the service. We have got two drones as of now. We are expecting to have 30-40 pilots operating drones across the country by next

kharif season," RG Agarwal, Chairman, Dhanuka Group, said.

"We are planning to offer the service as a package and make it affordable for farmers. Drones can help assess the health of soil and map the presence of pests. This will enable the farmers to reduce the losses by addressing the challenges well in time," he said.

Expansion plans

He said Dhanuka Agritech was expanding its operations by investing ₹100 crore. "The first phase at the Dahej (Gujarat) plant will be ready by June 2022. After that we will invest another ₹100 crore in the second phase," he said.

The company is in talks with a few Japanese players to explore opportunities for manufacturing products for them. "Some international players are looking at altern-



The firm expects to deploy at least 30-40 pilots by next kharif season to launch drone-based services ISTOCKPHOTO

atives to China as their manufacturing base. There is a good scope for companies in India to tap the opportunity," he said.

The firm has technical tie-ups with two American,

three European and six Japanese firms.

Exports

The company will use the Dahej plant as a launchpad for its plans to tap the ex-

port opportunity. "We need to register our products (in foreign markets) before we seek to export them. As and when we get the approvals, we will start exports," he said.

Low pesticide usage

He said the country's average use of pesticides stood at just 340 grams a hectare against 13 kg a hectare in China. This, he said, was resulting in low productivity, putting the country way behind China.

"When you compare with China, the productivity and per hectare incomes are very low despite the fact the two countries shared similar climatic conditions," he said.

The Dhanuka group has signed a memorandum of understanding with Prof. Jayashankar Telangana State Agricultural University to provide technical know-how and support farmers.

India-China trade deficit at \$30 bn during April-Sept



NEW DELHI: Trade deficit between India and China stood at \$30.07 billion during April-September 2021, Parliament was informed on Wednesday.

India's exports to China during the April-September 2021 period was \$12.26 billion, while imports were aggregated at \$42.33 billion, according to data given by Minister of State for Commerce and Industry Anupriya Patel in a written reply to the Lok Sabha.

She said the imports from China have increased from \$60.41 billion in 2014-15 to \$65.21 billion in 2020-21, exhibiting an increase of 7.94 per cent over six years. However, the imports were static between 2019-20 and 2020-21, she said.

"The government has made sustained efforts to achieve a more balanced trade with China, including bilateral engagements to address the non-tariff barriers on Indian exports to China," Patel said.

Schemes like the production-linked incentive scheme will help promote domestic manufacturing capacities and attract investment and reduce dependency on imports from China, the minister said.

Major items of import from China include telecom instruments, computer hardware, fertiliser, electronic components, chemicals and drug intermediates.

PTI

SHARP RISE IN GLOBAL PRICES Govt to tweak subsidy policy to promote local production of P&K fertiliser

PRESS TRUST OF INDIA
New Delhi, December 25

THE GOVERNMENT ON Saturday decided to make changes to the existing nutrient-based subsidy (NBS) policy to promote domestic production of phosphatic and potassic (P&K) fertilisers amid a sharp rise in global prices.

A decision in this regard was taken in a high-level meeting chaired by Union minister for chemicals and fertilisers Mansukh Mandaviya.

In the meeting, "...it was decided to continue support to the domestic industry for production of P&K fertilisers and propose additional provisions in the present NBS Policy to promote domestic production of P&K fertilisers in the country," an official statement said.

This decision will help in utilising the unutilised domestic production capacity of these fertilisers and promote 'Atmanirbhar Bharat', it added.

Under the NBS policy, being



Minister for chemicals and fertilisers
Mansukh Mandaviya

implemented since April 2010, a fixed amount of subsidy which is decided on an annual basis is provided on P&K fertilisers depending on their nutrient content.

Under this policy, maximum retail price (MRP) of P&K fertilisers is fixed by the fertiliser companies as per the market dynamics at reasonable levels which is monitored by the government. However, in the current 2020-21 fiscal, the government notified NBS

rates for P&K fertilisers twice in order to keep domestic prices of these soil nutrients reasonable to farmers and ensure adequate supply.

Keeping in account high global prices, the Centre has also provided a special one-time package for additional subsidy over above the NBS rates for period from October 2021 till March 2022 for diammonium phosphate (DAP) and three most consumed NPK fertilisers.

The government has also included potash derived from molasses under the NBS scheme with effect from October, 2021.

The country imports P&K fertilisers to meet its domestic demand. Global prices of these soil nutrients have increased continuously since early this year. For instance, global prices of DAP had increased to \$730 per tonne in September from \$565 per tonne in May. They have further risen now from that level.

Dhanuka Group, agri varsity sign pact to support farmers

HANS BUSINESS
HYDERABAD

DHANUKA Group has signed a Memorandum of Understanding (MoU) with Prof Jayashankar Telangana State Agricultural University (PJTSAU), Hyderabad. Under this, they will work jointly to provide scientific and technical knowledge to the farmers at large.

The partnership will pave way for research activities in the field of crop protection chemicals and will encourage farmers to use modern agriculture technologies which will play a vital role in increasing crop production and also increase the income of farmers. Endowed with vast resources and a vibrant farming community, Telangana has the right potential to emerge as a major hub for the export of farm produce. Farmers in Telangana can take the help of drones, robotics and artificial intelligence (AI) and use the best quality seeds, fertilisers and pesticides to increase the agri-yield, improve crop quality and increase their income. "Quality inputs and use of modern technology, like drones for

Dhanuka Group has been at the forefront in promoting the latest technology to help farmers increase yield



crop protection, are key for increasing the agricultural export from Telangana and making the State role model for others. We have international collaboration with the world's leading agro-chemical companies from US, Australia, Japan and Europe which helps them to introduce the latest technology in Indian farmlands", said RG Agrawal, Chairman, Dhanuka Group. These initiatives will ultimately help in achieving the vision of our Prime Minister of doubling the farmers' income and transforming India into a \$5 trillion economy of which \$1 trillion will be contributed by the agriculture sector, he added.

Govt directs ICAR to include natural farming in UG/PG courses; KVKs to set up demo plots

43.38 lakh farmers have adopted natural farming in 38.09 lakh ha

PRABHUDATTA MISHRA

New Delhi, December 27

In a less than a week after Prime Minister Narendra Modi's appeal to farmers to shift from chemical-based farming, the Indian Council of Agricultural Research has decided to include 'natural farming' in the syllabus at both undergraduate and post-graduate levels following a government directive.

"Education division of ICAR shall develop a syllabus on natural farming in consultation with agricultural universities and experts for inclusion in UG/PG courses," ICAR's assistant director general SP Kimothi said in a letter to all directors of ICAR in-



stitutes and vice chancellors of agriculture universities.

The letter dated December 22 said that the issue (of natural farming) was also "emphasised by Hon'ble Prime Minister while addressing the nation during valedictory function of the Vibrant Gujarat Summit on December 16."

R&D and demonstration

Referring to a communication received from Cabinet Secretariat intimating the decision to promote natural farming, Kimothi mentioned "it has also been high-

lighted to develop the syllabus on Zero Budget Natural Farming and incorporate it in the text books at UG/PG level."

Research, demonstration and training on natural farming will be carried out by the concerned institutes and KVKs will earmark land for natural farming for demonstration, the letter said.

"At this landmark moment, India is well-positioned to provide the world a solution to the issues of food security in a better balance with the nature," Modi had said in virtual address at the National Conclave on Natural Farming held in Anand on December 16.

So far, 43.38 lakh farmers have adopted organic/natural farming in 38.09 lakh hectares, out of this as many as 4.09 lh are under Bhartiya Prakritik Krishi Padhati, a

sub-scheme on natural farming of main scheme Paramparagat Krishi Vikas Yojana. The Centre targets to raise 7.35 lh additional area under organic/natural farming in different schemes between 2022-23 and 2025-26.

Mixed reactions

"Every farmer, who is practicing it, has validated this method in his field scientifically. Agro-ecology is the only way to tackle the issues posed by climate change," said T Vijay Kumar, executive vice chairman of Rythu Sadhikara Samstha (Farmers' Empowerment Corporation) of Andhra Pradesh government. This kind of collaboration is good for both farmers and ICAR, Kumar said.

Former director general of ICAR Panjab Singh felt it would have been better had the move been accepted after proper trials.

Changes in biodiversity law may weaken regulation

THE proposed Biological Diversity (Amendment) Bill, 2021, now being referred to the Joint Parliamentary Committee for scrutiny, was tabled in the Lok Sabha without public consultation. The Biological Diversity Act (BDA), 2002, was prepared with caution and on the basis of a scientific spirit to protect and preserve the scarce biological diversity of India and the traditional knowledge associated with it. The Act was also in support of sustainable economic use of its components on the principle of fair and equitable sharing of the benefits. To ensure its implementation in letter and spirit, and prevent bio-piracy from foreign research institutes funded by multinational pharmaceutical companies, the National Biodiversity Authority, state biodiversity boards and biodiversity management committees at village levels were empowered to take decisions and impose fines.

Though the amendments to the BDA-2002 are well intentioned, they have weak regulations. While the Bill encourages the cultivation of medicinal plants on private land to reduce dependence on wild medicinal plants, poor monitoring and regulation over the supply chain may lead to an appropriation of wild plants associated with traditional knowledge of the local communities. The concern is real as the Bill proposes to exempt Ayush practitioners from seeking approval for the economic use of plants from biodiversity boards. The amendment pushes for the commercial use of biodiversity involving Ayush with



REAL CONCERN: It seems that the government intends to reduce its control on biodiversity — a state and community property resource. TRIBUNE PHOTO

relaxations in punishments, including decriminalisation of bio-piracy, simplification of the patent process, promotion of patents based on research, and attraction of foreign investment. This shows that the government intends to reduce its control on biodiversity — a state and community property resource.

In recent years, the demand for access to biodiversity or genetic resources and associated knowledge for economic use and development has increased, particularly among the Ayush, seed and research industries. They have sought relaxations of the benefit-sharing provisions to gain more patents. The expanding patent activities have implications for public health, food security, biodiversity, agriculture, indigenous knowledge and benefit-sharing. Traditional livelihoods of millions of local communities directly rely on the rich biodiver-

sity of plant genetic resources in India. The livelihoods, especially of indigenous people like forest-dependent communities, have been increasingly getting affected in recent years as the quest increases for the mining of traditional and genetic resources with the aid of changes in policies and regulations.

There are instances of misappropriation of traditional knowledge that have resulted in bio-piracy. The proposed amendment disempowers biodiversity management committees with respect to rights over genetic resources associated with their traditional knowledge. The provision for the Ayush sector to access the biodiversity and traditional knowledge without intimation and approval of the state biodiversity boards may pave the way for commercial use without benefit-sharing with the knowledge owners. The amendment undermines sustain-

able use of genetic resources and protection of indigenous knowledge through scientific documentation of knowledge through the India Biodiversity Register.

Already, the poor farmers and communities are made to pay for seeds and medicines that they themselves have evolved or created (the basis for modern seeds and medicines) without receiving royalties for their knowledge-sharing.

These provisions raise the critical question of the potential impact on indigenous people's livelihood and their knowledge protection where knowledge in the public domain is increasingly becoming private, thereby ushering in private rights over public goods. Biodiversity or genetic resources are increasingly being privatised. The structural alterations of property rights over common property resources have several implications, particularly for indigenous people's livelihoods. The traditional knowledge continues to be the basis of food and nutritional security for the indigenous people who have accumulated this knowledge through interaction with biodiversity for generations.

The Food and Agriculture Organisation states: "India has a long-standing knowledge and understanding of using medicinal plants in its codified medical systems, as well as through its highly diverse folk traditions. The knowledge of plant identification, methods of collection and processing, biological activities and uses was transmitted both orally and in written form by traditional medical cultures in India."

Ethnopharmacologist Elaine Elisabet-sky observes: "To transform a plant into a medicine, one has to know the correct species, its location, the proper time of collection, the solvent to use, the way to prepare it, and finally, posology (route of administration, dosage)."

The amendment may allow private interest to take precedence over public concern and the proliferation of exclusive rights could be a stumbling block for the provision of numerous national public goods, including healthcare, biodiversity conservation and environmental protection. Studies show that patents held by the public sector are much lower than the private sector, showing the domination of MNCs in commercialising biodiversity. It has led to a rise in the prices of essential and lifesaving drugs. Less than 2 per cent of our plants are studied for their phenolic constituents. More evidently, a lacuna in medicinal plant research is due to the unavailability of data on the chemical constituents of herbs available as drugs are camouflaged.

Though India has the advantage of a wealth of herbal plants, it lags in identifying medicinal plants for new drug discovery, which is associated with poor investment in R&D. Traditional knowledge is being exploited by the private sector. Relaxation of benefit-sharing will lead to overexploitation of biodiversity and undue use of traditional knowledge. Government policies need to serve society at large with the aim of protecting biodiversity and associated traditional knowledge against commercial exploitation by a few private entities.

India not signed up to COP26 agenda on sustainable agriculture



NEW DELHI: The Centre on Tuesday clarified that India has not signed up to a sustainable agriculture policy action agenda during the COP-26 Climate Summit in Glasgow.

The clarification was issued by the Union Agriculture Ministry following media reports that India had signed up for the agenda.

"It is clarified that such statements are baseless and factually incorrect. India has not signed up for the Sustainable Agriculture Policy Action Agenda during the COP-26 Climate Summit," the ministry said in a statement.

A National Mission for Sustainable Agriculture (NMSA) is one of the Missions within the National Action Plan on Climate Change (NAPCC) that is operational in the country to deal with the issue of climate change, it said.

The mission aims to evolve and implement strategies to make Indian agriculture more resilient to the changing climate, it added.

According to the ministry, NMSA was approved for three major components: rain-fed area development, on-farm water management as well as soil health management. PTI

Centre to impose duty on imported caustic soda

PRESS TRUST OF INDIA

New Delhi, December 24

The Union Commerce Ministry's investigation arm, Directorate General of Trade Remedies (DGTR), has recommended imposition of anti-dumping duty on caustic soda, used in diverse industrial sectors, for five years from Japan, Iran, Qatar and Oman, to guard domestic players from cheap imports.

The directorate has recommended the duty after concluding in its probe that the product has been exported at dumped prices into India, which impacted the domestic industry.

'Necessary' move

"The authority considers it necessary to recommend imposition of definitive anti-dumping duty... for a period of five years on all imports of the



Recommended anti-dumping duty ranges between \$8.32 to 8.61 per dry tonne

goods ... from Japan, Iran, Oman and Qatar from the date of notification to be issued in this regard by the Central government," the directorate has said in a notification.

The directorate had conducted the probe following a complaint from Alkali Manu-

facturers Association of India (AMAI), which requested for one.

Recommended duty

The recommended duty ranges between \$8.32-8.61 per dry tonne.

The Finance Ministry takes the final decision to impose duty.

"The authority is of the view that imposition of anti-dumping is required to offset dumping and injury," the notification said.

The imposition of anti-dumping duty is permissible under the World Trade Organization (WTO) regime.

The proposed anti-dumping duty is aimed at ensuring fair trading practices and creating a level-playing field for domestic producers vis-a-vis foreign producers and exporters.

Use of urea reduced, still yield is good

About 450 bags of unused urea worth ₹5.4 lakh returned

R. AVADHANI
HYDERABAD

Ibrahimpur village in Narayanarao pet mandal of Siddipet district, once in the news by attracting several VVIPs from across the country for its innovation on community activities, is in the news once again. This time it has reduced the use of urea to the best possible extent. As much as 450 bags of urea worth ₹5.4 lakh given for the village was unused and sent back.

Take the case of Kumbh Nagesh Reddy, a farmer from the village. He is having about 4.2 acres of land cultivating paddy. Farmers usually use higher quantity of urea to get bumper harvest with a staunch feeling that additional urea will give strength to the crop for better yield. Nagesh Reddy was no exception. He was accustomed to using as much as nine bags (405 kilograms) of urea in his field every season for paddy cultivation.

However, his perspective has changed for the better. In the present season, he



Farmers working on a field at Ibrahimpur village in Narayanarao pet mandal in Siddipet district. ■ MOHD ARIF

used only half of what he used to. The urea consumption was reduced to five bags (225 kilograms) as against the previous nine bags. He used urea in three phases - first basal dose of 15 kilograms in the first week after rains, followed by another 15 kilograms at tillering stage and third dose of last 15 kilograms in the panicle stage per acre.

With this, the urea he saved was worth ₹4,800 as per open market rate of ₹1,200 per bag while farmers

are getting each bag of urea at a subsidized price of ₹280.

"Fertilizer plays an important role in agriculture. The plant requires major nutrients, NPK, for growth. Chief source of artificial nitrogen fertilizer is urea. According to reports, NPK consumption in India is 8:4:2 whereas the standard was 4:2:1 ratio and the result is one and the same. Paddy growers depend on urea resulting in adverse impact on soil fertility - the organic carbon essential for normal

growth of plant is getting reduced and salinity in soil increasing - leading to saline soil. The average yield per acre stood at 25 quintals," T. Nagarajuna, agriculture extension officer (AEO), Narayanarao pet told *The Hindu* adding that not following crop rotation was one of the main reasons for soil degradation.

The village farmers used to apply 1,250 bags of urea for 600 acres and this season they used only 800 bags and saved 450 bags of urea. This is worth ₹5.4 lakh.

The farmers in the village have also come forward to cultivate green manure. In more than 360 acres green manure was sown and incorporated in soil after flowering stage. "One acre of green manure crop adds 10 tonnes of bio-mass to soil. One tone of green manure contain 7.5 kg of nitrogen, two kilograms of phosphorus and five kilograms of potash as this results in increase in organic carbon and reduce the salinity in soil," said Mr. Nagarajuna.

THE COMPASS

Prospects may be turning around for India's specialty chemicals

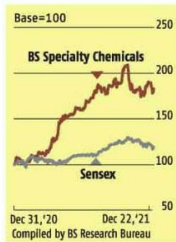
Q2FY22 was benign due to cost pressures, leading to lower margins

DEVANGSHU DATTA

India's specialty chemicals segment may have a new opportunity in the wake of Covid-19. Consumers across the globe are diversifying away from China (which holds close to 36 per cent global market share) and moreover China has cracked down on many segments in a drive to cut pollution.

India has quite a few companies well-placed to pick up some market share in the circumstances and there could be acceleration in export growth, as well as stable local double-digit demand. The Indian specialty chemicals industry currently generates revenue of approximately \$32 billion and the favourable macro-factors mentioned above could help it grow 12 per cent compound annual growth rate, doubling in size by 2025.

It is a rather fragmented industry however, with low research and development (R&D) expenditure and only one company — UPL — registering \$1-billion-plus in revenue. The agrochemicals segment, dyes and



paints, and aromatics, etc, are all interesting segments, with double-digit domestic growth and strong exports.

India is the fourth largest agrochemicals market in the world, with production of \$9-billion-plus, and around 45 per cent of that is exported. India exports generic agrochemicals. Agrochemicals worth \$8 billion are scheduled to go off-patent between 2020 and 2025, enhancing export opportunities.

Despite the size of the local market, there's room for future growth. On a per hectare basis, consumption of agrochemicals is low, with the US, Japan, China, etc, (the three larger markets) consuming between 10x-20x as much. Indian crop yields suffer losses of between 15

per cent and 20 per cent to weeds, pests, diseases, and animals — these can be reduced via more agro-chemical penetration.

The Indian pesticide-herbicide consumption mix is also unusual. Pesticides have 55 per cent market share, whereas in the larger markets, herbicides hold dominant market share. If labour moves out of agriculture, making manual weeding expensive, herbicide consumption and market share should rise.

Dyes and pigments were targeted in the environmental crackdown mentioned above. As Chinese units shut down, prices increased and end-users looked for other sources. This is another area of opportunity. Ideally, the specialty chemicals segment in India should see some consolidation, coupled with more R&D expenditure, enabling movement up the value chain.

There's a large number of listed companies, including both multinational subsidiaries, as well as local outfits. The industry suffered margin pressures through the second quarter (Q2) of 2021-22

(FY22). For a sample of 48 companies of various sizes, gross margins dropped to 45 per cent, from 47 per cent a year ago, and 48 per cent in the first quarter of FY22.

Operating expenditure rose to 20.4 per cent of revenue, from 19.9 per cent year-on-year and 20.2 per cent quarter-on-quarter. Raw material prices are expected to ease as China is expected to ease production curbs after the Winter Olympics (February 2022), while fuel prices have already started easing. This should lead to better gross margins and lower operating expense by the fourth quarter of FY22.

After Q2 results, Bloomberg's consensus earnings estimates reduced for nine large companies (of 13), for five mid-sized companies (of nine) and for six small companies (of eight).

Nocil, Rossari Biotech, Fine Organics, Jubilant Ingrevia, Deepak Nitrite, and Sharda Cropchem were among the few that saw higher consensus estimates. Rossari Biotech, which listed in July 2020, has been an outperformer through the past 18 months.

New cooperative policy soon: Shah

FE BUREAU
Pune, December 19

UNION HOME MINISTER Amit Shah, who is also minister of cooperation, on Sunday, announced that the Centre will soon unveil a new comprehensive cooperative policy to widen the reach of cooperatives at the grassroot level and strengthen the cooperative sector.

He also said that the government has decided to amend the Multi State Cooperative Societies Act 2002 to establish an effective regulatory mechanism for multi-state cooperative societies and remove the loopholes in the existing act.

Addressing the annual convocation ceremony at the Vaikunth Mehta National Institute of Cooperative Management (VAMNICOM) in Pune, he said that the government shall soon computerise the Primary Agriculture Societies (PAC) and link these with the District Central Cooperative Banks that in turn will be linked with State Cooperative Banks and the National Bank for Agriculture and Rural Development (NABARD) to establish a seamless and transparent financial system

for cooperative banks. Currently there are at least 95,000 PACs in the country out of which 65,000 are active, he said. If all the PACs work in a transparent manner, they will directly benefit farmers and the economy shall get a boost, he said.

Shah said there are several government schemes in 23 different departments for various sectors like fisheries, micro irrigation, which will all be brought under the common umbrella of the Cooperation Department. At present, there is a lot of talk about organic farming but there is no proper system for validation because of which farmers do not get the right prices for their produce, he said. The minister said that the government is working to establish a laboratory in the country that will audit land and certify organic products so that farmers get more prices. Amul and others are working on it. This will encourage organic farming, he said. Cooperatives like IFFCO, Amul, Lijjat Papad and KRIBHCO have achieved a milestone in areas like milk and fertilisers, he said, adding that cooperatives have played a stellar role in the development of the nation.

Drones in agricultural farms get wings

Life science firm demonstrates use of drones in agriculture operations

SPECIAL CORRESPONDENT
HYDERABAD

Life science firm Bayer on Tuesday conducted a field demonstration on use of drones in agricultural operations at its multi-crop breeding centre in Chandipa, near Hyderabad.

First such by the firm, it came on the back of Bayer securing approvals to conduct research and development and agriculture spraying operations to make the drone technology available for smallholders.

Stating this the firm, in a release, said, drones can help support more targeted applications of insect, weed and disease-control products. The move will ensure correct dosage and also limit the risk of accidental expo-



A drone in action at the multi-crop breeding centre of Bayer near Hyderabad on Tuesday. ■ ARRANGEMENT

sure to chemicals. Besides, drones also offer real-time agronomic advisory to farmers, enhancing farm productivity and fostering sustainability, it said.

CEO and managing director of Bayer CropScience D.

Narain said, "We are proud of the results of our drone trial in Hyderabad. It showcases the potential of the future of farming. Drone applications are operating in other small farmer countries in Asia and have the poten-

tial to deliver significant value to smallholders in India."

Bayer said it has partnered with drone start-up General Aeronautics and conducted several in-house and external R&D trials with universities and central research institutions to generate data to make drone-based services available to farmers. Growers may be able to explore the technology's capabilities in aiding paddy, corn, sugarcane, wheat, vegetables, fruits and plantation crops and harvests in the future, the company said. Union Minister of Agriculture Narendra Singh Tomar said Bayer's project on use of drones in agriculture comes amid India's giant strides in technology and digitalisation.

Agtech, foodtech investments doubled to \$2.1 b in FY21: Report

OUR BUREAU

Bengaluru, December 17

Indian agtech and food tech sectors saw investments almost doubling to \$2.1 billion in the 2020-21 fiscal, a report by Omnivore and AgFunder said.

In 2019-20, these sectors attracted \$1.1 billion worth investments, the India AgriFood Startup Investment Report said. Overall number of deals rose to 189 in 2020-21 compared with 133.

The AgriFood Startup Investment Report is an annual assessment of the latest funding trends in these sectors in the country, brought out by AgFunder, one of the most active global venture capital firms, and Omnivore, the most active VC in the country.

For the first time in the Indian agtech arena, the upstream deals at 98 surpassed the downstream



deals of 91 during the fiscal. In the upstream category, start-ups develop technologies for farmers and the agri value chain, while the downstream start-ups are consumer facing entities such as eGrocery, restaurant market places and premium branded foods.

In the farmtech category that includes both upstream and farm-to-consumer e-grocery, start-ups raised \$527 million in some 119 deals. The comparative

figure for the previous fiscal stood at \$431 million across 74 deals.

The agribusiness marketplaces raised \$86 million in 2020-21, up from \$30 million.

Midstream tech

Further, midstream technologies were the most active category among upstream sectors, with start-ups raising \$176 million across 29 deals.

"The India AgriFood Startup Investment Report has recorded the dynamics of this critical ecosystem since 2013. Particularly notable in this year's report, and a milestone for the industry, is the increase in investment in technologies operating closer to the farm," said Louisa Burwood-Taylor, Head of Media and Research, AgFunder.

Agriculture lacks private investment, says Tomar

PRESS TRUST OF INDIA
Nagpur, December 24

UNION AGRICULTURE MINISTER Narendra Singh Tomar on Friday said the agriculture sector has received the least private investment in the country.

Speaking at a function here, he also said the government was not dejected even though the agriculture reform laws had to be repealed.

Tomar was speaking at the inauguration of agri industry exhibition 'Agrovision' here. Union minister Nitin Gadkari, who is the chief patron of the initiative, was also present.

"We brought agriculture amendment laws. But some people did not like these laws which were a big reform brought about 70 years after Independence under Prime Minister Narendra Modi's leadership," Tomar said.

"But the government is not disappointed, we moved a step back and we will move forward again because farmers are India's backbone," he added.

Lab to land, PM's farm slogan

Urges farmers to shift focus from chemical lab to natural farming

PTI
ANAND

Urging farmers to turn to organic or natural farming, Prime Minister Narendra Modi on Thursday said there is a need to take agriculture out of the chemical laboratory and connect it with the nature's lab.

Modi, in his virtual address at the National Conclave on Natural Farming held at Anand, also expressed concern over the issue of stubble burning, saying the practice would actually harm the productivity of the agricultural land.

He said time has now come to "correct the mistakes" that have become part of farming.

"It is a fact that chemicals and fertilisers have played a crucial role in the green revolution. But it is also imperative to work on their alternatives. It is the right time to take big steps before the issues related to farming become severe. In Gujarati, it is said that prevention is always better than cure," Modi said in virtual address.

He stressed the need to find alternatives of chemical fertilisers and pesticides saying the high cost of import shoots up the cost of farming and in turn increases the prices of farm produce for the common man. Time has come to correct the mistakes that have



Prime Minister Narendra Modi addressing the National Conclave on Natural Farming, in New Delhi. — Photo: ANI

now become part of farming, such as burning of farm residue and use of chemical fertilisers, he said, adding, "Experts say that burning farm residue would actually reduce the productivity of the land. As we know, bricks are made after heating the clay. Despite knowing that, it has become a tradition in our country to burn the stubble."

Air pollution due to stubble burning, especially in northern parts of India, has become a major cause of concern as farmers burn several tons of crop waste from their paddy fields after harvesting.

Modi added that there is another misconception among the farmers, which is higher yield is not possible without chemical fertilisers.

"We need to take agriculture out of the chemical lab and connect it with the nature's lab. And natural farming is also science-based. Experts had opined that cows can play an important role in organic farming as their dung and urine can be used as both fertiliser as well as pesticide. This will reduce the cost of farming," Modi said, adding that natural farming would prove more beneficial to small and marginal farmers.

During the address, he urged the Indian Council of Agricultural Research (ICAR) and other such institutions as well as agricultural universities to adopt the concept of 'Lab to Land' and take their research on natural farming on the ground to help farmers

India suspends kiwi imports from Iran on pests issue

PRABHUDATTA MISHRA

New Delhi, December 13

India has effectively banned import of kiwi fruits from Iran starting December 8 by deciding not to entertain phytosanitary certificates, (mandatory in global trade of certain fruits), issued by the Persian Gulf country following consistent interception of consignments with pests.

The Union Agriculture Ministry in a letter to the National Plant Protection Organisation (NPPO) of Iran said the detection of *Aspidiotus nerii* pest (quarantine) and *Aonidiella aurantii* (non-quarantine) continues since April 2019 and increased in October 2021.

Considering the findings of non-conformance to the Indian requirement, the ministry said: "the exports of fresh kiwi from Iran to India



is suspended with immediate effect till the revision of pest risk analysis (PRA)."

Indian imports

India's kiwi fruit import from Iran is substantial in terms of volume as it is cheaper than Italy. Import of the sub-tropical fruit from Iran was 19,899 tonnes worth \$13 million during 2020-21. The kiwi import from the Persian Gulf nation was 6,896 tonnes worth \$ 4.25 million during April-October of the current fiscal.

On the other hand, 10,991 tonnes of kiwi worth \$18.48

million were imported from Chile last fiscal and 13,646 tonnes worth \$26.05 million in the first half of this fiscal.

"There may be an overall drop in imports of kiwi this year as prices in Italy and Greece are higher compared to Iran. Depending on the domestic demand, importers will take a call on sourcing from other markets," said Anil Dwivedi, general secretary of Delhi-based Fresh Fruit Importers Association.

He said importers had bought kiwis at high rates – up to ₹400/kg – due to the consumers' preference to these exotic fruits following second wave of Covid. But, the prices have declined to ₹100-110/kg. Overall imports of kiwis were 49,483 tonnes worth \$53 million during 2020-21 and 33,976 tonnes worth \$49 million in 2021-22 (April-October).

40% of Indian agricultural soil is zinc deficient, says IZA official

Most of the deficiency in western, central, southern soils

OUR BUREAU

Bengaluru, December 15

The use of zinc is on the rise in Indian agriculture, but more needs to be done to achieve food security and nutritional security of the growing population, said Andrew Green, Executive Director of International Zinc Association (IZA).

"According to estimates, about 40 per cent of the agricultural soils or about 60 million hectares in India are zinc deficient. Most of this zinc deficiency is found in the soils of Western India, mainly Rajasthan, Central and South India.



Andrew Green, ED, International Zinc Association
Increasing awareness among the farmers about using the micronutrient in fertiliser formulations is crucial to boost not only food production and productivity but also to increase farm incomes," Green said.

Increasing awareness

In a bid to promote use of zinc, IZA along with Hindustan Zinc recently announced a project to study the effect of zinc application on crop productivity, soil

health and popularising the zinc fertilisation among the farmers in collaboration with the Mahara Pratap University (MPU) in Udaipur. As part of the project, MPU would engage and mentor around 100 farmers to incorporate zinc to increase productivity, starting with wheat and maize in the next cropping season.

Soumitra Das, Director (South Asia), Zinc Nutrient Initiative, IZA, said the best way to address the issue of zinc deficiency is to increase the awareness and educate the farmers. "It is estimated that about 50 per cent of the cereal-cultivated soils globally are deficient in plant-available zinc, leading to reductions in crop production and nutritional quality. Therefore, we have planned a strategic multi-step approach consisting of a proposed study on

new and innovative products/technologies," Das said. Citing fertiliser industry estimates, Das said India's zinc consumption in agriculture is over 2 lakh tonnes per annum. However, IZA believes that the consumption ranges between 2.5-3 lakh tonnes and has the potential to increase to around 7 lakh tonnes if all the micronutrient requirement of the crops are met, Green said.

Zinc sulphate

Zinc sulphate is widely consumed world over in the farm sector. Among the overall zinc fertiliser consumed in the country, zinc sulphate has 75-80 per cent share, Das said. Also, the use of zinc sulphate monohydrate is picking up because of the handling property and is considered value for money by the farmers.

प्रधानमंत्री 16 को गुजरात में देश के पहले प्राकृतिक खेती सम्मेलन का समापन करेंगे चार लाख हेक्टेयर भूमि पर प्राकृतिक खेती को मंजूरी

बदलाव

नई दिल्ली | विशेष संवाददाता
कृषि मंत्रालय ने आठ राज्यों में चार लाख हेक्टेयर भूमि पर प्राकृतिक खेती करने की मंजूरी दी है। इसकी पृष्ठभूमि में गुजरात के आनंद में मंगलवार से देश का पहला तीन दिवसीय प्राकृतिक खेती सम्मेलन शुरू होने जा रहा है। इसका राष्ट्रीय प्रसारण किया जाएगा, जिससे सभी किसान प्राकृतिक खेती के गुरु सीख सकेंगे। प्रधानमंत्री नरेंद्र मोदी 16 दिसंबर को वर्चुअल तरीके से इसके समापन समारोह को संबोधित करेंगे। कृषि सचिव संजय अग्रवाल

प्राकृतिक खेती में लागत कम

गुजरात के मुख्य सचिव पंकज कुमार ने बताया कि प्राकृतिक खेती में लागत काफी कम हो जाती है और पैदावार बढ़ जाती है। इससे मानव स्वास्थ्य को कोई हानि नहीं होती है। वर्तमान में रासायनिक उर्वरकों से जो खेती होती है उससे मानव स्वास्थ्य को नुकसान होता है। उन्होंने बताया कि गुजरात में 20 हजार प्राकृतिक खेती प्रशिक्षकों ने करीब दो लाख किसानों को प्रशिक्षण दिया है।

धरती मां की सेवा के लिए आगे आएं : मोदी

अहमदाबाद। प्रधानमंत्री नरेंद्र मोदी ने सोमवार को गुजरात के किसानों से धरती माता की सेवा के लिए प्राकृतिक खेती तकनीक अपनाने की अपील की। उन्होंने यह बात गुजरात के कडवा पाटीदार समुदाय की देवी मां उमिया के मंदिर के शिलान्यास समारोह के मौके पर एक वीडियो संदेश में कही। उन्होंने कहा, कम समय में अधिक उपज की इच्छा ने किसानों को उर्वरकों और रसायनों का उपयोग करने के लिए मजबूर किया है, जिससे मिट्टी की गुणवत्ता में गिरावट आई है।

ने सोमवार को पत्रकार वार्ता में कहा कि गुजरात में 14 से 16 दिसंबर तक कृषि एवं खाद्य प्रसंस्करण पर राष्ट्रीय सम्मेलन हो रहा है। प्राकृतिक खेती को बढ़ावा देने के तहत कृषि मंत्रालय ने आंध्र प्रदेश,

गुजरात, केरल, ओडिशा, झारखंड, हिमाचल प्रदेश और मध्य प्रदेश के चार लाख हेक्टेयर पर ऐसी खेती करने की स्वीकृति दी है। सिक्कम सहित कई राज्यों में किसान पहले से प्राकृतिक खेती

कर रहे हैं, जिनका ब्योरा इसमें शामिल नहीं है। इसमें आंध्र प्रदेश में एक लाख हेक्टेयर, गुजरात में 71 हजार हेक्टेयर, छत्तीसगढ़ में 85 हजार और ओडिशा में 24 हजार हेक्टेयर भूमि में खेती की जाएगी।

Pests attack chilli crop in Telangana, AP

The 'invasive thrips' infection may affect yield; red chilli prices up 30% in 3 weeks

KV KURMANATH
Hyderabad, December 9

Red chilli could turn out to be spicy hot this year as its production is likely to be affected with a new "invasive pest" (*Thrips parvispinus*) infesting the crop in a few districts in Telangana and Andhra Pradesh. The infection is affecting the plants at the flowering stage and stunting the growth of fruits.

Heavy rains in the growing areas have compounded the problem, according to traders. Farmers are worried that the crop's yield might take a hit due to the pest.

Over the past 2-3 weeks, chilli prices have increased by over 30 per cent across various markets in Telangana and Guntur.

On Thursday, the modal price (rates at which most trades take place) Teja variety red chilli was quoted at ₹14,800 a quintal against ₹11,000 three weeks ago. In Guntur, the popular 434 grade was quoted at ₹13,000-15,000 a

quintal. Some traders are even quoting in the range of ₹16,500 to ₹19,500 a quintal on witnessing the huge demand in domestic and international markets.

Andhra Pradesh (43.5 per cent) and Telangana (23.5 per cent) totally account for over 67 per cent of the country's chilli production, followed by Karnataka and Madhya Pradesh. During the 2020-21 season (July-June), red chilli production has been estimated at a record 19.88 lakh tonnes (lt) compared with 19.14 lt the previous year.

With reports of the pest spreading fast, scientists from the Prof. Jayashankar Telangana State Agricultural University (JTSAU) and Indian Institute of Horticultural Research visited some of the affected areas to study the virus attack. "The indiscriminate use of pesticides and a cocktail of pesticides is the reason. The pest has developed resistance to the pesticides, making the way for the new attack," R Jagadeeshwar, Director



Besides spraying neem oil, the farmers are being advised to consider planting sunflower crop next to the chilli fields to promote natural enemies of the pest

of Research at the Prof. Jayashankar Telangana State Agricultural University (JTSAU) said.

"In 2020, infection of flowers by thrips was noticed in Telangana and Andhra Pradesh in February, while this year (2021) its population flared up as early as October. Both adults and young ones feed on the ovaries of the flowers and make them unfit for fruiting leading to heavy flower drop and yield losses thereby," an official report, seen by *Business-Line* showed.

Besides spraying neem oil, the farmers should consider planting sunflower crop next to the chilli fields in order to promote

natural enemies of the pest and bring down pest population, it said.

Farmers worried

"Seeing the pest population in huge numbers and plants wilting, farmers have begun to pluck the plants and plough the fields," Rambabu, a farmer from Jonnaram village in Khammam district, said.

Farmers in Andhra Pradesh and Telangana grow the commercial crop on about 2.40 lakh hectares, producing over 12.5 lt of red chilli. The area has seen a slight increase this year as the farmers expected better prices, owing to the

demand in the domestic and international markets.

Adinarayana, a farmer who planted the crop on 18 acres, has not seen any flowering on his farm so far. "In a normal season, we would get 8-10 quintals in the first 'pick' in the first two weeks of January. Though the plants have grown 3-5 feet tall, there is no sign of flowering yet," he said.

AV Rama Rao, a chillies trader in Khammam, says that there is a huge demand in the domestic market. "New arrivals would have come in handy by now. But the pest attack is stated to be severe. The farmers did not bring the stocks from the cold storages until the price was increased by ₹1,000 a quintal. It is ruling at ₹16,500 now," he said.

If prices have not sky-rocketed, it is because farmers have stocks of the last season. Also, lower exports last year have helped in higher ending stocks this season.

According to the Spices Board, 6.01 lakh tonnes of chilli were exported last fiscal against 6.71 lakh tonnes the previous year. Farmers say that a clear picture will be available in early January.

Crystal Crop completes acquisition of 4 hybrid seeds from Bayer

Agro-chemical firm Crystal Crop Protection Ltd (CCPL) on Thursday said it has completed the acquisition of four hybrid seeds -- cotton, mustard, pearl millet and grain sorghum -- from global life sciences firm Bayer in India. The seed business acquired by CCPL represents a very small portion of Bayer's Indian and global business portfolio. The firms had agreed to close the transaction by December-end this year.

PM woos farmers, claims govt gave ₹76k-cr fertiliser subsidy

VIRENDRA SINGH RAWAT
Lucknow, 7 December

Prime Minister Narendra Modi on Tuesday reached out to farmers, claiming the Centre had insulated them from the sudden spurt in international fertiliser and urea prices by providing subsidies worth ₹76,000 crore.

Addressing a public meeting after inaugurating the ₹8,600-crore Gorakhpur fertiliser factory, Modi said soil nutrients NPK (Nitrogen, Phosphorous, Potassium) and urea accounted for central subsidies worth ₹43,000 crore and ₹33,000 crore, respectively this year.

"Since our government is pro-farmer, we decided not to pass on the impact of higher prices of fertilisers to farmers. While the global prices are ruling at ₹60-65 per kg, the prices for our farmers are 10-12 times cheaper," he said.

Sharpening his attack on the Opposition, he equated the red caps worn by Samajwadi Party workers with *laal batti* (red beacons) that suggest a hunger for power, sounding a "red alert" against them in the state which chooses its next government early next year. "Today, the entire UP knows very well that those wearing the red caps are concerned about the red beacon and not bothered about your pain and sorrows," he said, apparently referring to the beacon atop cars carrying VIPs.

Samajwadi Party chief



"TODAY, THE WHOLE OF UTTAR PRADESH KNOWS VERY WELL THAT THOSE WEARING THE RED CAPS ARE CONCERNED ABOUT THE RED BEACON AND NOT BOTHERED ABOUT YOUR PAIN AND SORROWS"

NARENDRA MODI, Prime Minister

Akhilesh Yadav hit back, saying the people wearing red caps are "red alerts" also for the BJP as they will oust it from power in the assembly polls.

"For the BJP, there is a red alert of inflation, of unemployment, of the bad plight of farmers and labourers, of Hathras and Lakhimpur Kheri (incidents) of the oppression of women and youths, of a destroyed education system, business and health, besides the red cap, which will oust the BJP from power," said former UP chief minister in his tweet.

At the inauguration event, the PM also recalled fertiliser shortages in the past and

slammed the previous state governments over delays in payment by sugar mills.

Modi said the Centre was working on a multi-pronged strategy to attain self-reliance in fertilisers and streamline supplies. This includes neem-coating urea to curb non-farm diversion, providing soil health cards to farmers for judicious use and augmenting domestic production. Currently, five plants are being revived by the Centre, of which the Gorakhpur unit, which was shut in 1990, has been restarted. These five plants are expected to increase the domestic capacity by 6 million tonnes.

Better change yourself, else there'll be changes, PM warns BJP MPs

Prime Minister Narendra Modi on Tuesday emphasised on the attendance of party MPs in Parliament, saying if they don't transform themselves, there could be changes with time, sources said.

The PM made the remarks at the BJP parliamentary party meeting at the Ambedkar International Centre, the sources told *PTI*.

Sharing the details of the meeting, which was for the first time held outside Parliament complex, Parliamentary Affairs Minister Pralhad Joshi said the PM told party MPs that all of them should organise sports competitions in their respective constituencies.

On the issue of attendance, the prime minister said party MPs should regularly attend Parliament proceedings and remarked that when children are pointed out an issue again and again, even they don't repeat it.

The prime minister told MPs to change themselves, otherwise change would happen with time, the sources said. **PTI**

Chilli growers in Tiruvallur district go in for pesticide-free cultivation

Tiruvallur Collector has launched 'red revolution' in eight blocks

SPECIAL CORRESPONDENT
CHENNAI

Nearly 350 acres of chilli cultivating lands in Tiruvallur district are turning pesticide-free this season.

The farmers are cultivating the US 341 variety of chillies through the Integrated Horticultural Development Scheme.

The variety is known for its colour, flavour and pungency and is expected to give double the yield of the usual Ananya variety that they grow, said District Collector Alby John Varghese, who launched the Red Revolution in eight blocks on Wednesday.

"The Horticulture Department provides the saplings at a subsidy. Farmers get 20,000 saplings per hectare at ₹20,000, which translates to ₹1 per sa-



Seeds of change: Tiruvallur Collector Alby John planting US 341 variety of chilli as part of 'red revolution' at Thottikalai village on Wednesday. ■SPECIAL ARRANGEMENT

pling. The crop duration is three months. They have tied up with Aachi Masala to buy the produce," he said.

About 2,216 acres of land was under vegetable cultivation in the district, of which chillies were grown on 706 acres of

land. However, most of it is sold as green chillies and due to this, farmers do not get good price since they have no other go but to sell according to the day's rate in the market. "If the chillies are dry, they have more shelf life and the farmers can sell them at

a better price," Mr. Varghese said.

The Nalla Keerai organisation is hand-holding the farmers since it was a new crop variety. Jagan, a member of the organisation, said they were controlling pests through three methods. One of them was inter-cropping by growing crops like Agathi, Aamanakku, Thuvurai, Karamani and Ulundhu that would divert the pests.

"We are also using a mix of punga and neem oil and use light traps. Last year, we had a trial in Tiruvallur. This year, it has been expanded to more districts including Sivaganga, Ramanaapuram and Tenkasi. The government had announced it and they are spending ₹2 crore for buying seeds for these districts," he added.

Crystal Crop Protection expects to be among top 10 players

VISHWANATH KULKARNI
Bengaluru, December 29

Crystal Crop Protection Ltd expects to be among the top ten seed companies in the country with the recent acquisition of seed brands from Bayer CropScience.

Crystal Crop acquired cotton, mustard, pearl millet and sorghum hybrid seed brands from Bayer for an undisclosed sum recently.

"The acquisition will place us among the top ten seed companies in the country," said Ankur Aggarwal, Managing Director, Crystal Crop Ltd. With this buyout, the seed business of Crystal Crop will expand from around ₹75 crore to about ₹300 crore.

The Bayer deal is the third such acquisition done by Crystal Crop in the seed sector. It had acquired Rohini Seeds in 2011 and Syngenta's Indian sorghum and pearl millet business in 2018.

In the millets segment, Crystal Crop will be among the top three players with the latest acquisition expanding its share to around 15 per cent of the es-



Ankur Aggarwal, MD,
Crystal Crop Protection Ltd

timated market of 16,000 tonnes of pearl millets, Aggarwal said.

In sorghum hybrids, Crystal Crop is the market leader, Aggarwal said, adding that the company continues to have a presence in the maize hybrids. "We continue to sell around 1,500 tonnes of maize seeds," he said.

Similarly, in mustard, Crystal Crop expects to be among the top 3-4 players selling hybrids. "Mustard is an exciting opportunity and some of the new hybrids are very promising. We are looking to expand this many folds from here, probably look-

ing at coming to the leadership position," Aggarwal said. Crystal Crop is working on 5-6 mustard hybrids, of which two are likely to be launched in the next year. In the hybrid mustard seed market of around 6,000 tonnes, Crystal Crop will expand its share to around 15 per cent.

The buyout of Bayer's Surpass brand has helped Crystal Crop strengthen its hybrid cotton seeds business and increase its market share from one per cent to five per cent of the estimated 18,800 tonnes. "Our cotton seed business will be sizeable. We would be among the five to seven companies with market of 1.5-2 million packets," he said.

Further, Aggarwal said the acquired brands would contribute to around 10 per cent of Crystal Crop's revenues from next financial year. Crystal Crop had clocked revenues of ₹2,050 crore during 2020-21, bulk of it coming from the crop protection business.

Strengthening R&D

As part of the deal, in addition

to the seed brands, the entire breeding programme, research and development facilities and about 45-member R&D team has also been transferred to Crystal.

"Our R&D strength would be close to 60-65 people in total in seed business, while we have another 30-35 people in crop protection business," Aggarwal said, adding that the company would continue to focus its R&D on the existing field crops and strengthen its position in these categories.

Meanwhile, in its dominant crop protection business, Crystal Crop is expanding its technical manufacturing capabilities to reduce its dependence on China. The company has invested around ₹100 crore in a seven-acre greenfield technic-

als manufacturing facility in Dahej for herbicides. "We expect to begin production in our Dahej facility from February 1, 2022," Aggarwal said.

Crystal Crop has two other facilities in Nagpur and near Sonipat in Haryana, where it manufactures insecticides and fungicides. The company is also investing around ₹100 crore in these two facilities, he said.

The company has a total of 76-odd crop protection products including 30 insecticides, 24 herbicides, 13 fungicides and nine bio-stimulants. Aggarwal said the company's crop protection business has been growing higher than the industry average and clocked a compounded annual growth rate of 15 per cent in the past 5 years.

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