

ACFI NEWSLETTER

FEBRUARY 2023

Green focus to benefit chemicals industries

Sai Prabhakar Yadavalli
bl. research bureau

The Budget has indicated that green, sustainable and circular economic development will be strategic pillars for the government. From fuel to mobility, farming to building equipment, green solutions will be leveraged for the benefit of environment and job creation.

From the chemicals industry perspective, an economic transition from fossil fuel to sustainable energy has translated to a new revenue opportunity in the past and may most likely continue to support the industry.

AREAS OF CONCERN

At the same time, there are some areas of concern in agro-chemical applications,

but the threat is not significant.

Chemicals' applications in the green transition will be widely similar to a fossil-based economy. Electrolytes in batteries, solar films used in panels, waste treatment in biogas and biomass, efficient catalysts replacing older chemicals and environment compliant refrigerants — chemicals are used in most green solutions. This should be beneficial for companies which have or are developing solutions in such space. Tatva Chintan for catalysts, Clean Science for environment compliant chemicals and Gujarat Fluorochemicals for green energy solutions are the companies to monitor. SRF, Atul and Navin Fluorine which are exploring possibilities should be in the next league of players entering



ALLURING ALCHEMY. An economic transition from fossil fuel to sustainable energy has translated to a new revenue opportunity

the space with a portion of the upcoming capacities earmarked for the same.

Customs duty for fluorospar, a raw material for fluorochemicals which is used in pharma, agro-chem and new age energy solutions, has also been reduced from 5 per cent to 2.5 per

cent supporting emerging solutions. The Make-in-India push by the government in the electronics segment spells opportunity for chemicals manufacturers supplying to semiconductor industries as well. On a broader basis, net-zero carbon emission by 2070 will involve

solutions engineered by chemical industries to cap the emissions from industrial processes.

GREEN FERTILISERS

Chemical industries source a significant portion of revenues from agri-chemical companies and the current Budget speech mentioned a balance use of chemical fertilisers and alternative fertilisers. The speech also mentioned facilitating one crore farmers to adopt natural farming. While this might appear negative to the agro-chemical sector, and hence chemicals sector, there is unlikely to be any significant near term impact. The extent of implementation by the government and uptake of alternative chemicals by farmers even over a longer time frame are circumspect at the current juncture.

Jammu & Kashmir to promote organic food

STATESMAN NEWS SERVICE
JAMMU, 8 FEBRUARY

The Jammu and Kashmir government has initiated a programme to support its farmers and promote sustainable agriculture in the Union Territory.

With a growing concern for health and an increasing demand for organic food, the government is investing in a project that will boost organic food production and increase economic returns for farmers in the UT. This is a part of the government's larger efforts to create a safer, cleaner and more sustainable environment for agriculture and food production in the region, said an official spokesman on Wednesday.

The government has earmarked a budget of Rs 84



crore to support the program over the next five years. This initiative is part of a larger effort to promote sustainable agriculture, commercial agriculture and healthy food production. The project envisages creation of over 12,600 jobs and 300 enterprises in the organic agri-sector.

The program includes a range of interventions to support organic farming such

as expanding organic cultivation in a cluster approach, producing and recycling bio-inputs, facilitating certification and marketing and providing training and capacity building for farmers. The project aims to create six to seven organic clusters per district, covering a total of 2000 hectare of land. Additionally, it aims to convert another 2000 hectare into organic

production, including niche crops and default organic areas.

The program will also provide training to 10,000 farmer families in organic farming and establish 200 commercial and 3000 low-cost vermicompost units and 100 Integrated Organic Farming System Units. Besides, two Bio-Input Production Units will also be set up to supply organic inputs for the production clusters. "The project will have a number of positive outcomes which will further fuel growth in organic production within J&K, including development of trained manpower and a package of practices suited to the region, dedicated bio-input production facilities, certification and branding facilities and an organic value market chain.",

said Atal Dulloo, Additional Chief Secretary (ACS), Agriculture Production Department.

"J&K has a number of remote areas where very little chemical use is being undertaken in Agriculture. Moreover, the farmers in these areas are usually marginal and economically weak. By promoting organic cultivation, the livelihood of these farmers will be secured and their returns significantly improved.", he added.

"Alternate Agriculture System for Sustainability" is one among the 29 projects, which were approved by the Jammu and Kashmir administration after being recommended by the UT Level Apex Committee for holistic development of Agriculture and allied sectors in UT of J&K.

Agriculture Credit (In ₹ lakh crore)



Source:
Economic Survey 2023



Agri Needs 'Re-orientation' to Combat Climate Change

TEAM ET

New Delhi | Pune: Indian agriculture needs "re-orientation" to combat adverse impacts of climate change, fragmented landholdings, sub-optimal farm mechanisation, low productivity, disguised unemployment and rising input costs, the Economic Survey 2023 said.

"We need to move to crops that have shorter growth periods so that we can take care of the challenges of climate change. Also need to have crops that are more suited in the context of changing weather conditions. This is an emerging challenge and we saw

that (a heat wave) happen in 2022 as well," Chandni Raina, adviser to the Department of Economic Affairs, said in a media interaction.

The survey suggested a greater focus on the development of the food processing sector with improved infrastructure, like cold storage and better logistics, to reduce wastage, improve value addition, ensure better farmers' returns, promote employment and increase export earnings. It made a strong case for increasing farm mechanisation as it helps increase productivity through timely and efficient use of other inputs and natural resources while at the same time reducing the cost of cultivation. According to the survey, the agriculture sector has grown at an average annual rate of 4.6% in the last six years.

Agri sector has grown at an average annual rate of 4.6% in the last six years. It grew 3% in FY22 vs 3.3% the year before

Modi Govt to build digital public infrastructure for agri sector

PIONEER NEWS SERVICE ■
NEW DELHI

The Narendra Modi Government at the Centre will build a digital public infrastructure for the agriculture sector which will work as an open-source digital public good that will support growth for agritech industry and startups.

The Government has also announced an 11 per cent hike in agriculture credit target to Rs 20 lakh crore for the next fiscal with focus on animal husbandry, dairy and fisheries.

Presenting the Union Budget 2023 in Parliament, the Finance Minister Nirmala Sitharaman said that a digital public infrastructure for the agriculture sector will enable inclusive farmer-centric solutions through relevant information services for crop planning and help improve access to farm input, credit, and insurance, help for crop estimation, market intelligence and support for the growth of agritech industry and startups.

Sitharaman said, "An agriculture accelerator fund will be set up to encourage agri-startups by young entrepreneurs in rural areas.

The fund will aim at bringing innovative and affordable solutions for challenges faced by farmers. It will also bring in modern technologies to transform agricultural practices and increase productivity and profitability." This comes after the



government highlighted that agritech startups in India assist farmers in improving farming techniques in the Economic Survey on January 31.

To further boost startups sprouting out of rural areas, Sitharaman also said the government will launch an agriculture accelerator fund for young entrepreneurs.

The Modi government further announced an 11 per cent hike in agriculture credit target to Rs 20 lakh crore for the next fiscal with focus on animal husbandry, dairy and fisheries, a move aimed at providing higher farm loans at a subsidised rates to the farming community.

Among other big ticket announcements for agriculture and allied sector, Sitharaman said the government will launch a new sub-scheme of Pradhan Mantri Matsya Sampada Yojana with an investment of Rs 6,000 crore to improve value chain efficiencies and expand the fishery market.

Customs duty on key inputs for domestic manufacturing of shrimp feed will also be reduced to promote export of marine products, she said.

For adoption of natural farming, the FM said the government will facilitate 1 crore farmers for this purpose and will also set up 10,000 Bio-

Input Resource Centres for creating a national-level distributed micro-fertilizer and pesticide manufacturing network.

Further, the government will incentivise state governments and Union Territories under the Pradhan Mantri Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth (PM-PRANAM) to promote alternative fertilizers and balanced use of chemical fertilizers.

That apart, the government will launch an Atmanirbhar Clean Plant Program to boost availability of disease-free, quality planting

material for high value horticultural crops with an outlay of Rs 2,200 crore, she said.

To encourage agri-startups by young entrepreneurs in rural areas, the FM said the government will set up an Agriculture Accelerator Fund (AAF).

A digital public infrastructure for agriculture will also be built to enable inclusive, farmer-centric solutions.

To make India a global hub for millets, also called "Shree Anna", the FM said, Hyderabad-based Indian Institute of Millet Research will be supported as the Centre of Excellence for sharing best practices, research and technologies at the international level.

India is the largest producer and second largest exporter of millets in the world. The country grows several types of millets such as jowar, ragi, bajra, kuttu, ramdana, kangni, kutki, kodo, cheena, and sama.

These have a number of health benefits, and have been an integral part of our food for centuries. I acknowledge with pride the huge service done by small farmers in contributing to the health of fellow citizens by growing these 'Shree Anna', she added.

Sitharaman said, "The agriculture credit target will be increased to Rs 20 lakh crore with focus on animal husbandry, dairy and fisheries."

'Mum on doubling farmers' income, legal guarantee of MSP'

Hopeless Budget, No Mention Of Debt Waiver, Say Farmers

Neel Kamal & Yudhvir Rana | TNS

Bathinda/Amritsar: The farmers of Punjab have termed the Budget as hopeless, with no mention of government failure to double their income by 2022, of legal guarantee of minimum support price or other pending demands made during their Delhi agitation. Another thing they hoped for and haven't got is farm debt waiver.

The farmers claim their income level to be close to 2016, when PM Narendra Modi promised to double their

income in six years, by the 75th anniversary of Independence. Farmer unionist Darshan Pal said: "The farmers had high hopes from the Budget, that it will fix the MSP by the C2-50% formula recommended by the Swaminathan Committee."

BKU (Ekta Dakaunda) general secretary Jagmohan Singh said: "For the last six years, farmers have been hearing the promise but their income hasn't doubled. This government's last Budget didn't even give us a debt waiver."

Punjab general secretary



A DAY'S HARD WORK: Farmers carry cauliflowers from their fields in a village near Amritsar, on the day of Union Budget 2023-24

of Border Area Sangharsh Committee, Rattan Singh Randhawa said, "We were expecting some announcement for border farmers, more subsidies in fertilizers, pesti-

Steady decline in allocation under flagship schemes: SKM

Bathinda: The Sanyukt Kisan Morcha (SKM) has termed the Budget as anti-farmer, saying total outlay for agriculture and allied sectors has come down from 3.84% in 2022-23 to 3.20% in 2023-24. Allocation for rural development has also been cut from 5.81% in 2022-23 to 5.29%, it added.

"While it is universally known that farming and farmers have been economically neglected by the BJP-led Union government, the SKM had expected that after the sustained and determined protest of the farmers at Delhi, the party in power would appreciate the importance of the farm sector and the need to secure income and future of the rural farming community, who form the bulk of India's population," it said in a statement

The Morcha claimed that the Budget is silent on the status of MSP on crops, according to recommendation of Swaminathan Commission while flagship schemes like PM Annadata Aay Sangrakshan Abhiyan have seen a steady decline in allocation. Price Support Scheme and Market Intervention Scheme has been reduced from Rs 1,500 crore in 2022 to Rs 10 lakh. PM Fasal Bima Yojana was supposed to protect farmers from crop losses due to natural calamities, but from allocation of Rs 15,500 crore last year, it is just Rs 13,625 crore this year. Even the MGNREGS and PM Kisan Samman Nidhi allocation has been cut to Rs 60,000 crore each. Similarly, fertilizer subsidy has been cut from Rs 2,25,000 crore in 2022 to Rs 1,75,000 crore in this Budget, it added.

des, and weedicides among others, but all that did not happen," he said.

State general secretary of Kisan Mazdur Sangarash Committee Sarwan Singh

Pandher said neither any specific announcement had been made to bring the farmers out

from the vicious wheat-paddy circle nor any announcement was made to implement the full recommendations of Swaminathan Commission.

However, Punjab BJP core committee member Rajinder Mohan Singh Chhina hailed the Budget as growth-oriented and people-friendly as every sector, including agriculture, health, education, and defence, apart from employees have been taken care of. Gunbir Singh, former chairman, CII, Punjab, said, "By taking an aggressive and ambitious approach to this year's fiscal paper, the finance minister assuaged the hopes of industry and the services, although the agrarian sector is feeling let down."

Organic farming gets renewed push

PM-PRANAM scheme announced to incentivise states and UTs to promote alternative fertilisers and balanced use of chemical fertilisers

AJITH ATHRADY
NEW DELHI, DHNS

Union Finance Minister Nirmala Sitharaman in Union Budget 2023-24 on Wednesday made a slew of announcements including new scheme PM-PRANAM for farmers and the agricultural sector particularly in promoting organic farming and reducing consumption of chemical fertilisers.

Announcing the new scheme-PM-PRANAM, she said the "PM programme for restoration, awareness, nourishment and amelioration of mother earth" will be launched to incentivise states and Union Territories to promote alternative fertilisers and balanced use of chemical fertilisers.

The minister also announced GOBARdhan (Galvanising Organic Bio-Agro Resources Dhan) scheme under which 500 new 'waste to wealth' plants will be established for promoting a circular economy. These will include 200 compressed biogas (CBG) plants, including 75 plants in urban areas, and 300 community or cluster based plants at a total investment of Rs 10,000 crore.

In due course, a 5% CBG mandate will be introduced for all organisations marketing natural and bio gas. For collection of bio-mass and distribution of bio-manure, appropriate fiscal support will be provided.

She also said over the next 3 years, the government will

facilitate 1 crore farmers to adopt natural farming under Bhartiya Prakratik Krishi Paddhati (BPKP). For this, 10,000 Bio-Input Resource Centres will be set up, creating a national-level distributed micro-fertiliser and pesticide manufacturing network, she said.

Bhartiya Prakratik Krishi Paddhati (BPKP) was launched in 2019-20 to promote natural farming and to assist farmers in adopting traditional indigenous practices. Under the BPKP, 4.09 lakh ha of land have been brought under natural farming in 8 states - Andhra Pradesh, Chhattisgarh, Kerala, Himachal Pradesh, Jharkhand, Odisha, Madhya Pradesh and Tamil Nadu.

According to Economic Survey 2022-23, India has 44.3 lakh organic farmers, the highest in the world, and about 59.1 lakh hectares area, was brought under organic farming by 2021-22.

Sikkim voluntarily adopted going organic, and the process of getting the total cultivable land of 58,168 hectares under organic farming commenced at ground level in 2010.



No plan to tax agri income, says govt

TRIBUNE NEWS SERVICE

NEW DELHI, FEBRUARY 13

The Ministry of Finance on Monday clarified in Parliament that there was no proposal under consideration to tax agricultural income.

Replying to a question in the Lok Sabha on whether the government intended to bring changes to Section 10(1) of the Income Tax

Act, 1961, to make agricultural income taxable in India, Minister of State for Finance Pankaj Chaudhary said, "There is no such proposal. As per Article 246 of the Constitution of India, tax on agricultural income comes under the State List."

To another query on whether any committee had been formed to study the issue, the minister said, "No such committee has been formed in the last five years."



ASSET QUALITY mainly Kisan credit cards also at risk from loan waiver calls as polls near: Analysts

El Nino Threat Raises Fears of Stress on Lenders' Agri Books

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Mumbai: Farm loan exposure of banks has started to come back to analyst focus, amid forecasts of a possible occurrence of El Nino that could hurt crop production and potential calls for farm loan waivers in the run-up to next year's elections.

While the climate effect could leave farmers with less money to repay their loans, any promise of loan waivers by political parties could be a sentiment dampener, as there would be uncertainties while governments evolve mechanisms to pay lenders back.

"El Nino could lead to stress in the agriculture portfolio of banks, mainly Kisan Credit Card (KCC) loans," said Anand Dama, an analyst with brokerage house Emkay Global. "We believe farm stress in the run-up to the general elections may lead to calls for farm-loan waivers and so pose a risk to asset quality for banks, mainly KCC-heavy banks like SBI and HDFC Bank," he said, adding that microfinance players, with higher portfolio share in rural areas, too will need to keep a

Drop in Harvest

India has seen **7 El Nino** episodes since '94

El Nino resulted in **14% lower rainfall** and **2-3% lower kharif** cereal production in 2015



The **weather phenomenon** is known to hurt farm output

For lenders, it could disrupt agri asset quality for **3-4 weeks**

Agri loan NPA for SBI rose to **15.9%** in FY20 from **11.6%** in FY19

Source: Emkay Global, RBI

Agri NPA for the banking sector stood at **8.6%** at the end of September 2022



close watch on asset quality.

While the economy grapples with high food inflation, potentially adverse climate conditions are posing a fresh threat to India's agriculture output. Heat stresses are building up again like last year, putting pressure on the production of rabi crops like wheat, oilseeds and pulses. On top of this, the growing possibility of an El Nino condition could spoil the monsoon season ahead, Emkay said in a report.

El Nino refers to the abnormal

warming of surface waters in the eastern tropical Pacific Ocean, often associated with droughts in India, resulting in low agricultural output mainly for rain-dependent areas. The US National Oceanic and Atmospheric Administration has predicted the possibility of El Nino conditions this year.

Since 1994, India has encountered seven instances of El Nino, hurting farm production and hence resulting in higher non-performing assets for banks in the related subse-

quent three-four quarters. The latest instance was in 2019, after which agricultural NPAs for the State Bank of India shot up, from 11.6% in the fiscal year 2019 to 15.9% in the fiscal year 2020.

At the end of September 2022, agriculture bad loans totalled 8.6% of the credit disbursed to this sector, Reserve Bank of India data showed.

El Nino resulted in 14% lower rainfall and a 2-3% lower kharif cereal production during 2015.

"It's a wait-and-watch situation, we are keeping a close watch on the performance of our agriculture portfolio but honestly the vagaries of nature is not in our hands so we will have to deal with it if El Nino happens," said the agriculture head of a PSU bank who did not wish to be named. "Though as bankers we really hope that governments would deter from announcing farm loan waivers as it leads to bad credit discipline."

The asset quality situation of banks has been on a steady mend. The sector's impaired-loan ratio declined to 4.5% in the first nine months of the financial year ending March 2023 from 6% in FY22.

MONEY MATTERS

India's fertiliser imports rose 3.9% to 19.04L ton in January

The country's fertiliser imports rose by 3.9 per cent to 19.04 lakh tonnes in January this year compared to the year-ago period, according to the Fertiliser Ministry data. The country imported 18.33 lakh tonnes of fertilisers during January 2022. According to the latest data, of the total imports of 19.04 lakh tonne, 10.65 lakh tonnes of urea, 5.62 lakh tonnes of Di-ammonium Phosphate (DAP), 1.14 lakh tonnes of Muriate of Potash (MoP) and 1.63 lakh tonnes of complexes were imported. In the same month of the previous year, the country imported 12.48 lakh tonnes of urea, 2.45 lakh tonnes of DAP and 3.40 lakh tonnes of MoP. The quantity of MoP was for both agriculture and industrial use. The domestic fertiliser production during January this year also rose to 39.14 lakh tonnes when compared with 32.16 lakh tonnes in the year-ago period, the data showed. In the international market, there has been a falling trend in fertiliser prices. Urea prices (freight on board) showed a decline of 44.26 per cent to USD 500 per tonne in January this year from USD 897 per tonne in the year-ago period.



Fearing aphid attack, farmers asked to monitor wheat crop constantly

TRIBUNE NEWS SERVICE

MUKTSAR, FEBRUARY 27

With mercury remaining above normal, the Agriculture Department has asked farmers to constantly observe the wheat crop as chances of aphid attack have increased.

The department has advised the farmers to divide their fields in four parts and do a survey of the crop. Gurpreet Singh, Chief Agriculture Officer, Muktsar, said, "If there are five aphids per wheat spikelet, then the farmers should spray pesticides as per recommendation. The wheat leaves turn yellow with aphid attack and require timely action."

He said the situation was fine, but the experts had warned of further rise in temperature in the coming days.

"The rise in temperature may also decrease the wheat



Agriculture experts inspect wheat fields in Muktsar. TRIBUNE PHOTO

PREVENTION TIPS

“If there are five aphids per wheat spikelet, then the farmers should spray pesticides as recommended. The wheat leaves turn yellow with aphid attack and require timely action. Gurpreet Singh, CHIEF AGRICULTURE OFFICER

yield. We have recommended light irrigation for the wheat crop at this stage. However, fields should not be irrigated in windy weather. Besides, the farmers should spray the recommended

dose of potassium nitrate on the crop only in the evening hours,” said the Chief Agriculture Officer. Meanwhile, the officials did a field survey and said there was no trace of yellow rust.

Robust Dec quarter margin a shot in the arm for PI Industries

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PI Industries Ltd shares have risen by 1% since the company announced its December quarter results (Q3FY23) on Tuesday after market hours.

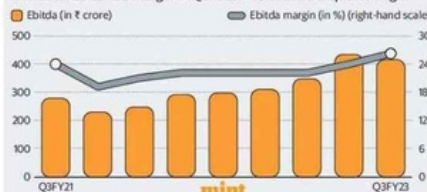
The agrochemicals company's earnings have been strong with Ebitda (earnings before interest, taxes, depreciation and amortization) margin rising by nearly 390 basis points (bps) year-on-year to 25.7%, coming in at a multi-quarter high. One basis point is 0.01%. A favourable product mix and operating leverage helped mar-

gin performance. With stable commodities prices and better operating efficiencies, the management expects to maintain the Ebitda margin at 23-24%.

Prashant Biyani, vice president, institutional equity, Elara Capital, said, "While we are expecting 24% margin band to be maintained, it could see a marginal improvement in H2FY24. But since many geographies are having surplus channel inventory globally, it has potential to impact PI Industries business in FY24, and we may revise the estimates at that time." The management expects to maintain revenue growth of over 20%. Here, the launch of

Upward trajectory

PI Industries Ebitda margin in Q3FY23 was at a multi-quarter high.



Note: Ebitda is earnings before interest, tax, depreciation, and amortization

Source: Company, Motilal Oswal Financial Services

SATISH KUMAR/MINT

new products should help. In the nine-month ended December, PI Industries has commercialized three new products in its

exports business and seven in domestic agri brands. In Q3, the company derived about 82% of its revenue from exports, which

saw a growth of 23% y-o-y. This was driven by 9% volume growth and 14% growth coming from price, currency and favourable product mix. The segment has seen an uptick in custom synthesis manufacturing (CSM) exports order book to about \$1.8 billion, which offers good visibility. Domestic revenues were subdued, growing by just about 2% due to adverse weather conditions and higher channel inventory. Overall revenue growth stood at 19% to ₹1,613 crore, missing analysts' expectations. However, better margin performance meant Ebitda growth was relatively higher at 40%.

Meanwhile, the company has

guided for capex of ₹500 crore and around ₹800 crore for FY23 and FY24, respectively. Even so, the company is evaluating a pharma acquisition, which analysts point could be an overhang on the stock in the near-term.

While the stock has gained since the results, year-to-date returns are broadly flatish. Valuations appear steep. The stock trades at nearly 36 times estimated earnings for FY24, according to Bloomberg data. "We are enthused by strong operating leverage and solid bottom-line growth in the near term while pharma acquisition remains a key overhang," said a report by Nuvama Research.

AP emerges as leader in agriculture-based industry

HANS NEWS SERVICE
VIJAYAWADA

ANDHRA Pradesh emerges as a leader in India's agribusiness industry with Rs 44,539 crore exports in 2021-22. Andhra Pradesh has firmly established itself as a major player in India's agribusiness industry, with a significant contribution in sectors such as aquaculture, horticulture, dairy, and poultry. Despite the disruptions caused by the pandemic, the state's agri and food processing exports for the year 2021-22 were valued at Rs 44,539 crores (US \$5.95 bn), showcasing a notable growth rate of 5.95 per cent, according to a statement from the state government on Saturday.

In addition to this, the state has achieved remarkable milestones in the agriculture and food processing sector. In the fiscal year 2021-22, the state ranked first in the production of several crops including oil palm, papaya, lime, coconut, cocoa, tomato, and chillies



- ▶ According to a release by the state govt, the state exported Rs 44,539 cr agriculture and food processing products in 2021-22
- ▶ In the fiscal year 2021-22, the state ranked first in the production of many crops, including oil palm, papaya, lime, coconut, cocoa, tomato, and chillies as well as in marine exports
- ▶ The state has made significant investments in infrastructure, with 10,788 YSR Rythu Bharosa Kendras functioning as one-stop-shops for agriculture and allied services

as well as in marine exports. Furthermore, the state has secured the top position in egg, fish and shrimp production, while taking the second position in paddy, maize, mango, sweet orange, cashew and turmeric.

To support this thriving sector, the state has made significant investments in infrastructure, with 10,788 YSR Rythu Bharosa Kendras func-

tioning as one-stop-shops for agriculture and allied services, 58 agricultural and horticultural research stations, 373 cold storage facilities, 124 warehouses, 247 ripening chambers, 4,587 pack houses, 5 food quality testing labs, and 400 market yards, said the statement.

The state government has taken an initiative to support cultivators with the YSR

Rhythu Bharosa flagship programme, which is designed to provide timely and high-quality inputs and services to increase crop productivity.

In addition, the government is actively developing Integrated production centres in all districts of the state in line with the AP Food Processing Policy 2025, which will provide farmers with common facilities. To further improve farmers'

income, the government has introduced new crops such as dragon fruit, Taiwan guava, Mauritius variety of pineapple, strawberry, cinnamon, nutmeg, Japanese mint and more. These initiatives demonstrate the government's commitment to promoting the growth of the agricultural sector and supporting the welfare of farmers in Andhra Pradesh, the release said.

Roll of dice for agrochem companies with El Niño dampener on monsoon

Adverse agronomical conditions, excess channel inventory weigh on domestic market volume offtake

RAM PRASAD SAHU
Mumbai, 26 February

Domestic-focused agricultural chemical (agrochem) companies could face near-term headwinds, given the worries on the El Niño effect on monsoons, higher inventory, and pressure on margins. Some of these were reflected in the October-December quarter (third quarter, or Q3) results of companies and may impact them in the current quarter (fourth quarter, or Q4) as well.

Nuvama Research pointed out that the sector witnessed mixed performance during the quarter as global agrochem and domestic fertiliser companies maintained growth momentum, while adverse agronomical conditions and excess channel inventory weighed on domestic market volume offtake. Dhanuka Agritech and Rallis, which generate a majority of revenue from the home-grown market, did not fare well in the quarter.

Dhanuka posted 10 per cent growth in the quarter — most gains came from price hikes. Gross margins for the pesticide manufacturer contracted 220 basis points (bps) due to high-cost inventory and inability to fully pass on inflated raw material costs.



The management, however, indicated that most of the high-cost inventory had been liquidated in Q3 of 2022-23; the rest would be exhausted in Q4 (January-March quarter).

The domestic crop care segment of Rallis logged 7 per cent growth in revenue. This was entirely pricing-led, with flat volumes, compared with the year-ago quarter. Its export business declined 7 per cent, led by lower volumes (due to higher inventory build-up at the customer end) and pressure on realisations (due to sluggish demand for key products). Its overall operating profit margins slid 227 bps to 8.5 per cent.

bearing in mind higher market spend and high-cost inventory. India's largest agrochemical company UPL (formerly United Phosphorus) registered 21 per cent growth in overall revenue, driven by the Latin American and North American markets which grew 28 per cent and 30 per cent, respectively. However, the agriculture solutions provider reported a flat domestic crop protection performance in the quarter. Strong traction in the seed business helped offset the muted India crop protection performance.

Michael Frank, chief executive officer of its global crop protection business, pointed out that

the subdued performance was due to unfavourable weather conditions and high channel inventory, galvanising lower volumes. He, however, said the impact was compensated by improved price realisation.

While the India portfolio is sizeable, with revenue crossing ₹1,075 crore in the quarter, the domestic market accounted for only about 8 per cent of its consolidated revenue. Agri-sciences company PI Industries, too, saw a strong quarter, with overall revenue growing 19 per cent. The export segment grew a robust 23 per cent over the year-ago period. While

MARGIN PRESSURES

	(₹ crore)	Net sales	YoY chg (%)	Ebitda margins (%)	YoY chg (bps*)	FY24 P/E (x)
UPL	13,679	21.1	22.0	12	9.0	
PI Industries	1,613	18.9	28.9	507	33.0	
Bayer CropScience	1,038	4.8	19.4	580	25.0	
Sumitomo Chemical India	754	6.6	17.7	-103	35.9	
Rallis India	630	0.4	8.8	-282	17.4	
Dhanuka Agritech	393	10.2	15.1	-218	12.2	

*Basis points; Q3FY23 figures in ₹ crore; P/E: Price-to-earnings ratio based on FY2023-24 estimates
Sources: Capitaline, Bloomberg
Compiled by R5 Research Bureau

volume growth accounted for 9 per cent of gains, the rest of the growth came from favourable pricing, currency benefits, and a better product mix.

Axis Securities expects the pressure on domestic companies to continue in Q4. While fertiliser demand was relatively stable in Q3, channel inventory for agricultural inputs remained elevated on lower infestation in earlier seasons. This led to slower growth for Indian agrochem companies in Q3. It may impact Q4 demand as well, subject to an easing of channel inventory pressure and outlook for monsoons, says the brokerage.

Analysts at the brokerage, led by Ankur Periwal, say that global agricultural input inventory, especially for generics, is relatively high and will normalise gradually on inventory drawdown. Declining global prices, however, will impel inventory losses in the near term, they add.

The key trigger for the sector will be the pace and progress of monsoons. There is an expectation that this year may well see El Niño make an appearance, giving rise to dry conditions and a deficit monsoon.

Say analysts at JM Financial, "The probability of El Niño occurring this year is increasing with every revised prediction. Currently, it stands at 60 per cent by August-October. If El Niño appears, it could lead to an extended and humid summer season in India." The phenomenon was last seen in 2018 and led to lower-than-normal rainfall.

Analysts of Nuvama Research, led by Abneesh Roy, say that the El Niño event has an inverse relationship with monsoons, which only means rainfall is usually downcast during such a year. Consequently, lower sowing and resultant lower crop yield will hurt farm income. After four good monsoons, the probability of a fifth normal monsoon appears diluted at this stage, they add.

Given the multiple headwinds for the domestic sector, investors should await progress on destocking and volume growth trends, as well as monsoon movement.

Nuvama Research is cautious about domestic agrochem players like Dhanuka Agritech and Rallis while being upbeat on global players like UPL.

Farmer unions demand separate Centre, state agriculture budgets

TRIBUNE NEWS SERVICE

CHANDIGARH, FEBRUARY 28

A meeting of five farmer organisations, including Bharti Kisan Union Rajewal, All India Kisan Federation, Kisan Sangharsh Committee, Punjab, Bharti Kisan Union, Mansa, and Azad Kisan Sangharash Committee was held here at Kisan Bhawan today.

The unions demanded separate Centre and state Budgets for agriculture for increasing the public investment in the sector, which they said was being slashed and implementation of Dr MS Swaminathan's recommendations.

Farmer organisations have decided to march towards

parliament on March 13 and submit a memorandum to the Prime Minister in this connection. The main demands of the unions are saving Punjab from acute water crisis as the underground water is depleting and much river water is flowing out of state due to wrong decisions of the Central Government regarding water dispute. Environment pollution as the chemical effluents of factories are going down into the earth untreated and continuous attack on the federal system of the state and curtailment of its powers.

Leaders said the Central Government backed out from the promises made to farmers when the three farm laws were repealed.

Roll of dice for agrochem companies with El Niño dampener on monsoon

Adverse agronomical conditions, excess channel inventory weigh on domestic market volume offtake

RAM PRASAD SAHU
Mumbai, 26 February

Domestic-focused agricultural chemical (agrochem) companies could face near-term headwinds, given the worries on the El Niño effect on monsoons, higher inventory, and pressure on margins. Some of these were reflected in the October-December quarter (third quarter, or Q3) results of companies and may impact them in the current quarter (fourth quarter, or Q4) as well.

Nuvama Research pointed out that the sector witnessed mixed performance during the quarter as global agrochem and domestic fertiliser companies maintained growth momentum, while adverse agronomical conditions and excess channel inventory weighed on domestic market volume offtake. Dhanuka Agritech and Rallis, which generate a majority of revenue from the home-grown market, did not fare well in the quarter.

Dhanuka posted 10 per cent growth in the quarter — most gains came from price hikes. Gross margins for the pesticide manufacturer contracted 220 basis points (bps) due to high-cost inventory and inability to fully pass on inflated raw material costs.



The management, however, indicated that most of the high-cost inventory had been liquidated in Q3 of 2022-23; the rest would be exhausted in Q4 (January-March quarter).

The domestic crop care segment of Rallis logged 7 per cent growth in revenue. This was entirely pricing-led, with flat volumes, compared with the year-ago quarter. Its export business declined 7 per cent, led by lower volumes (due to higher inventory build-up at the customer end) and pressure on realisations (due to sluggish demand for key products). Its overall operating profit margins slid 227 bps to 8.5 per cent.

bearing in mind higher market spend and high-cost inventory.

India's largest agrochemical company UPL (formerly United Phosphorus) registered 21 per cent growth in overall revenue, driven by the Latin American and North American markets which grew 28 per cent and 30 per cent, respectively. However, the agriculture solutions provider reported a flat domestic crop protection performance in the quarter. Strong traction in the seed business helped offset the muted India crop protection performance.

Michael Frank, chief executive officer of its global crop protection business, pointed out that

MARGIN PRESSURES

	(₹ crore)	Net sales	YoY chg (%)	Ebitda margins (%)	YoY chg (bps*)	FY24 P/E (x)
UPL	13,679	21.1	22.0	12	9.0	
PI Industries	1,613	18.9	28.9	507	33.0	
Bayer CropScience	1,038	4.8	19.4	580	25.0	
Sumitomo Chemical India	754	6.6	17.7	-103	35.9	
Rallis India	630	0.4	8.8	-282	17.4	
Dhanuka Agritech	393	10.2	15.1	-218	12.2	

*Basis points; Q3FY23 figures in ₹ crore; P/E: Price-to-earnings ratio based on FY2023-24 estimates
Sources: Capitaline, Bloomberg
Compiled by R5 Research Bureau

the subdued performance was due to unfavourable weather conditions and high channel inventory, galvanising lower volumes. He, however, said the impact was compensated by improved price realisation.

While the India portfolio is sizeable, with revenue crossing ₹1,075 crore in the quarter, the domestic market accounted for only about 8 per cent of its consolidated revenue.

Agri-sciences company PI Industries, too, saw a strong quarter, with overall revenue growing 19 per cent. The export segment grew a robust 23 per cent over the year-ago period. While

volume growth accounted for 9 per cent of gains, the rest of the growth came from favourable pricing, currency benefits, and a better product mix.

Axis Securities expects the pressure on domestic companies to continue in Q4. While fertiliser demand was relatively stable in Q3, channel inventory for agricultural inputs remained elevated on lower infestation in earlier seasons. This led to slower growth for Indian agrochem companies in Q3. It may impact Q4 demand as well, subject to an easing of channel inventory pressure and outlook for monsoons, says the brokerage.

Analysts at the brokerage, led by Ankur Periwal, say that global agricultural input inventory, especially for generics, is relatively high and will normalise gradually on inventory drawdown. Declining global prices, however, will impel inventory losses in the near term, they add.

The key trigger for the sector will be the pace and progress of monsoons. There is an expectation that this year may well see El Niño make an appearance, giving rise to dry conditions and a deficient monsoon.

Say analysts at JM Financial, "The probability of El Niño occurring this year is increasing with every revised prediction. Currently, it stands at 60 per cent by August-October. If El Niño appears, it could lead to an extended and humid summer season in India." The phenomenon was last seen in 2018 and led to lower-than-normal rainfall.

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₹7,341 cr proposed for agri, allied sectors

Emphasis on cultivation, consumption of millets, natural farming, micro-irrigation techniques



The government has proposed 3 centres of excellence to promote horticulture. Among these, one will be set up in Panchkula for post-harvest mgmt, second in Nuh district for onion farming and the third in Jhajjar for flowers

RAVINDER SAINI
THE HINDU NEWS SERVICE

CHANDIGARH, FEBRUARY 23

Laying special emphasis on promoting cultivation and consumption of millets, natural farming, optimum use of water through micro-irrigation techniques and resolving the issue of salinity and waterlogging, Chief Minister Manohar Lal Khattar today proposed to allocate Rs 7341.91 crore to agriculture and allied sectors in the Budget, which is over 27 per cent higher than the revised estimates of Rs 5758.02 crore of the current year.

The allied sectors include Department of Animal Husbandry, Fisheries, Horticulture and Forest. The government has proposed to establish three centres of excellence to promote horticulture in the state. Among these, one would be set up in Panchkula for post-harvest management, second in Pinangawan of Nuh district for onion farming and the third Munimpur (Jhajjar) for flowers.

Besides, a honey quality laboratory will be set up and a



honey trade policy will also be prepared to facilitate beekeepers in the state to market honey through auctions for better price realisation and improving quality.

To give fillip to green manuring or Dhaincha cultivation, which increases soil organic matter and improves soil health, a scheme for facili-

itating farmers to adopt green manuring through dhaincha cultivation will be introduced under which the government will bear 80 per cent of the cost of Rs 720 per acre and the farmer has to contribute only 20 per cent of the cost. "Agriculture and allied activities contribute 18.5 per cent to the state's economy. Haryana is

the only state to provide assurance on the MSP for 14 crops. Over 9 lakh farmers register regularly on Meri Fasal Mera Byora (MFMB). Haryana was conferred with the Best State Agribusiness Award-2022 by the Indian Agriculture and Food Council.

In the last two years, over Rs 45,000 crore has directly been

₹400 CRORE FOR STRAY CATTLE CARE, SHELTERS

The provision for the Haryana Gau Sewa Aayog is proposed to be increased to ₹400 crore in 2023-24 from the present allocation of ₹140 crore. Gram Panchayat land will be made available with the concurrence of gram panchayats for new gaushalas registered with the Haryana Gau Sewa Aayog. The gaushalas will be linked to the Gobar Dhan scheme, under which biogas plants are proposed to be constructed in every district to ensure the care and protection of stray cows, besides eliminating the occurrence of accidents being caused by stray cattle on roads. The state has 632 gaushalas with housing of around 4.6 lakh stray cattle.

transferred into the accounts of the farmers on the procurement of their crops, besides Rs 428 crore for the implementation of different schemes in agriculture," said the CM during his Budget address. He said the government was actively promoting cultivation and consumption of millets in the state.

With consultant on board, govt plans to bring fallow land under cultivation

TIMES NEWS NETWORK

Panaji: The state government has appointed Darashaw and Company as consultant to help Goa attract funds for agriculture under various central government schemes. Officials said that several joint meetings have also been conducted with experts from organisations like CSIR-NEERI to implement khazan land rejuvenation and boost stingless bee farming, diversification, and modernisation of crops in Goa.

The appointment was made through a tendering process. The directorate of agriculture issued the mandate letter to Darashaw on February 10 to prepare a detailed project report (DPR) to secure funds under centrally-sponsored schemes and other works proposed under 'Rashtriya Krishi Vikas Yo-

Community agriculture infrastructure will be created for the protection of prime agricultural land and provide better facilities to take up commercial cultivation of agricultural and horticulture crops



jana - Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR)'.

"The government of India constituted the RKVY scheme which aims at achieving 4% annual growth in the agriculture sector during the XI Plan period, by ensuring development of agriculture and allied sectors. To expedite the procedure of preparing the DPR and coordination for the central scheme, the state had begun the process of empanelment of consul-

nants," said the official.

The directorate of agriculture, along with the directorate of planning, statistics and evaluation, have identified multiple projects to be taken up to boost agriculture in Goa and to avail benefits of various schemes.

"One of the projects is stingless honey bee farming with a processing unit (meliponiculture), which is expected to help in the promotion of allied activity to increase farmers' income in a sustainable man-

ner. The focus will also be on creation of infrastructure of 'agri-hubs along the highways, district roads for marketing of local agriculture produce and value-added products which will increase farmers' income and profitability through direct marketing," said the official.

Community agriculture infrastructure will be created for the protection of prime agricultural land and provide better facilities to take up commercial cultivation of agricultural and horticulture crops.

"This is to help bring back fragmented fallow lands under cultivation on mission mode. Awareness programs will be held among the farming community to adopt new technologies and develop their agricultural lands by availing benefits under various state and central schemes," the official stated.

₹30 cr sensor-based smart agri project gets approval

JAMMU, FEBRUARY 18

The Jammu and Kashmir administration has approved a Rs 30.40 crore project "Sensor-based smart agriculture" envisaging integration of agriculture with technology driven by Artificial Insemination and IoT for automation of practices, enhanced resource use efficiency and profitability.

According to an official statement, the project, which is aimed at establishing a sensor-based smart agriculture ecosystem would prove to be helpful for the agri-economy of the region. The integration of agriculture with

technology driven by AI and IoT will make agriculture alluring, professional and competitive.

"The project will enable the use of Hi-tech poly houses for the cultivation of cash crops around the year with the application of IoT and automation for monitoring the microclimatic parameters of plants. The greenhouse technology will result in increased yields and make possible off-season availability of vegetables as early production or late availability as compared to open field conditions," the statement said. — IANS

NHAI to explore fertiliser's waste to build roads



NHAI on Wednesday said it is exploring the use of phosphor-gypsum waste material, a by-product of fertilizer production, in the construction of highway. National Highway Authority of India (NHAI), along with the ministry of chemicals and fertilisers will take up field trials on projects for use of phosphor-gypsum in building national highway to achieve a circular economy in the use of gypsum.

Odisha launches India's first AI-Chatbot for Agriculture

Concern over prices of diesel, seeds & fertilizers

STATESMAN NEWS SERVICE
BHUBANESWAR, 18 FEBRUARY:

Governor Prof. Ganeshi Lal on Saturday launched India's first AI Chatbot for the agriculture sector - Ama KrushAI, which will be a pilot project with above 10,000 farmers and will be implemented full-fledged in next two months.

Ama KrushAI chatbot will help the farmers with best agronomic practices, government schemes and loan products from more than 40 commercial and cooperative banks.

Addressing the valedictory session of 'Krushu Odisha 2023', organized by the Department of Agriculture & Farmers' Empowerment, Odisha, jointly with FICCI, Prof. Lal urged the farmers to benefit from all schemes announced by state government.



Praising the KALIA scheme, Prof Lal added that the scheme has proved to be a game changer for the income security of farmers.

Agriculture Minister Ranendra Pratap Swain, said "Odisha is now self-sufficient in many crops. The state is 4th largest rice producer in the country. We are near self-sufficient in milk, egg and fisheries." He however expressed concern over the rising prices

of diesel, seeds and fertilizer. "Our sincere effort will become helpful to bring down the cost of farming. To achieve this goal, we need farm mechanization," added Swain while urging the farmers to use new machine and technology in farming. Ms Basanti Hembram, Minister, Women & Child Development and Mission Shakti, said the focus is on farmer-friendly schemes, nutritional food and commercial-

ization of agriculture. Dr. Arabinda Kumar Padhee, Principal Secretary, Department of Agriculture & Farmers' Empowerment said government focuses on farm mechanization, crop diversification, development of the allied sector and entrepreneurship development."

Suresh Kumar Vashishth, Principal Secretary, F & ARD Department said, "We have achieved significant devel-

opment in animal resources and milk production. We have developed technology and showcased on cage culture, Tilapia fish and bio-floc." Mr T R Kesavan, Chairman, FICCI National Agriculture Committee & Group President, TAFE Ltd, T R Kesavan emphasized on input cost reduction in farming to make water use effective. He elaborated various aspects of water efficiency in farming so that technology-based agriculture can be sustainable.

Prem Chandra Chaudhary, Director, Agriculture and Dr Yeddula Vijay, Director of AH & VS, Rama Chandra Panda, Advisor to Dept. A & FE, Odisha were also present.

Official sources claimed that more than 20,000 farmers and agri-entrepreneurs from across the state attended the three day event.

Cabinet nod to set up 200,000 agri-fishery-dairy cooperatives

FE BUREAU

New Delhi, February 15

TO STRENGTHEN THE cooperative movement in the country, the Union Cabinet on Wednesday approved setting up of 2,00,000 new Primary Agriculture Credit Societies (PACS), dairy and fishery cooperatives in uncovered villages and panchayats over the next five years.

"The plan would be implemented with the support of NABARD, National Dairy Development Board (NDDDB) and National Fisheries Development Board (NFDB) through the convergence of various schemes of Ministry of Fisheries, Animal Husbandry & Dairying by lever-

Cabinet nod to ₹4,800 cr scheme for border villages

TO IMPROVE THE quality of life and encourage people to stay in their native locations in border areas, the union government on Wednesday announced a ₹4,800 crore centrally sponsored scheme for four years through FY26.

The Cabinet approved

the 'Vibrant Villages Programme' to ensure the comprehensive development of villages along the northern border areas. Out of the financial allocation of ₹4,800 crore, ₹2,500 crore would be used for constructing roads.

—FE BUREAU

aging the 'whole-of-Government' approach," the government said in a statement. The government would provide farmer members with requisite

forward and backward linkages to market their produce, enhance their income, and obtain credit facilities and other services at the village level.

Digging in with nano fertilisers

The government claims the use of nano-urea and DAP can be game-changers, but private fertiliser manufacturers seem to be in a wait-and-watch mode

SANJEEB MUKHERJEE
New Delhi, 15 February

Come next kharif season, farmers in India should be able to use nano-di-ammonium phosphate (DAP), the second major initiative that the government is championing using nanotechnology after nano urea. Both nano fertilisers, the government thinks, have the potential to revolutionise Indian agriculture and make it more cost-effective than the conventional versions, which can save significantly on fertiliser subsidy and have minimal impact on the environment by reducing the release of greenhouse gases.

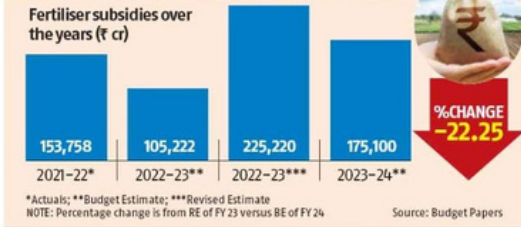
DAP is the second most consumed fertiliser in India after urea; of the estimated annual consumption of 10-12.5 million tonnes (MT) domestic production is 4-5 MT and the rest is imported.

Preliminary estimates show that a 500-litre bottle of nano-DAP is expected to be priced at around ₹600, half the present subsidised rate of a 50-kg bag of DAP of ₹1,350. Cooperative major IFFCO, which holds the patent for the technology, and private sector player Coromandel are jointly working on the nano-DAP roll-out.

Ahead of that, India had started commercial production of nano-urea



SUBSIDISING SUBSIDY



on August 1, 2021, with IFFCO and state-owned Rashtriya Chemicals and Fertilizers Ltd (RCF).

Thereafter, a plan was drawn to scale up nano-urea production in eight plants of IFFCO, National Fertilizers Limited (NFL) and RCF

in various phases starting from August 2021. These together will produce around 440 million bottles of 500 ml nano-urea by November 2025. This will be equivalent to around 20 MT of conventional urea. One bottle of nano-urea is equiv-

alent to one bag of urea. IFFCO has transferred nano-urea technology to NFL and RCF free of cost.

India currently consumes around 35 MT of urea a year, of which domestic production is 25-27 MT and the rest imported. Under the plan, the extensive use of nano-urea along with commissioning of new plants is expected to reduce India's overall reliance on urea imports, from the present 7-9 MT per annum. According to senior government officials, the government will save foreign exchange of about ₹40,000 crore a year on the import bill. This apart, reducing the application of conventional chemical fertilisers is expected to contain soil, water and air degradation caused by the overuse of chemical fertilisers, government officials say.

At present, the capacity of nano-urea production is over 50 million bottles per year, and it is expanding. Earlier this week, Chemicals and Fertilisers Minister Mansukh Mandaviya inaugurated two new nano-urea plants set up by IFFCO in Aonla and Phulpur in Uttar Pradesh.

Officials also claim that the use of nano-urea will lead to an increase in farmer income, on account of lower input costs and higher crop yield and prices from better quality crops. By some estimates, a farmer could enhance income by an average of ₹4,000 per acre by using nano-urea.

To assess the effectiveness of nano-urea, the government has conducted research trials with 20 Indian Council of Agricultural Research (ICAR) institutes and state agricultural universities across 43 locations on 13 crops since 2019-20 under different agro-climatic regions. Over 11,000 farmer field trials on 94 crops were also conducted in collaboration with ICAR and Krishi Vigyan Kendras using nano-urea.

The studies, according to government reports, showed an eight per cent increase in crop yields in foliar application (that is from the top

through a sprayer on the leaves) of nano-urea.

That apart, the government claims nano-urea effectively fulfils the nitrogen (N) requirement of the plant. It has nutrient use efficiency (NUE) of more than 85 per cent. N is absorbed by plants through the roots when applied in soil and through foliage when sprayed on crops. It said that with the application of nano-urea on all crops, the injudicious use of chemical urea can be halved.

Despite these advertised benefits, the private sector remains in a wait-and-watch mode (Coromandel being an exception for nano-DAP). Private manufacturers produce almost half the domestic urea. Being a patented product by the government, the private sector will have to get a licence to produce nano-urea or nano-DAP in their plants.

Industry players said that they wanted to assess its effectiveness and cost before opting for large-scale production and sale of nano-urea through their channels. Some private company players said that nano-urea was essentially a product that was suitable for foliar application, while conventional urea was applied at the roots of the plants. Therefore, its effectiveness needs to be closely analysed in farmers' fields rather than in trials.

Some critics also cite studies, which show that fertiliser use efficiency of urea is better via soil application rather than foliage.

But the government remains enthusiastic about the future of the technology. If officials are to be believed, more products using nanotechnology are in various stages of development that include nano zinc and even other complex fertilisers.

Meanwhile, all the claims and counter-claims about nano fertilisers will be fully verified in the next few years once they are tested in farmers' fields. Till then, it is the government that will have to drive the initiative.

'Drone use not limited to pesticide spraying, tremendous scope in organic farming too'

India's aim is to become a global hub for drones by 2030, for which an industry friendly policy including the PLI Scheme is in place, Scindia added

INDORE: Union Minister of Civil Aviation, Jyotiraditya Scindia on Tuesday said the applicability of drone in the agriculture sector is beyond pesticide spraying and has tremendous scope in organic and natural farming as well.

Drone industry in India has grown 6-8 times in the last one-and-a-half years. The drone infrastructure set up in the country is "extremely robust" and an Indian case study of drones as pioneer in agriculture will be exhibited in the ongoing meeting of G20 agriculture working group.

India's aim is to become a

global hub for drones by 2030, for which an industry friendly policy including the Production Linked Incentive Scheme (PLI) is in place, he added.

Addressing the media on the sidelines of the first G-20 Agriculture Deputies Meeting here, the Union minister said, "Don't look at drones through narrow lines. The versatility and diversity of the application of using drones as service is vast."

The use of drones in agriculture should not be limited to pesticide spraying. It can be used in cadastral mapping and survey of agriculture land, he said.

"The area of drone application for jaivik kheti (organic farming) is also tremendous. ...Even in natural farming, there is tremendous scope for application of drones," Scindia noted.

As organic farming sees an organic growth, there will surely be the movement of drone application, he added.

The government is promoting organic and natural farming in a big way to reduce use of chemical fertilisers and save mother earth. Madhya Pradesh is currently leading in organic farming.

Currently, drones in agriculture are permitted only for



pesticides spraying.

Asserting that many more applications will continue to emerge in future, the Union minister said there are multiple uses of drones. "I think as volumes grow, versatility will

'The PLI scheme for drone industry encompasses close to Rs 120 cr incentive for industry whose size in 2021 was only Rs 60 cr'

also grow."

He mentioned that the prime minister has been clear in determination that India can no longer be a follower and the country must be a leader in unexplored areas in the world.

Drone is one such area.

For achieving the aim of becoming a global hub for drones by 2030, the government has adopted a three-pronged approach, he said.

Firstly, the government has put in place a robust policy going away with some cumbersome rules and brought in ease of doing business. In a short span, digital mapping of drones has been done in the country into red, green and yellow zones.

Secondly, the government has come out with the PLI scheme for promotion of the drone industry. "For the

first time, the PLI scheme was brought about for industry which was in a nascent stage," he said. The PLI scheme for drone industry encompasses close to Rs 120 crore incentive for industry whose size in 2021 was only Rs 60 crore, he added.

The minister further said the PLI scheme has yielded "very good results" as many companies have registered and the size of the industry has grown 6-8 times in the last one-and-a-half years.

Thirdly, the government is creating demand for drones and earmarked 12 ministries including agriculture for man-

datory use of drone technology, he added.

The three day event of the first G20 Agriculture Deputies Meeting of the Agriculture Working Group (AWG) will conclude on February 15.

It deliberated on four key priority areas: food security and nutrition; sustainable agriculture with climate smart approach; inclusive agriculture value chain and food supply system; and digitalisation of agriculture transformation. The next meetings of the G20 agriculture working group is likely to be held in Chandigarh, Varanasi and Hyderabad. PII

'Mum on doubling farmers' income, legal guarantee of MSP'

Hopeless Budget, No Mention Of Debt Waiver, Say Farmers

Neel Kamal & Yudhvir Rana | INX

Bathinda/Amritsar: The farmers of Punjab have termed the Budget as hopeless, with no mention of government failure to double their income by 2022, of legal guarantee of minimum support price or other pending demands made during their Delhi agitation. Another thing they hoped for and haven't got is farm debt waiver.

The farmers claim their income level to be close to 2016, when PM Narendra Modi introduced to double their

income in six years, by the 75th anniversary of Independence. Farmer unionist Darsan Pal said: "The farmers had high hopes from the Budget, that it will fix the MSP by the C2-50% formula recommended by the Swaminathan Committee."

BKU (Ekta Dakaunda) general secretary Jagmohan Singh said: "For the last six years, farmers have been hearing the promise but their income hasn't doubled. This government's last Budget didn't even give us a debt waiver." Punjab general secretary



A DAY'S HARD WORK: Farmers carry cauliflowers from their fields in a village near Amritsar, on the day of Union Budget 2023-24

of Border Area Sangharsh Committee, Rattan Singh Randhawa said, "We were expecting some announcement for border farmers, more subsidies in fertilizers, pesti-

Steady decline in allocation under flagship schemes: SKM

Bathinda: The Sanyukt Kisan Morcha (SKM) has termed the Budget as anti-farmer, saying total outlay for agriculture and allied sectors has come down from 3.84% in 2022-23 to 3.20% in 2023-24. Allocation for rural development has also been cut from 5.81% in 2022-23 to 5.29%, it added. "While it is universally known that farming and farmers have been economically neglected by the BJP-led Union government, the SKM had expected that after the sustained and determined protest of the farmers at Delhi, the party in power would appreciate the importance of the farm sector and the need to secure income and future of the rural farming community, who form the bulk of India's population," it said in a statement

The Morcha claimed that the Budget is silent on the status of MSP on crops, according to recommendation of Swaminathan Commission while flagship schemes like PM Annadata Aay Sangrakshan Abhiyan have seen a steady decline in allocation. Price Support Scheme and Market Intervention Scheme has been reduced from Rs 1,500 crore in 2022 to Rs 10 lakh. PM Fasal Bima Yojana was supposed to protect farmers from crop losses due to natural calamities, but from allocation of Rs 15,500 crore last year, it is just Rs 13,625 crore this year. Even the MGNREGS and PM Kisan Samman Nidhi allocation has been cut to Rs 60,000 crore each. Similarly, fertiliser subsidy has been cut from Rs 2,25,000 crore in 2022 to Rs 1,75,000 crore in this Budget, it added. INX

des, and weedicides among others, but all that did not happen," he said.

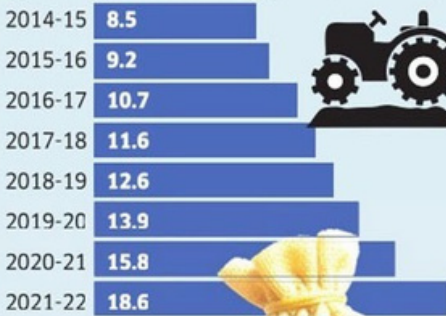
State general secretary of Kisan Mazdur Sangharsh Committee Sarwan Singh

Pandher said neither any specific announcement had been made to bring the farmers out

from the vicious wheat-paddy circle nor any announcement was made to implement the full recommendations of Swaminathan Commission.

However, Punjab BJP core committee member Rajinder Mohan Singh Chhina hailed the Budget as growth-oriented and people-friendly as every sector, including agriculture, health, education, and defence, apart from employees have been taken care of. Gumbir Singh, former chairman, CII, Punjab, said, "By taking an aggressive and ambitious approach to this year's fiscal paper, the finance minister assuaged the hopes of industry and the services, although the agrarian sector is feeling let down."

Agriculture Credit (In ₹ lakh crore)



Source:
Economic Survey 2023

Agri Needs 'Re-orientation' to Combat Climate Change

TEAM ET

New Delhi | Pune: Indian agriculture needs "re-orientation" to combat adverse impacts of climate change, fragmented landholdings, sub-optimal farm mechanisation, low productivity, disguised unemployment and rising input costs, the Economic Survey 2023 said.

"We need to move to crops that have shorter growth periods so that we can take care of the challenges of climate change. Also need to have crops that are more suited in the context of changing weather conditions. This is an emerging challenge and we saw

that (a heat wave) happen in 2022 as well," Chandni Raina, adviser to the Department of Economic Affairs, said in a media interaction.

The survey suggested a greater focus on the development of the food processing sector with improved infrastructure, like cold storage and better logistics, to reduce wastage, improve value addition, ensure better farmers' returns, promote employment and increase export earnings.

It made a strong case for increasing farm mechanisation as it helps increase productivity through timely and efficient use of other inputs and natural resources while at the same time reducing the cost of cultivation. According to the survey, the agriculture sector has grown at an average annual rate of 4.6% in the last six years.

Agri sector has grown at an average annual rate of 4.6% in the last six years. It grew 3% in FY22 vs 3.3% the year before

Core Sector Growth Rises to 3-Month High of 7.4% in Dec

Surge in output of coal, steel, cement, fertiliser and electricity aid higher expansion

Our Bureau

New Delhi: India's core sector grew 7.4% in December as against 3.8% in the year-ago period as output in seven of the eight components of the infrastructure sectors rose, official data released on Tuesday showed.

A surge in the output of five segments — coal, steel, cement, fertiliser and electricity — aided higher growth in December.

The core sector had grown 5.7% in November

The data has been released a day before Finance Minister Nirmala Sitharaman is scheduled to present the Union Budget for 2023-24.

PMI manufacturing has remained in the expansion zone for 18 months since July 2021, and the Index of Industrial Production (IIP) grows at a healthy pace, the Economic Survey for 2022-23 said on Tuesday.

"Much in tune with the Economic Survey which has painted



an optimistic picture of the economy, core sector growth for December has come in at 7.4% thus taking the cumulative number to 8% for the first three quarters," said Madan Sabnavis, Chief Economist, Bank of Baroda.

As per the data released by the commerce and industry ministry, the production of coal rose

11.5%, electricity 10%, steel 9.2%, cement 9.1%, and fertilisers 7.3% in December.

Growth in steel and cement output signal strong infrastructure activity and private construction.

Crude oil output shrank 1.2%, hit by volatile prices and limited investment in new fields. Natural gas and refinery products

output grew 2.6% and 3.7%, respectively.

In April-December FY23, the core sector cumulatively grew 8%, lower than 12.6% growth seen in the same period a year ago.

Core sector or key infrastructure industries, which have a 40.27% weight in the overall IIP. The IIP is expected to increase 4-5% in December.

Farm equipment makers seek duty cuts, PLI in Budget to boost domestic manufacturing

Our Bureau
Bengaluru

Agricultural machinery makers have sought rationalisation of customs duty and GST to make domestic manufacturing more competitive in the upcoming Union Budget, besides making a pitch for production-linked incentive for the sector.

“Even after achieving more than 50% indigenisation through in-house manufacturing, we still need to import several critical parts, including special steel. Unfortunately, the current duty/tax structure makes Indian manufacturers uncompetitive. Therefore, we request the Finance Minister to reduce customs duty on spare parts. Also the non-automotive engines should be treated as spare parts as they are critical for farm mechan-

isation and increase in efficiency. All spare parts should be at a lower customs duty and GST slab to help indigenise,” said Ravindra Agrawal, Chairman, KisanKraft Ltd.

Mrityunjaya Singh, Managing Director, CLASS India Pvt Ltd, said the domestic manufacturing of combine harvesters should be promoted under the Make in India programme. The combine harvester executes a key farming operation for the farmer and they are being short-changed by cheap, poor quality imports from countries like China and Thailand, that do not have a proper warranty or after-market support.

DISBURSAL OF SUBSIDIES
Randhir Chauhan, MD, Netafim India and SVP Netafim, said policymakers should push for drip irrigation usage in water-guzzling crops such

Mrityunjaya Singh said the domestic manufacturing of combine harvesters should be promoted under the Make In India programme

as rice, wheat, and sugarcane. He said providing infrastructure status would help the micro-irrigation manufacturer (95 per cent of which comes under MSME) to reduce operating costs, thereby accelerating the industry growth, and bringing the equipment cost down for the farmer community.

Making farmers energy-sufficient would also reduce the burden on the govern-

ment's energy subsidy bills.

Shekar Sivasubramanian, CEO, Wadhvani AI, said, “In the upcoming Budget, a continued focus on building sustainable AI capacities to support large-scale deployment of AI solutions will go a long way in creating a material impact on the lives of the underserved people of India.”

KC Ravi, Chief Sustainability Officer, Syngenta India Pvt Ltd, said the Budget should consider reducing GST on crop protection products, farm equipment, seeds and other inputs. An enhanced outlay for PM-KISAN will also ensure farmers get more liquidity to buy inputs.

The industry is also expecting that the government devise a special PLI scheme for the agro-chemical sector which will have a spiralling effect on boosting manufacturing in India.

Need to make agri-food systems climate-smart

With a sizeable population of India and the rest of the world directly dependent on agriculture, it is time to make agri-food systems more efficient, inclusive, sustainable and climate-smart. We need to harness the power of innovation and digitalisation to build adaptation capacity and resilience, while reducing greenhouse gas emissions from agriculture at a faster rate. Finance flows in the farm sector need to reflect the importance that developing countries assign to climate adaptation in this sector.

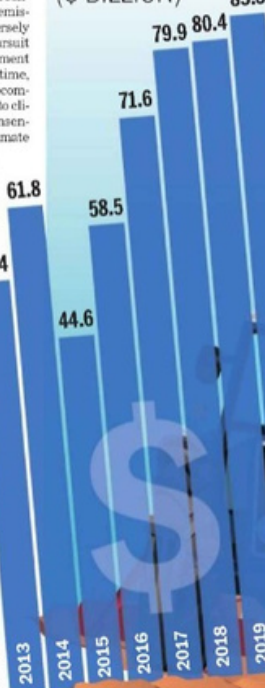
BISHWA BHASKAR CHOUHARY

Land use and food production systems are a major source of greenhouse gas (GHG) emissions across the world, adversely affecting climate and the pursuit of all Sustainable Development Goals (SDGs). At the same time, the agriculture sector is becoming increasingly vulnerable to climate change. Scientific consensus on the threat of climate change to food security is growing worldwide and the evidence is more prominent in developing countries: rising temperatures, heatwaves, droughts and floods, changes in rainfall patterns and other extreme events affect agriculture more than any other sector.

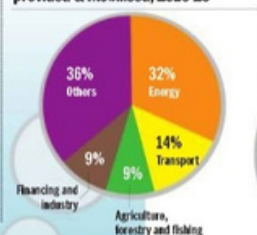
A UN climate change report claims that while the emissions are reducing, they are not going down fast enough to limit the global temperature rise to 1.5°C by the end of the century in line with the 2015 Paris Agreement goal. And if the world is unable to achieve this, the impact of climate change will only get worse and more frequent.

While agri-food systems contribute to and are affected by the impact of the climate crisis, they are also part of the solution. Agriculture and food security issues featured prominently in the 27th Conference of Parties (COP27) of the UN Framework Convention on Climate Change in

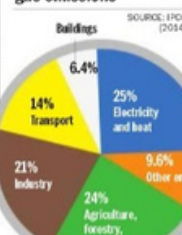
CLIMATE FINANCE PROVIDED AND MOBILISED (2013-20)
(\$ BILLION)



Global sectoral split of climate finance provided & mobilised, 2016-20



Sources of greenhouse gas emissions



this fund, particularly in agriculture, would not be easy.

The foremost question is: Will the rich countries fulfil their climate financing promises? We should not forget that 12 years ago, at COP15, rich nations made a significant pledge to channel \$100 billion a year to other nations by 2020 to help them adapt to climate change and mitigate further rises in temperature. That promise has not yet been met.

Egypt in November last year. A new initiative, Food and Agriculture for Sustainable Transformation (FAST), was launched. FAST is a multi-stakeholder programme that aims to step up finance to transform agriculture as well as contribute to adaptation efforts and pursue the Paris Agreement's 1.5°C global warming limit while supporting economic and food security.

The creation of the Loss and Damage Fund (LDF) at COP27 is being seen as a hard-fought win for the world's developing countries, including India. The purpose of LDF is to provide immediate financial support to vulnerable countries hit hard by climate disasters. The establishment of LDF has met a long-running demand by developing countries. However, the path ahead to activate

As per a report of the Organisation for Economic Co-operation and Development (OECD), in 2020, the initial target year of the \$100-billion goal, total climate finance provided and mobilised by developed countries amounted to \$83.3 billion. Some analysts claim that the OECD's numbers are inflated. International aid charity Oxfam estimated public climate financing at only \$19-22.5 billion in 2017-18, around one-third of the OECD's estimate. In 2015, India's Finance Ministry disputed the OECD's estimate of \$62 billion of climate finance in 2014, saying that the real figure was \$1 billion. Multiple analyses of a notional fair share for these payments reach the same conclusion: the US has not paid enough in climate finance to developing nations and always fallen well short, considering the size of its economy. The recent report from World Resources Institute reckoned that the US should

contribute 40-47% of the \$100 billion, but its average annual contribution from 2016 to 2018 was only around \$7.6 billion.

The agriculture sector continues to receive only a modest share of international climate finance, and it has proportionally decreased. Current flows of public international climate finance do not coincide with the priorities that developing countries have specified in their Nationally Determined Contributions. From an average of 45 per cent at the beginning of the millennium, the total finance flows in the agriculture and land-use sector reduced to 24 per cent in 2013. Between 2016 and 2020, the share of global climate finance in agriculture, forestry and fishing was only 9 per cent.

With a sizeable population of the world directly dependent on agriculture, it is time to make agri-food systems more efficient, inclusive, sustainable and climate-smart. We need to harness the power of innovation and digitalisation to build adaptation capacity and resilience, while reducing GHG emissions from agriculture at a faster rate. Therefore, there is a need to invest more in adaptation and nature, including in ecosystem conservation and restoration. Finance flows in the agriculture sector need to reflect the importance that developing countries assign to climate adaptation in this sector.

The G20 presidency is expected to enable India to convince the world to step up climate finance flows from LDF towards the agriculture sector, which is both a sufferer and a cause of climate change.

The author is an agricultural economist at ICAR-Indian Grassland and Fodder Research Institute, Bikaner. Views are personal.

SOURCE: ORGANISATION FOR ECONOMIC CO-OPERATION & DEVELOPMENT (OECD)

Send your feedback to letters@tribunemai.com

Spurious seeds: 42 PD Act cases booked in '22

'Many Cases Not Proven; Only A Few Sentenced'

Sribala.Vadlapatla
@timesgroup.com

Hyderabad: Chief minister K Chandrasekhar Rao has recently announced on the floor of the House that 42 Preventive Detention (PD) Act cases were booked against those selling spurious seeds in the previous year. He also warned seed traders from selling spurious seeds.

A quick scan reveals that in 2022, 276 cases were booked under the Seed Act 1966 in Telangana against the sale of spurious seeds. The threat of spurious seeds primarily affects cotton and chilli crops and Telangana has begun filing cases under the PD Act because many spurious seed sellers were repeat offenders.

The Seed Act only punishes violators with a fine of ₹500, but the crop damage, caused by the use of spurious seeds, is severe. And, an amendment, prescribing severe action, to the Act is pending in Parliament.

According to officials, the damage is so severe that using spurious seed reduces cotton productivity per acre to three quintals, down from 12 or 13 quintals. "Most far-

'CASES MUST BE AGAINST FIRMS'

- 276 cases booked under Seed Act 1966 against sale of spurious seeds in 2022

- Seed Act punishes violators with fine of ₹500

- Spurious seed reduces cotton productivity per acre to 3 quintals from 13 quintals, say officials

- Sources say stern action can be taken under PD Act but many cases not proven, only 13-14 sellers sentenced

- Cases should be against companies & not suppliers, says Kisan cell

- Majority spurious seeds imported from Gujarat, Tamil Nadu (cotton), Karnataka, AP (chilli)



mers suffer the damage but don't complain. Stern action can be taken under the PD Act. However, even in these cases, booked over a three-year period, many cases could not be proven and 13 to 14 sellers were sentenced," sources said.

State Kisan cell president K Anvesh Reddy said: "Farmers should be given compensation in case they were sold spurious seeds and the crop is damaged. And, cases should be booked against companies, but not suppliers."

Spurious seeds are those produced by companies that have not completed the required four stages of research and development. According to the Seed Act, all companies must obtain marketing licences to sell and these

licenses must specifically mention the brand's varieties. R&D stages include breeding, foundation, certification, and the fourth and final one, truthful label. Companies that have followed these steps for two or three years sell a variety of seeds with accurate labelling.

The Seed Act requires sellers to obtain a marketing licence for each variety, but they adopt shortcuts offering low-quality seeds.

Telangana has approximately 1,000 seed marketing licensees and a few dozen companies that were actively engaged in R&D.

The majority of spurious seeds were reportedly imported into the state from Gujarat, Tamil Nadu (cotton), Karnataka and Andhra Pradesh (chilli).

21 more airports to be linked to Krishi Udan scheme

SANDIP DAS

Indore, February 14

THE GOVERNMENT WILL soon add 21 more airports under the Krishi Udan scheme, aimed at facilitating faster movement of agricultural produce in north eastern, hilly and tribal regions of the country, civil aviation minister Jyotiraditya Scindia said on Tuesday. “At least 31 airports are there under the Krishi Udan scheme and we are speaking with the minister of defence to include 21 more airports under the scheme,” Scindia said while briefing reporters about the second-day of deliberations at the first G20 agriculture deputies meeting being held here.

Scindia said that because of Krishi Udan scheme, fruits such as lemon, jackfruit and grapes from north-eastern states are being transported to not only other parts of the country but also to other countries including Germany, the UK, Singapore and Philippines.

To promote transportation of perishable agricultural produce from the north-eastern, hilly and tribal regions,



GIVING WINGS TO FARM PRODUCE

■ Krishi Udan scheme aims to facilitate faster movement of agricultural produce from the hills

■ Under the scheme, lemon & grapes from the N-E are being sent to Germany and the UK

under the Krishi Udan scheme 2.0 launched in October 2021, the Airports Authority of India provides waiver of landing and other charges.

G20 Meet to Look to Find Solutions for Global Food Security: Chouhan

World will need 345 million tonnes of food grains by 2030: MP CM at Agri group meet

Our Bureau

Indore: The G20 summit will come out with solutions, such as new technologies, to boost farm productivity, which is key to addressing global food security concerns, Madhya Pradesh chief minister Shivraj Singh Chouhan said on Monday.

Chouhan was speaking while inaugurating the first meeting of the Agriculture Working Group under India's G20 presidency. India will continue to play a major role in fulfilling the world's food requirements, the CM said.

The world will need 345 million tonnes of food grains by 2030, he said.

In the current fiscal year, out of India's 4.6 million tonnes of wheat export, Madhya Pradesh contributed 2.1 million tonnes, Chouhan said. Area under cultivation in Madhya Pradesh has gone up to 29.9 million hectares from 19.9 million 18 years ago, while production has increased to 61.9 million tonnes from 15.9 million tonnes, he said.

India is making the world aware about millets and their benefits, thus creating global demand for the cereal grains, the CM said.

Chouhan said it was important to move towards natural farming in order to protect human health as well the health of the environment, in order to pass on a better environment to the future generations.

Natural farming is promoted as part of the Bhartiya Prakritik Krishi Paddhati Yojana, a subscheme under the Paramparagat Krishi Vikas Yojana being implemented by the agriculture ministry.

According to the agriculture ministry, half a million hectares are covered under natural farming, mostly in Andhra Pradesh, Rajasthan and Uttar Pradesh. More than 0.73 million farmers have initiated natural farming methods.

India is making the world aware about millets and their benefits, thus creating a global demand for the cereal grain



A foreign delegate tries her hand at making jalebis during a heritage walk on Monday, the first day of the 3-day G20 summit, in Indore.

The three-day event has been organised to deliberate on agriculture-related matters. It is expected to be attended by around a hundred delegates from G20 member countries, guest countries and international organisations.

Civil aviation minister Jyotiraditya Scindia is scheduled to attend the second day's events. The third day will be dedicated to deliberations on the key deliverables of the working group.

Switch to organic farming to protect environment: Shivraj

► Continued from P 1

Under the Prime Minister Narendra Modi's leadership, there has been continuous improvement in agriculture growth rate in Madhya Pradesh for a decade" said Chouhan, adding that the state has been at the first position in the country in oilseeds production. "MP has 60% share in the country's soyabean production while the state is the largest producer of wheat in India. Chouhan also emphasized on increasing production and promoting use of millets along with urging farmers to gradually opt to organic/natural farming to help protect the environment, health of humans and ani-

mals. "This year, around 60,000 farmers have registered in MP for natural farming. They encourage others and gradually, we will achieve the set target" he said, adding that MP is the largest millet producer of the country.

89 delegates from 30 countries and 12 international organizations are participating in the three-day deliberations. The delegates were accorded a warm and traditional welcome and were taken for a heritage walk from Krishnapura Chhatri to Rajwada Palace as they are exploring and learning about tradition, culture and history of India.

Apart from G20 countries including India, representatives of Indonesia, Brazil, Argentina, Australia, Canada,

China, European Union, France, Germany, Italy, Japan, Korea, Russia, Mexico, Saudi Arabia, South Africa, Turkey, UK, and USA, as many as 10 countries including Bangladesh, Egypt, Mauritius, Netherlands, Nigeria, Oman, Singapore, Spain, UAE, and Vietnam are invited in the event.

Besides, representatives of around a dozen international organizations including ADB, BMGF, ERIA, FAO, ICRISAT, IFAD, IFPRI, OECD, WFP and World Bank are participating in the three-days long first AWG on agriculture as part of G20 Summit. Later, Chouhan inaugurated an exhibition on agro products and stalls of millets put up at the venue. TNN

Stern action against those selling spurious seeds: KCR

Sushil.Rao@timesgroup.com

Hyderabad: Chief minister K Chandrasekhara Reddy on Sunday issued a stern warning to those selling spurious seeds, which are adversely affecting farmers.

Intervening during the question hour in the Assembly, the chief minister said Telangana was the only state in the country, which was taking action against spurious seed sellers under the PD Act. He said agriculture minister S Niranjana Reddy, who is also an advocate, convinced the Centre about the need to take stringent action against spurious seed sellers under PD Act. He said despite the punitive action if some people were still indulging in the illegal activity, the law would come upon them strongly.

The chief minister was responding to the problem raised by ruling party MLA Anjaiah Yadav, who brought to the notice of the house the loss that farmers were suffering because of spurious seeds being sold to them.

Responding to requests

CM ASSURES STRICT ACTION

● Telangana only state in country taking action against spurious seed sellers under PD Act



● Convinced Centre about need to take stringent action against spurious seed sellers under PD Act

● Integrated market complexes to be constructed in all municipalities

Will BJP demolish domes of Supreme Court as well, asks Balka Suman

Hyderabad: BRS MLA Balka Suman on Sunday asked if BJP would demolish the domes of Kamakya temple in Assam and Supreme Court as well. During a discussion on money appropriation bill in assembly, he asked: "BJP said that they will demolish the secretariat building named after Ambedkar. Would they do the same with Kamakya temple in Assam and Supreme Court as well."

He said that no one would keep quiet if such a step is taken. TNN

from other legislators, the CM said integrated market complexes, such as the one in Gajwel in Siddipet district, Nizamabad and Warangal would be constructed in all municipalities. He said an enclosed play area for children will also be provided at all vegetable and meat markets so that the children can play while their parents buy what they ne-

eded.

KCR said the integrated market complexes were constructed in a scientific manner with raised platforms on which the vegetables and meat can be kept. "We implemented the 'dining table' concept from the West. The raised platform, which is of two and a half feet at least in height helps keep the place clean," he said.

Awareness programme on organic and natural farming held

KARUN SHARMA
HARIHWAR (UTTARAKHAND)

A one-day awareness programme for farmers on organic and natural farming was held at the University of Patanjali. The programme was supported by the Regional Centre of Organic and Natural Farming and National Centre for Organic and Natural Farming of the Ministry of Agriculture and Farmers Welfare, Government of India in collaboration with the Patanjali Organic Research Institute, Haridwar. Around 500 farmers participated in the programme.

Addressing the participants Acharya Balkrishna urged the farmers to initially adopt organic and natural farming practices to produce food for own consumption which will also lead to reduction of health related expenditure for their family. He shared about the work being done by Patanjali for helping farmers through digital methods including the HaritKranti and Annapada apps.

On this occasion Dr Gagnesh Sharma, Director, National Centre for Organic and Natural Farming spoke on the importance of Organic Certification,

marketing of organic produce for which the centre is taking important initiatives. AK Upadhyay, Joint Director, Department of Agriculture, Uttarakhand shared the important schemes related with organic and natural farming being implemented by the State Government.

Hitesh Chowdhary, CEO/MD of Prakhand Bio energy Farmer Producer Company shared her experiences as an entrepreneur and trainer with the Patanjali Farmer Samridhi Programme and urged the women to take up organic farming.

Gopal Sharma, entrepreneur

explained the work done in goshalas and making of vermicomposting as an enterprise. Progressive farmers including Sanjay Kumar, Jai Prakash, Khala Ram and Anil Pandey shared their experiences on Organic and Natural Farming.

Stalls of various products were displayed including the DhartiKa Doctor Soil Testing Kit, Patanjali Samridhi Card etc and live demonstration of natural farming practices was done. The programme was moderated by Shri Pawan Kumar, Chief General Manager of Patanjali Organic Research Institute.



Ensuring nutritional security is the way forward







India faces the complex challenge of nutritional insecurity. Strategies for the development of agriculture cannot be limited to just increasing agricultural production for food security; a paradigm shift is needed to pursue tech-based strategies for achieving assured food and nutrition sustainability. There is a silent epidemic of malnutrition despite improved food production. A report of FAO (2018) shows that about 14.5 per cent of the Indian population continues to be undernourished.

MS BANWA

As per the Global Hunger Index, India was ranked 107th out of 121 countries in 2022, which is a drop from the earlier ranking of 101 in 2021 and 94 in 2020. Today, over 194 million Indians remain undernourished, underscoring a severe food crisis despite the technological gains made through the Green, Yellow and White Revolutions. In India, between 1970 and 2022, foodgrain production increased from about 50 million tonnes (MT) to around 316 MT; horticultural produce increased from less than 150 MT to about 330 MT (197 MT vegetables, 103 MT fruits); production of pulses rose from 12 MT to around 27 MT and of edible oils from less than 10 MT to around 23 MT. In Punjab, during this period, foodgrain production increased from 7 MT to over 30 MT, and horticulture production rose from 1 MT to over 7 MT (5.4 MT vegetables, 1.8 MT fruits).

Notwithstanding these achievements in food production and the implementation of the National Food Security Act to ensure food and nutritional security, millions of people in the country continue to grapple with hunger and malnutrition. This dire situation will persist in the future due to the widening food supply-demand gap with the progressively growing population, expected to be about 152 crore by 2030 and 170 crore by 2050, and the decelerating pace of food production in view of the intensely increasing pressure on soil and water resources. Moreover, the impact of climate change is expected to be huge; it may reduce India's agricultural capacity by about 40 per cent and cause up to 30 per cent loss in yield of some staple

ECONOMIC SURVEY 2022-23 Agriculture & food mgmt: From food security to nutritional security

-  **MSP** for all mandated crops fixed at 1.5 times of all-India weighted average cost of production since 2018
-  Continued growth in institutional credit to the agricultural sector
-  **315.7 million tonnes** of foodgrains produced in India in 2021-22
-  **11.3 crore** farmers covered under PM-KISAN for financial support
-  **₹13,681 crore** sanctioned under Agriculture Infra Fund for post-harvest support & community farms
-  **1.74 crore** farmers and 2.39 lakh traders covered under National Agriculture Market Scheme (e-NAM)



crops by 2050. It will be challenging to sustain crop productivity and production to meet the needs of the growing population and ensure food security. A report of the National Academy of Agricultural Sciences says that by 2050, India will need 405 MT foodgrains, 342 MT vegetables, 305 MT fruits and 39 MT edible oils. These figures represent a significant increase from current levels, and if production is not augmented, serious food shortfalls and food insecurity can be expected. India will not be able to meet the UN goal of a 'zero-hunger world' by 2030. Higher production has to be achieved in the face of continuously degrading soil health, depleting water resources, climate change and a

weak agricultural policy. Therefore, for achieving assured food security, emphasis should be on the selection of site (soil, water) suitability-based high-yielding crops and their varieties; enhancing the capacity of farmers to adopt climate-resilient technologies judiciously to produce more from every unit of time, land, soil, water and inputs (fertilisers, pesticides and energy); and anticipatory adoption of strategies for guarding of the food production system against various risks to agricultural production. India also faces the complex challenge of nutritional insecurity. Strategies for the development of agriculture cannot be limited to

just increasing agricultural production for food security; a paradigm shift is needed to pursue technology-based strategies for achieving assured food and nutrition sustainability. There is a silent epidemic of malnutrition despite improved food production. A report of FAO (2018) shows that about 14.5 per cent of the Indian population remains undernourished. Undernutrition is severely reducing the performance capability of the people and eventually hurting the economy of the country. The main reason for the persistence of malnutrition is a nutritionally poor diet due to inadequate access (particularly of resource-poor, income-deficient population) to fruits and vegetables. It is reported that the average per-capita daily consump-

tion of fruits and vegetables in India is well below the required quantity of at least 400 gm. Innovation through the convergence of agriculture with biotechnology has the potential to be the frontier in developing nutritionally enhanced food crops for combating malnutrition, just as gene and technology-based Green Revolution ensured food self-sufficiency in the country. Biofortification of crops via biotechnology, especially of high-yielding cereals, vegetables, fruits, pulses, etc. with increased bioavailable concentrations of essential nutrients such as proteins, minerals and vitamins can greatly contribute towards future breakthroughs in mitigating hunger and malnutrition and achieving sustainable

food and nutrition security. A good example is golden rice, which is fortified with vitamin A and iron. Other examples include lysine and tryptophan-rich quality protein maize, vitamin A-rich orange, iron-rich pearl millet and lentil, zinc-rich wheat and coloured wheat rich in anthocyanins (antioxidants) and zinc.

Policies for achieving food and nutrition security must take cognisance of the implications of food losses. The achievements of record foodgrain and horticultural production cannot be considered satisfactory when up to 40 per cent of the food is wasted — equivalent to Rs 92,000 crore a year — and never reaches the needy. Prevention of this wastage could feed about 50 million people per year. Minimising post-harvest losses along the entire supply chain (production to consumption) by increasing infrastructure for integrated cold chain, storage and food processing industries for perishable products and providing scientific storage of foodgrains will be a resource-efficient way to improve food availability and fighting hunger and malnutrition sustainably.

The government and policymakers must understand that dynamic short-term and futuristic long-term implementable policies and adequate investments are required to mitigate hunger and malnutrition. It is imperative that policies are formulated and implemented effectively for strengthening research and development activities, incentivising farmers and helping them technologically as well as financially for judiciously adopting strategies to achieve assured food and nutritional security in the future.

The author is former Director of Research, PAU, Ludhiana

3-day meet of first G-20 Agriculture Working Group to be held in Indore from February 13

Organising meets in states, a rare opportunity to establish country's identity: CM Chouhan

SATYAPRAKASH SHARMA

BHOPAL: The first G-20 Agriculture Working Group (AWG) meeting under India's Presidency will be held in Madhya Pradesh's Indore, the cleanest city in the country, from February 13-15.

While reviewing the preparations for the AWG meeting on Monday, MP Chief Minister Shivraj Singh Chouhan instructed the concerned officials to make higher-level arrangements for the event.

CM Chouhan has said that organising the working group meetings of the G-20 summit in the state is a rare opportunity to establish the country's identity. We should take advantage of this opportunity. The delegates coming to participate in the conference should be well received and they would not be faced any inconvenience, the



Shivraj Singh Chouhan

MPOST

CM instructed officials.

The meeting will have over 200 participants including members of the Group20 countries, and nine special invitee guest countries - Bangladesh, Egypt, Mauritius Netherlands, Nigeria, Oman, Singapore, UAE and Spain.

Earlier, the CM had said that there were many important religious and tourist places like Khajuraho, Panna, Tiger Reserve, Mandav, and

Mahakal Lok corridor to be shown to the delegates coming from the country and abroad. Chouhan also said that necessary arrangements should be completed at these places. The arrangements for transport and accommodation should be of a high standard. He also has given responsibilities to the ministers in charge of the concerned districts.

Union Minister for Civil Aviation Jyotiraditya Scin-

dia will deliver the welcome address at the inaugural function of the AWG meeting of G-20. An exhibition including International Millets Year-2023 highlighting the development works done in the state will also be organised at the programme venue.

Chouhan also instructed the officials that try their best to maintain the good image of the state, and the branding of the event should be of international level. A state-level committee under the chairmanship of the CM has also been formed for organising the G-20 summits in the state. A team of officers had also been sent to Udaipur so that the state could get the benefits of experience.

CM Chouhan emphasised that inter-national-level events Pravasi Bhartiya Divas and Global Investors summit have recently taken place success-

fully in Indore, and the city has worked with competence and efficiency.

The CM assured the officials of the central government who look after the G-20 summit events that there would be no shortfall in the programme. With the experience gained from global-level events organised in the city, the CM again assured that the AWG meeting would be held in a better way.

Instructing the Indore and Dhar collectors, the CM also said that there should be a manifestation of the culture of the state.

Chouhan also instructed the officers to prepare publicity material regarding the export promotion of the state's products and make it available to the delegates present. Moments of ODOP (one district one product) will be given to all delegates.

Latest agri tech to be shared with growers at 'Kisan Milni'

RUCHIKA M KHANNA
TRIBUNE NEWS SERVICE

CHANDIGARH, FEBRUARY 10

Latest technologies in the agriculture sector, be it the use of drones for spraying pesticides and fertilisers or benefits of using nano-DAP, will be shared with farmers from across Punjab as they converge on Ludhiana for the first-ever "Kisan Milni" on Sunday.

With the Centre approving the commercial release of nano-DAP as a substitute for the more expensive DAP, this will be a big game changer in farmer economies once these become commercially available to farm-

ers. The cost of nano-DAP bottles being half of that of a bag of the DAP, the government's fertiliser subsidy bill will also go down, it is learnt.

The farmers will also get first-hand information on spraying of chemicals on farmland by using drones, which will save time and labour. "The "Kisan Milni" will help the farmers get a sneak peek at the latest technologies on offer. A training centre for the use of drones, being set up at Punjab Agricultural University (PAU), will also be discussed so that young farmers can seek training and start using drones," said Agricul-



WILL SAVE TIME AND LABOUR

- Farming community will get first-hand information on spraying of chemicals on farmland by using drones, which will save time and labour
- On offer for them will also be a kiosk to brief them about subsidies offered under central and state schemes

ture Minister Kuldeep Singh Dhaliwal.

Director (Agriculture) Gurvinder Singh said these latest technologies would also be showcased in detail during the Kisan Mela at PAU to be held next month for a wider audience. Farmers will also learn about the availability of cheaper agriculture implements and machinery, which can be purchased by small and marginal farmers, who constitute 19 per cent of the total farmers in the state.

On offer for the farmers will also be a kiosk to brief them about subsidies offered under various central and state schemes for agriculture. The idea, says the Director

(Agriculture), is to ensure that farmers know about the latest developments and start adopting these to better their farm income.

The main idea behind holding the "Kisan Milni", however, is to get a feedback from farmers regarding the problems they face in agriculture and the practical solutions they would like the government to implement. "The farmers will be told about the traditional crops grown in different areas of the state and if these can once again be grown there. This will help us bring out a practical and implementable agriculture policy," said Dhaliwal.

Exports of agricultural & food products rose by 13 per cent in nine months of financial year: Govt

STATESMAN NEWS SERVICE
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Continuing the trend from the previous year, the exports of agricultural and processed food products rose by 13 per cent in the nine months of the current Financial Year 2022-23 (April-December) in comparison with the corresponding period of 2021-22, according to the provisional data released by the Directorate General of Commercial Intelligence and Statistics (DGCI&S). The overall exports of APEDA products increased to \$19.7 billion in April-December 2022 from \$17.5 billion over the same period of the last fiscal.

The initiatives taken by the Agricultural and Processed Food Products Export Development Authority (APEDA) which works under the Ministry of Commerce and Industry have helped the country in achieving 84 per cent of its



total export target for the year 2022-23 in nine months of the current fiscal, an official release today said.

For the year 2022-23, an export target of \$23.6 billion has been fixed by APEDA for the agricultural and processed food products basket and an export of \$19.694 billion has already been achieved in nine months of the current fiscal.

As per the DGCI&S provisional data, processed fruits and vegetables recorded a growth of 30.36 per cent (April-December 2022), while fresh

fruits and vegetables registered a four per cent growth in comparison to the corresponding months of the previous year.

Also, processed food products like cereals preparation and miscellaneous processed items reported a growth of 24.35 per cent in comparison to the first nine months of the previous year.

In April-December, 2021, fresh fruits were exported to the tune of \$1078 million which increased to \$1121 million in the corresponding months of the current fiscal.

Exports of processed F&V jumped to \$1472 million in nine months of the current fiscal from \$1129 million in the corresponding months of the previous year.

The export of pulses has witnessed an increase of 80.38 per cent in nine months of the current fiscal in comparison to the same months of the last fiscal as the export of lentils increased from \$242 million (April-December 2021-22) to \$436 million (April-December 2022-23). Basmati Rice exports witnessed a growth of 40.26 per cent in nine months of FY 2022-23 while the exports of poultry products increased by 91.70 per cent. The exports of other cereals recorded a growth of 13.64 per cent in nine months of the current fiscal. The exports of poultry products rose to \$95 million in nine months of the current fiscal from \$50 million in the corresponding months of the previous year.

'3,600 firms prosecuted for selling low-quality pesticides'

About 11,080 officers of various State governments are notified as Insecticide Inspectors to check the quality of pesticides and its management

NEW DELHI

MORE than 3,600 firms have been prosecuted for manufacturing, sale and illegal import of sub-standard pesticides in the last five years and 137 companies were convicted by courts after they were found to be guilty, the government said on Tuesday.

"In last 5 years (2017-18 to 2021-22), Directorate of Plant Protection, Quarantine & Storage under the Ministry of Agriculture has analysed 3,40,479 pesticide samples, and 3,639 cases have been prosecuted against the firms who were found involved in the manufacture, sale and illegal import of sub-standard/low-quality pesticides, and in 137 cases the firms have been convicted by the Court after finding guilty," Minister of State for Chemicals and Fertilisers Bhagwanth Khuba said. In a written reply to the Rajya Sabha, the minister said the chemical sector is delicensed and de-regulated. The agriculture ministry has notified the Insecticide Act, 1968, wherein, there is no provision of spurious pesticides, however, under section 3k, the definition of 'misbranded' pesticide is clearly defined.

To ensure the availability of quality pesticides to farmers, the minister said provisions have been made that no insecticide can be



In last 5 years, 3,40,479 pesticide samples were analysed and 3,639 cases have been prosecuted against the firms who were found involved in the manufacture, sale and illegal import of sub-standard/low-quality pesticides, and the firms have been convicted by the Court in 137 cases

manufactured, stocked, sold or exhibited for sale without a license granted by the licensing officer appointed by state governments. The licenses are being granted after satisfying the availability of necessary plant and machinery, safety devices and first-aid facility in the premises where the insecticides are proposed to be manufactured or sold or distributed. As per the Insecticide Act, 1968, the quality control of pesticides is primarily the responsibility of states being the licensing authority.

"At present, 11,080 officers of various State governments are notified as Insecticide Inspectors to check the quality of pesticides and its management. To ensure avail-

ability of quality pesticides, 70 pesticide testing laboratories (SPTL) and 6 State BioPesticide Testing Laboratories (SBTLs) are established in 25 States and 2 Union Territories with a total annual capacity to test 77,975 samples," the minister said. The Centre supplements the resources of state/UT governments in quality control testing of pesticides, he added.

At present, 191 central government officers are notified as Central Insecticide Inspectors, and there exists one Central Insecticide Laboratory and two Regional Pesticides Testing Laboratories at Chandigarh and Kanpur under the Directorate of Plant Protection, Quarantine &

Storage with an annual testing capacity of 4,700 samples. That apart, Khuba said the Bureau of Indian Standards (BIS) formulates standards for chemicals, and most of the standards are presently voluntary in nature. To ensure the manufacture and import of quality chemicals, the minister said that the Department of Chemicals & Petrochemicals has initiated an exercise to make BIS standards mandatory for some chemicals under Section 16 of the BIS Act, 2016. Accordingly, the department of chemicals & petrochemicals has notified 61 Quality Control Orders to make BIS standards mandatory so far.

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