AGRO CHEM FEDERATION OF INDIA

ACFI NEWSLETTER

JANUARY 2024

‘Govt to strengthen agriculture and manufacturing’

Rhik Kundu
rhik.kundu@livemint.com
NEW DELHI

Nirmala Sitharaman, Union finance minister. PTI

The Centre plans to focus on strengthening agriculture and manufacturing sectors to stimulate the economy, finance minister Nirmala Sitharaman said on Thursday.

In an interaction with students at Hindu College, Sitharaman said the Centre’s priorities include modernizing post-harvest practices to boost the agriculture ecosystem, and pushing manufacturing in sunrise industries such as renewable energy, semiconductors, material sciences, earth sciences and space industries.

“High priority is being given to these sectors, and not just in the budget,” she said. “We are also looking at improving R&D, bringing in top experts as advisors.”

The finance minister is set to present the interim budget for 2024 on 1 February, with general elections likely in April-May.

India, the fastest-growing major economy, is expected to expand at 7% in FY24, according to the Reserve Bank of India (RBI), even as other global economies face sluggish growth.

She reaffirmed agriculture’s significance, citing international interest in Indian food exports and value-added farm products. “There is immense possibility in agriculture, she added. Last month, during a debate in the Rajya Sabha, Sitharaman had credited government policies like the production-linked incentive (PLI) scheme and Make-in-India for substantial contributions to the economy from manufacturing.

The HSBC Flash India Manufacturing PMI Output Index rose to 60.5 in January from a final of 57.4 in December.

However, challenges remain, including a slowdown in exports due to global growth deceleration.

She pointed to the impact of higher interest rates in western economies and wars in Ukraine and West Asia, which threaten to increase oil prices and inflationary pressures. Sitharaman said the government and the RBI have been engaging with digital currency. “Digital currency will help in cross border payments, bring in transparency, speed up the payment process for remittances,” she said.

Exports touch $765 billion in 2023, says RBI

New Delhi, Jan. 21: The country’s exports of goods and services rose marginally by 0.4 per cent to $765.6 billion in 2023 despite global economic uncertainties, according to the commerce ministry data.

Sectors which helped keep India’s exports afloat include electronics, pharmaceuticals, cotton yarn, fabrics and made-ups; ceramic products, meat, dairy and poultry, fruits and vegetables and information technology.

Goods exports in the last calendar year, however, contracted by 4.71 per cent to $431.9 billion while services exports are estimated to have risen by 7.88 per cent to $333.8 billion, the data showed.

The merchandise imports also dipped by 7 per cent to $667.73 billion last year as against $720.2 billion in 2022.

The latest data for the services sector released by the RBI is for November 2023. The data for December 2023 is an estimation by the ministry.

The main export destinations for India are the US, the UAE, the Netherlands, Bangladesh, the UK and Germany.

Goods shipments are impacted due to the Russia-Ukraine war, the Israel-Hamas conflict and the Red Sea trade route crisis due to attacks by Yemen-based Houthis on cargo ships.

According to international trade experts, if these challenges are prolonged, it will have major implications on global trade.

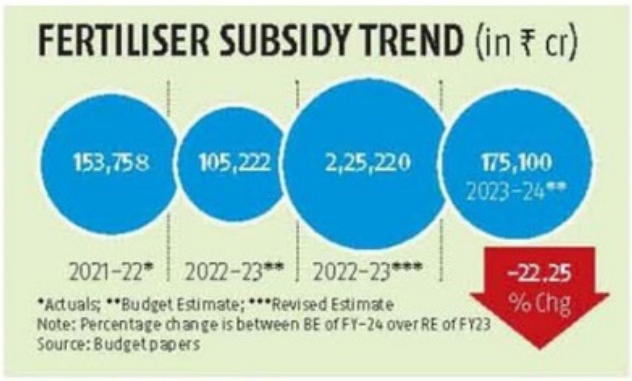
INDIA’S EXPORTS afloat include electronics, pharmaceuticals, cotton yarn, fabrics and made-ups; ceramic products, meat, dairy and poultry, fruits and vegetables and information technology.

Economic think-tank global trade research initiative (GTRI) said that India’s exports and imports have dipped by 2.6 per cent to $1,609 billion in 2023 compared to $1,651.9 billion in 2022.

The negative trade balance the difference between exports and imports decreased from $141.3 billion in 2022 to $75.2 billion in 2023.

The data for the current fiscal shows that the goods exports during April-December 2023 dipped by 5.7 per cent to $317.12 billion. Imports contracted by 7.93 per cent to $505.15 billion, leaving a trade deficit of $188.02 billion in the first three quarters as against $212.34 billion in April-December 2022. — *PTI*

SEEKING A BALANCE



Some in the industry fear a return of controls while others see positives in a govt circular, but the bigger issue is the skewed pricing in favour of urea

SANJEEB MUKHERJEE
New Delhi, 31 January

A few days back, the Ministry of Chemicals and Fertilisers issued an office memorandum that sought to cap the profit margin on the retail sale price of phosphate and potassic fertilisers charged by companies under the Nutrient-Based Subsidy (NBS) regime.

Di-ammonia phosphate (DAP), Muriate of Potash (MOP), and different grades of NPK (nitrogen, phosphorus, potassium) are the most commonly used non-urea fertilisers in the country. DAP is the second most-consumed. For urea, the largest consumed fertiliser, no such margin control has been proposed as it is already sold at a fixed rate that has not been revised for more than a decade.

The ministry's recent memorandum allows companies to charge profit over their total cost, including cost of production and a host of other items, or import according to three slabs. The profit will be calculated retrospectively from April 1, 2023.

Companies will have to refund any "unreasonable profit" they might have made, to the department of fertiliser by October 10 for the previous financial year. If they do not, interest at the rate of 12 per cent per annum on a pro-rata basis will be charged on the refund amount from the first day of the new financial year. For FY24, interest will be charged from April 1, 2024.

Companies have been also told to self-assess their reasonable profit based on the cost auditors report along with the audited cost data as approved by their Board of Directors. If a company does not submit the cost auditors report, its further subsidy could be stopped and a penalty levied.

Unfounded fears?

The circular has sparked fear in a section of the fertiliser industry that the new circular could mark a return to the controls that were eased by the NBS regime when it was introduced in April 2010 for non-urea fertilisers.

However, some experts say the circular will in fact simplify things. The Centre has been fixing "reasonableness of MRP or profit" since 2019, when it allowed firms to charge a uniform 12 per cent margin, including GST, over the cost of production irrespective of whether the DAP or MOP was made in India or imported.

Even when the NBS regime was introduced, though it theoretically provided companies the freedom to price their non-urea fertiliser, firms had to regularly provide details of the retail sale prices to the government.

"There are no additional controls. On the contrary, the memorandum simplifies lots of things. First is that the industry has been demanding that instead of defining 'reasonable profit margin' product-wise the entire segment should be considered as one unit for fixing 'reasonableness', which they have done. This will help the industry because if someone charges more for a product but less for another, it will now get balanced. This is in favour of the industry," says S Nand, a sector expert.

Secondly, GST has been excluded, which, Nand says, favours domestic manufacturers of non-urea fertilisers. And third, the differential pricing slabs will give a boost to the Make in India initiative. "The only thing is that the informal pricing control on DAP, MOP and NPKS-grades introduced since Covid-19 still remains," Nand said.

Skewed pricing

The more pertinent question to address, say several experts, is the pricing in favour of urea. India's subsidy matrix has ensured that the NPK ratio in the 2023 Kharif sowing season has remained abnormally high in favour of nitrogen and against an ideal NPK ratio of 4:2:1. It is now 10.9:4.9:1, shows data from the Fertilizer Association of India.

The NPK ratio was somewhere right around 2009-10, when it touched 4:3.2:1. The unchanged retail price of urea, as compared to other fertilisers, makes it the cheapest plant nutrient available to Indian farmers. Experts attribute this to the subsidy regime, wherein almost 90 per cent of the production cost of a bag of urea is subsidies and the retail price has not been raised for more than 10 years, while the price of all other fertilisers has been revised.

Bringing urea under the NBS regime could be the solution. In 2022-23, of the total consumed 64 million tonnes of fertiliser in India, urea made up 56 per cent.

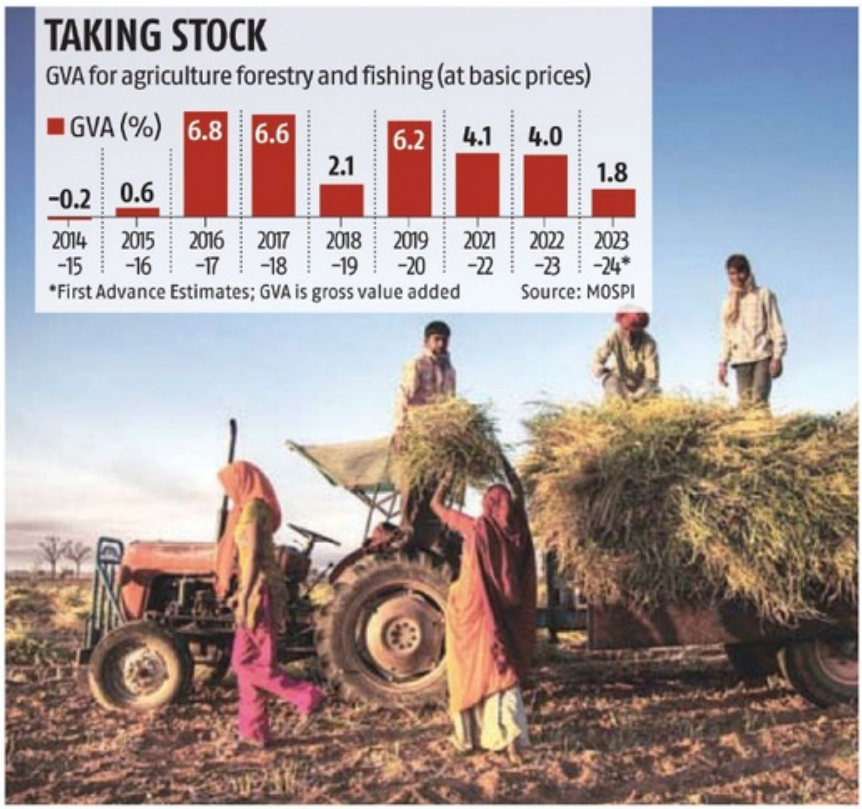
The Commission for Agriculture Costs and Prices, the government's panel to fix MSP, in its latest kharif report, has flagged this by saying fertiliser response and efficiency have continuously declined over the decades mainly due to imbalanced use of nutrients, deficiency of micro and secondary nutrients, and depletion of soil organic carbon, while the fertiliser subsidy has been rising.

The Commission recommends steps to bring urea under the NBS regime to address the imbalanced use of nutrients.

Innovation, tech needed for nutritious food basket

Policy consistency required to expand production choices for farmers: FinMin

SANJEEB MUKHERJEE
New Delhi,



Indian farmers can be encouraged to adopt technologies and practices through policy consistency and continuity, a finance ministry review of the Indian economy said.

That will expand their market and production choices, keeping in view ecological considerations, natural resource availability, and demand, according to the Review.

The review, released on Monday, before the government presents its Interim Budget on Thursday, stressed the need for continuous innovation in crop varieties, technology adoption, and farming to meet the growing demand for a diversified and nutritious food basket.

Meanwhile, the Review said the agricultural sector, which is estimated to constitute 18 per cent of India's gross value added (GVA) in FY24 and is the bedrock of the economy, had demonstrated remarkable tenacity and resilience by contributing significantly to economic recovery and development despite the challenges posed by the global health crisis and variability in climate conditions.

"Agriculture grew at a higher average annual rate of 3.7 per cent from FY15 to FY23 compared to 3.4 per cent from FY05 to FY14. For the year FY23, the sector grew at 4.0 per cent as compared to the previous year," the Review said.

In FY24, the first advanced estimate estimated GVA for agriculture and allied sector at a seven-year low of 1.8 per cent due to weak kharif output and initial weakness in rabi sowing.

Planting has been affected due to the uneven monsoon in 2023.

"India's global dominance extends across agricultural commodities, making it the largest producer of milk, pulses, and spices worldwide. Given opportunities and an appropriate policy setting, India's farmers have demonstrated their capability to meet food demand of the rest of the world. The potential is still huge," the Review said.

The Review talked of the various policy initiatives that the Narendra Modi government had initiated for farmers since 2014 and how effective they had been.

"The policy initiatives, such as Pradhan Mantri Kisan Maandhan Yojana (PM-KMY), Pradhan Mantri Kisan Samman Nidhi (PM-KISAN), and Pradhan Mantri Fasal Bima Yojana (PMFBY), have played a pivotal role in providing financial and income support to farmers," the Review said.

It added PM-KISAN, launched in 2019, supplemented the financial needs of landholding farmers by transferring ₹6,000 per year in three equal four-monthly instalments.

"As of December 12, 2023, over ₹2.8 lakh crore (₹2.8 trillion) have been transferred to more than 11 crore (1110 million) beneficiaries," the Review said.

It said the government was actively promoting digital inclusion and mechanisation to foster productivity, adding that the government's push for technology adoption was evident in its efforts to make drone technology affordable to farmers.

On food security to the poor, the Review said ensuring it, especially for vulnerable populations, was the cornerstone of government policies.

ICAR budget set to rise amid focus on food production

The expected allocation hints at the Centre's commitment to bolstering agricultural research

Dhirendra Kumar & Puja Das
NEW DELHI

The Indian Council of Agricultural Research (ICAR), the research arm of the agriculture ministry, is set to receive what two ministry officials called a "significant" boost in its budget for the upcoming financial year.

According to the officials, there is a proposal for an increase of up to 10%, resulting in a total budget of ₹10,454 crore, compared with a 9% increase in the last budget.

This underscores the government's commitment to strengthening agricultural research and development, they said, assuming significance in the context of the government's focus on agricultural research to increase foodgrain production.

Financial priorities unveiled in the 1 February interim budget are set to reflect the government's strategic focus on fostering advancements and innovation within the agricultural landscape, one of the officials said.

This potential rise in funding for ICAR signifies a proactive approach towards enhancing research capabilities, promoting sustainable agricultural practices, and addressing the evolving challenges faced by the agriculture sector.

The network of 113 ICAR institutes and 74 agricultural universities distributed across the country positions India as home to one of the largest national agricultural systems globally, the second official said.

This potential rise in funding for ICAR signifies a proactive approach towards promoting sustainable agricultural practices, among other things.. ISTOCKPHOTO

In the current scenario, as India aspires to emerge as a global food supplier, with a specific emphasis on augmenting foodgrain production, the projected increase in the ICAR budget by ₹950 crore assumes great significance.

IND.AI SURGE
INTERIM BUDGET 2024

In FY24, the budget allocation for agricultural research reached ₹9,504 crore, marking a notable 9% rise compared with the revised estimate of ₹8,659 crore from the previous fiscal year.

ICAR's budget constituted about 8% of the agriculture ministry's total outlay of ₹1.25 trillion in FY24, representing a 5% increase over the revised estimates of 2022-23. As much as 77% of the estimated expenditure goes toward three schemes that provide cash transfer, interest subsidy and crop insurance.

ICAR contributes to food security through its research on high-yielding crops, climate-resilient agriculture, and promotion of sustainable farming practices. The apex research body has released high-yielding varieties, including those with special traits like biofortification. It has released over 467 high-yielding varieties comprising 218 cereals, 57 oilseeds, 65 pulses, 98 commercial crops, 29 forage, and other crops for commercial cultivation, including 35 special traits varieties.

The allocation for crop science research within ICAR saw an upward trend, with a rise from ₹603 crore in 2021-22 to ₹714.41 crore in 2023-24, while ₹212 crore was allocated for research activities in horticulture in the ongoing fiscal year.

Under crop science, research provision is to develop trait-specific high-yielding field crop varieties having tolerance to pests and diseases, besides various abiotic stresses.

The budget allocation for animal science and fisheries research activities under ICAR is also expected to witness an increase in FY25 compared with the previous years' allocations.

Queries sent to the ministries of finance, agriculture and ICAR remained unanswered till press time.

Ajai Rana, chairman of the Federation of Seed Industry of India and CEO of Savannah Seeds Pvt. Ltd, said, "A key expectation from the budget is restoring the 200% income tax deduction for seed industry R&D under Section 35(2AB). The 200% income tax deduction for R&D in biotechnology was introduced in 2010-2011 and reduced to 150% in 2016 and further to 100% in 2020. The industry also expects the budget to restore customs duty on essential items to the earlier 5% rate for nationally accredited companies. This measure aims to support seed research by ensuring access to critical equipment," Rana said.

dhirendra.kumar@livemint.com

Rain Deficit may Hit Horticulture Crops

India seeing drought-like conditions in North India; not just rabi, but kharif crop output too may feel the impact: Experts

Shambhavi Anand

New Delhi: India is grappling with a nearly 56% rainfall deficit in January, leading to extreme dryness and drought-like conditions in the northern region, raising concerns about the production of key horticulture crops and spices such as apples and cumin.

"Nearly drought conditions have prevailed over the plains and mountains of North India," according to private weather forecaster Skymet. The northwestern part of the country has received only 0.7 mm rainfall in January against the normal of 24 mm – a deficiency of 97%, according to the India Meteorological Department (IMD).

Mountains of north India still await the maiden blanket of snow which can severely impact the yield of apples and other winter crops such as rice in Jammu and Kashmir, Himachal Pradesh and Uttarakhand.

In Rajasthan, the continuing dry spell could hit production of spices such as jeera (cumin) and dhaniya (coriander), said Rahul Chauhan of iGrain India, an agricultural research firm.

The Rajasthan agricultural ministry has also lowered the estimated yield for wheat, small millets and oilseeds in its first estimate for 2023-24 compared to the final estimate of 2022-23 due to the dry weather conditions.

Even though wheat, the main winter crop, is in good condition in the main growing areas such as Punjab and Haryana as the temperatures are suitably cold, some amount of precipitation is required, Chauhan said.

"This is the driest winter since 2018, when the overall rainfall across the country was 85% less than normal," said Akshay Deoras, meteorologist, adding that the dry spell is because of the lack of western disturbances in the northern region.

Scanty rainfall and low reservoir levels will affect the groundwater position and soil moisture, impacting not only the rabi (winter) season crop output, but the spillover impact will also be felt in the kharif (summer) season, said agricultural experts.

In a welcome respite, IMD has predicted light isolated rainfall or snowfall over the western Himalayan region from January 25-31 under the influence of two feeble western disturbances.

Out of 36 subdivisions, 16 are in the category of large deficient in rainfall till January 25, four are deficient and three have had no rainfall at all, according to IMD data.

Monsoon 'Break'

Northwest receives only 0.7 mm rainfall, a 97% deficiency

Snow delay in north impacts apple and winter crop yields

Rajasthan's dry spell may hit spice production and wheat yield

IMD predicts light rainfall in western Himalayas from Jan 25-31

BHAVN G

shambhavi.anand@timesgroup.com

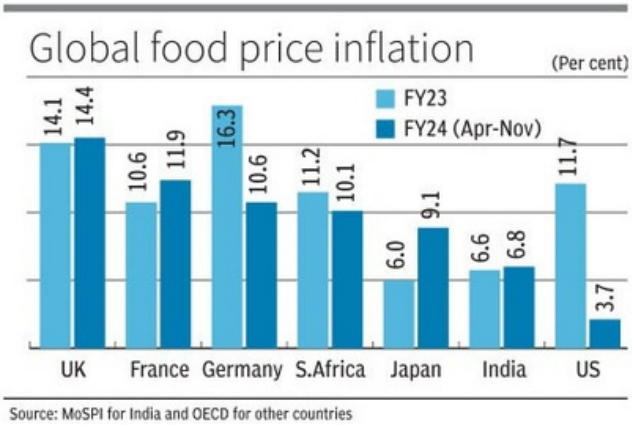
'Done well on the food inflation front, but need to fortify, diversify nutrition basket'

Prabhudatta Mishra
New Delhi

Highlighting that India has managed to keep its food inflation at moderate levels and lower than many large economies, the interim economic review on Monday said that the agriculture sector has performed well consistently. However, continuous innovation in farming practices, crop variety improvements, and technology adoption are essential to meet the growing demands for diversified and nutritious food baskets, it said.

"Given opportunities and an appropriate policy setting, India's farmers have demonstrated their capability to meet food demand of the rest of the world. The potential is still huge," it said. This 64-page review takes stock of the state of the Indian economy and its journey in the last 10 years and offers a brief sketch of the outlook for the economy in the coming years, the government said in the report.

The average agri growth between FY15 and FY23 was 3.7% against 3.4% between FY05 and FY14



Source: MoSPI for India and OECD for other countries

FARMING SECTOR

Despite challenges posed by the Covid pandemic and variability in climate conditions, the farm sector, having 18 per cent share in the GVA, has been contributing significantly to India's economic recovery and development, it noted. The agriculture growth was at an average 3.7 per cent from FY15 to FY23, as against 3.4 per cent between FY05 and FY14. The farm sector grew at 4 per cent during FY23 from the previous year. But in FY24, it is estimated that the farm sector growth may be 1.8 per cent.

Noting that consistent increase in Minimum Support Prices (MSPs) for 22 kharif and rabi crops was one of the important interventions, the review said, adding that it helped bolster the agriculture sector's growth and resilience. The government in 2018 decided to fix the MSPs at minimum 50 per cent over and above the costs of production (A2+FL).

It listed several schemes of the Agriculture Ministry such as Pradhan Mantri Kisan Maandhan Yojana (PM-KMY), Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) and Pradhan Mantri Fasal Bima Yojana (PMFBY) which have played a pivotal role in providing financial and income support to farmers. As of December 12, 2023, over ₹2.8-lakh crore have been transferred to more than 11 crore beneficiaries under PM-KISAN and 23.4 lakh small and marginal farmers have enrolled so far under the PM-KMY and ₹1.5-lakh crore has been paid as claims under PMFBY since launch of these schemes. "Policy consistency and continuity that expand market and production choices for farmers, which, at the same time, keep the larger environmental and ecological considerations and natural resources availability and demand in the country, will be useful in encouraging farmers to adopt new technologies and practices," it said.

TIMELY FOCUS

On food inflation, the review said, "India has managed to keep its food inflation at moderate levels and lower than many large economies." Persistence food inflation is a global challenge, even in several developed economies, it said and added that prices of specific food items in India were pressured by untimely rains, leading to crop losses and weather-driven supply chain disruptions. But the government's timely focus on supply-side initiatives, based on meticulous price monitoring, is giving credibility to anti-inflationary policies.

"Measures like strengthening buffers of key food items and making periodic open market releases, trade policy measures aimed at improving domestic availability of food, preventing hoarding through imposition and revision of stock limits and channelling supplies of select food items through designated retail outlets helped to keep inflationary pressures on the check, amidst adversities," it said.

Subsidies under Modi 2.0

Covid-19, war and now elections have forced a reversal of the rationalisation of subsidies of the 3Fs — food, fertiliser and fuel — that was undertaken during the Narendra Modi government's first term.

HARISH DAMODARAN

FROM NEW Welfarism to a renewed emphasis on subsidies and transfers —this is pretty much what has changed between the first and second term of the Narendra Modi government.

The Modi 1.0 period (2014-15 to 2018-19) saw a plethora of schemes launched for ensuring universal access to housing, toilets, drinking water, bank accounts, electricity and cooking gas connections.

Even as public funding for these normally privately provided, yet essential, goods and services went up — what the Modi government's former chief economic adviser Arvind Subramanian termed "new welfarism" — the Centre's subsidy bill fell, both in absolute and relative terms.

Between 2013-14 (the last year of the previous United Progressive Alliance government) and 2018-19, the Centre's spending on major subsidies — the 3 Fs of food, fertiliser and fuel — dropped from Rs 244,717 crore to Rs 196,769 crore. Relative to GDP, it more than halved from nearly 2.2% to just over 1%. Even after adding outlays under the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA, a UPA legacy scheme) and Pradhan Mantri Kisan Samman Nidhi (PM-Kisan, introduced in the last year of Modi 1.0), the decline was from 2.5% to 1.4% of GDP.

Making a comeback

Modi 2.0, however, has witnessed a reversal of the above trend.

The accompanying chart shows the major subsidies soaring from 1% of GDP in 2018-19 to 3.6% in 2020-21, and from 1.4% to 4.4% along with MNREGA and PM-Kisan transfers. While these have since dipped to 1.9% and 2.5% in 2022-23 (the current fiscal's numbers are budget estimates that may overshoot), they are more or less at the levels when the Modi government took over.

In absolute terms, too, the 3F subsidies peaked at Rs 707,707 crore in 2020-21 (Rs 879,866 crore with MNREGA and PM-Kisan expenditures). Even at Rs 530,959 crore (Rs 680,359 crore) in 2022-23, they were over two-and-a-half times their corresponding levels of 2018-19.

The drivers: Modi 1.0

During Modi 1.0, the subsidy bill reduction came primarily from benign international oil and fertiliser prices. The cost of crude imported by Indian refiners averaged $60.84 per barrel during 2014-15 to 2018-19, as against $96.05 in the preceding five financial years.

The Modi government, perhaps wisely then, did not pass on the full benefit of lower global prices to Indian consumers. Instead, it raised the excise duties on diesel, petrol and other fuel products.

In 2012-13 and 2013-14, the Centre's subsidy outgo on petroleum products, at Rs 96,880 crore and Rs 85,378 crore respectively, exceeded its corresponding excise revenues of Rs 63,478 crore and Rs 67,234 crore from the same. But by 2017-18 and 2018-19, the subsidy on fuels (Rs 24,460 crore and Rs 24,837 crore) stood far below the collections from excise (Rs 229,716 crore and Rs 214,369 crore).

In short, the Modi government used the easing of international crude prices to not just trim its fuel subsidy outlay, but also mobilise additional resources that could now finance other expenditures, including the "new welfarism" schemes. The petroleum subsidy was henceforth limited only to sales of LPG cylinders and providing connections to poor/low income households, while diesel and petrol turned into significant revenue sources for the government.

It was almost likewise with fertilisers. The gains from lower landed costs of imported finished fertilisers and raw materials were pocketed by the Centre — in the form of subsidy savings — and not farmers.

The drivers: Modi 2.0

There have been two key drivers of the spiraling outgo on subsidies and transfers during the Modi government's second term.

The first was a policy decision to fully provide for the food and fertiliser subsidy. Prior to 2020-21, the Centre wasn't wholly funding the difference between the Food Corporation of India's (FCI) economic cost — what it incurred in procuring, distributing and storing grain — and its average issue price, multiplied by the quantities handled. The same applied to fertiliser firms selling nutrients at prices below production or import cost. To bridge the gap, these entities had to borrow heavily, whether from the National Small Savings Fund (NSSF) or banks.

Finance Minister Nirmala Sitharaman making a one-time provision, to help FCI repay some Rs 339,236 crore of outstanding NSSF loans and also clear dues to the fertiliser industry, resulted in the Centre's overall subsidy tab spiking in 2020-21.

The second driver was Covid and the Russia-Ukraine war.

The pandemic-induced economic distress led to record offtake of rice and wheat through the public distribution system (PDS), with the Modi government doubling the monthly grain quota for beneficiaries from April 2020 to December 2022. MNREGA spending rose as well. An all-time-high 389.09 crore and 363.19 crore person-days of employment were generated in 2020-21 and 2021-22, compared with 267.96 crore and 265.35 crore in 2018-19 and 2019-20 respectively.

The war's impact was mainly on international fertiliser prices. The average landed price of imported urea surged from roughly $263 per tonne in 2020-21 to $661 in 2021-22 and $627 in 2022-23. The corresponding increases were from $369 to $741 and $805 per tonne for di-ammonium phosphate and $239 to $359 and $590 for muriate of potash. With the Modi government choosing not to allow pass-through of the higher costs to farmers, the net outcome was a near-doubling of the fertiliser subsidy from Rs 127,922 crore to Rs 251,339 crore between 2020-21 and 2022-23.

The road ahead

The maximum retail price of urea has remained at Rs 5,360 per tonne since November 1, 2012. The only change that has taken place is companies being permitted to charge 5% extra (Rs 268) for coating urea with neem oil, which has been made fully mandatory from May 25, 2015.

The PDS issue price was fixed at Rs 2/kg for wheat and Rs 3/kg for rice following implementation of the National Food Security Act from July 5, 2013. The Modi government has, far from increasing, slashed these to nil with effect from January 1, 2023. Retail prices of petrol and diesel were cut on May 22, 2022 and have not been revised thereafter.

The Interim Budget for 2024-25 is unlikely to tamper with the above prices. If anything, the Centre could hike the annual direct benefit transfer under the PM-Kisan scheme from the existing Rs 6,000 to, say, Rs 9,000 ahead of polls.

Any rationalisation of subsidies — most economists favour targeted DBT or income support payments over supplying goods and services at below cost — may have to wait for the next government.

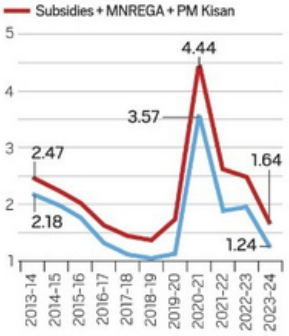
HOW THE SUBSIDIES BILL HAS CHANGED OVER THE YEARS

Spending under Centre's major subsidies and transfer schemes *(Rs crore)*

	Food	Fertiliser	Fuel	Total	MNREGA	PM-Kisan
			MODI 1.0			
2014-15	117671.16	71075.62	60268.82	249015.60	32463.40	-
2015-16	139419.00	72415.17	29999.00	241833.17	37340.71	-
2016-17	110172.96	66312.93	27538.71	204024.60	48214.95	-
2017-18	100281.69	66467.57	24460.49	191209.75	55166.04	-
2018-19	101327.00	70604.80	24836.95	196768.75	61815.09	1241.13
			MODI 2.0			
2019-20	108688.35	81124.33	38528.78	228341.46	71686.70	48713.84
2020-21	541330.14	127921.74	38454.64	707706.52	111169.53	60989.90
2021-22	288968.54	153758.10	3422.60	446149.24	98467.85	66825.11
2022-23*	272802.38	251339.35	6817.38	530959.11	89400.00	60000.00
2023-24#	197350.00	175099.92	2257.09	374707.01	60000.00	60000.00

**Provisional estimates; revised estimates for MNREGA and PM-Kisan. #Budget estimates.*

Centre's subsidy bill *(% of GDP)*



Note: 2022-23 is based on provisional/ revised and 2023-24 on budget estimates.

Supply of fertilizers on track: Officials

Say govt plans to supply 19.24L tonnes of various grades for Yasangi

STATE BUREAU
HYDERABAD

Even as there are reports of shortage of fertilizers, especially urea, from farmers in different districts, officials have denied the same. With the area under paddy projected to be little over 40 lakh acres in the State during Yasangi (Rabi) season, the Department of Agriculture has prepared an action plan for supply of 19.24 lakh metric tonnes of various fertilizer grades, they said.

Some nine lakh tonnes of fertilizer stocks were made available in all the districts as the Yasangi operations gained momentum under all the major projects that have announced the irrigation schedules for the season, officials claimed, stating that the fertilizer availability was 28 per cent more compared to Yasangi 2022-23, when it was 7.01 lakh metric tonnes.

TS Markfed, being the nodal agency, shoulders the responsibility for streamlining the supplies. Officials said the demand for urea would be more in the preparatory stage of the Rabi operations. The department managed to make available 3.57 lakh metric tonnes of urea during the preparatory months of the Rabi operations.

As part of the initiative to step up supplies, 4.68 lakh metric tonnes of urea was ready in godowns across the State and it is nearly 31 per cent more than the urea stocks available around the same time last year. The State was maintaining adequate stocks of DAP and other grades of fertilizers for the season. The supply-related issues being reported in different parts of the State had nothing to do with the demand and supply factors.

Delay in the supply of stocks were more local in nature and the local officials were tasked with monitoring, officials said. On the whole, the use of urea as well as other complex fertilizers was coming down in the State. The government was ensuring timely supplies of 25 grades of phosphatic and potassic fertilizers to the farmers at subsidised prices. The Central government had already approved Nutrient-Based Subsidy (NBS) rates of fertilizers for Rabi season 2023-24. The State had already initiated measures to ensure smooth availability of these fertilizers to the farmers at affordable prices, they added.

As Yasangi operations gain momentum, some nine lakh tonnes of fertilizer stocks were made available in all the districts, according to officials.

'Adequate stocks available in Adilabad'

ADILABAD: Agriculture officials said sufficient stocks of fertilizers were kept available at retailers and primary agriculture cooperative societies (PACS) to be sold to farmers for ongoing Yasangi season in erstwhile Adilabad district.

They stated that 3,477 metric tonnes of urea was available in Adilabad, while 11,541 metric tonnes was ready to be sold to farmers in Mancherial. A total of 3,830 metric tonnes and 7,153 metric tonnes of urea were dispatched to retailers and PACS in Kumram Bheem Asifabad and Nirmal districts, respectively.

According to information by the authorities, 9,543 metric tonnes of urea was consumed in Yasangi season-2022 in Adilabad district, while 6,437 metric tonnes of the chemical was used in Kumram Bheem Asifabad district in the same period. As many as 17,095 metric tonnes and 30,054 metric tonnes of urea were sold in Mancherial and Nirmal in 2022, respectively.

High urea prices upset paddy farmers

WARANGAL: Increasing prices and lack of availability of urea are worrying paddy farmers in the district. Farmers are complaining that they are not able to get enough stock of urea in the market and those available were sold at higher prices. Some cooperative bodies involved in the distribution of fertilizers have been blamed for insisting on unrealistic conditions. Although urea, potash and complex fertilizers like factamfos are the key fertilizers used by paddy farmers, the unavailability of urea was causing worries.

Warangal Fertilizer Dealers Association president Nagurla Venkateshwarlu too admitted that there was shortage of urea in the district and that farmers were finding it difficult to get urea. "We are getting reports that in many places in the district farmers are finding it difficult in getting urea. We have brought this to the notice of Agriculture Department officials," he said.

However, district agriculture officials are claiming that there was no shortage of urea or other fertilizers in the district. "We have sufficient stock for the Yasangi. We have not come across any report of shortage of fertilizers," an agriculture official stated.

Sugar industry may lead the way in climate-smart agriculture

Our Bureau
New Delhi

Sugarcane will likely take a leadership role in terms of implementing smart agriculture over the next few years. On the other hand, maize, which consumers less water, is considered a future crop to meet the ethanol industry demand and in turn help in combating climate change, said speakers at a panel discussion on the challenges posed by climate change at the *businessline* Agri and Commodity Summit 2024 on Friday.

Tarun Sawhney, Vice-Chairman and Managing Director, Triveni Engineering and Industries Ltd, said the impact of El Nino has been hard felt in Karnataka, where yields and area have fallen by 35-40 per cent, while it was about 20 per cent in Maharashtra. However, there has been no impact in Uttar Pradesh, which has the benefit of canal irrigation.

Sawhney said the lessons coming out of the ethanol system have been important for India as it has saved more than ₹24,300 crore in foreign exchange. He further said that it was important to have a sustainable policy framework, besides educating sugarcane farmers on what's required and for investments and commitments by the industry by not just partnering with farmers but also for expanding the existing infrastructure.

Stating that bio-energy is a sunrise sector, Sawhney said: "It is small but important part of combating climate change. The second and third-generation ethanol generated from the biomass holds a lot of potential".

"We need to create technology that will create more jobs. Within the field of agriculture, bio energy will create twice as many jobs as far as any other form of energy sector such as solar etc." he said.

GETTING FUTURE-READY. (from left) SK Pradhan, Assistant Director General (FFC), ICAR; B Dayakar Rao, Director, Nutrihub, ICAR-IIMR, Hyderabad; Subramani Ra Mancombu, Commodities Editor, *businessline*; Tarun Sawhney, Vice-Chairman and MD, Triveni Engineering & Industries Ltd; and BK Singh, CMD, Weathersys at a session on 'Challenges posed by climate change'

RESILIENT CROPS

SK Pradhan, Assistant Director-General (FFC), ICAR, said the change in climatic patterns is affecting the farmers resulting in lower agriculture output. Farmers in rain-fed areas are the worst affected and more than 60 per cent of the farmers practice rain farming. Besides, the changing climate has also impacted the livestock sector as drought has impacted the quality of fodder and output, besides land degradation.

Though India has achieved food security in foodgrain production and horticulture output exceeding 330 million tonnes, it is predicted that output of crops such as rice, wheat and maize may decline by 2050 due to the impact of climate change. "We have to think of other resilient crops to cope with the future demand" Pradhan said. Maize, which requires less water, can help meet the demand for ethanol sector, without hurting the interests of the poultry sector, he said.

B Dayakar Rao, Director, Nutrihub, ICAR-Indian Institute of Millets Research, Hyderabad, said in the context of climate change, it was very important to consider alternative crops such as millets. "There is a great scope to bring back the millets and potential to target them as climate resilient crops," Rao said.

BK Singh, Director, BKC Aggregators Pvt Ltd and ex-founder of Skymet, said offering plot-specific advisory services to farmers, depending on the stage of the crops, can help tackle climate change. Ground-level data is very crucial for offering crop advisory. However, ground-level data availability is scarce and Skymet has set up some 8,000 weather stations to improve the crop advisory and has been working with other agencies to improve the forecast, he said.

OUTREACH TO TALIBAN-LED GOVT IN KABUL

India Sends Pesticides to Afg to Ensure Food Security

Dipanjan Roy Chaudhury

New Delhi: In an outreach to the government in Kabul, India has sent 40,000 litres of Malathion, a pesticide, to Afghanistan through Iran's Chabahar port.

The pesticide is used to fight the locust menace. Malathion is an environment-friendly pesticide and best suited for arid regions. The Indian assistance will ensure food security in Afghanistan and Central Asia, according to the Afghan ministry of agriculture and irrigation. The Afghan ministry expressed its gratitude towards India and said that the assistance will assist to fight locusts within the country and prevents those coming from Tajikistan, Uzbekistan and Turkmenistan.

India has been continuing its humanitarian assistance for the people of Afghanistan, ranging from the supply of wheat to cope with an unprecedented food shortage to the provision of materials for drug rehabilitation camps run by the UN. The Indian government has partnered with the United Nations World Food Programme for the internal distribution of wheat within Afghanistan.

Under this partnership, India has supplied 47,500 metric tonnes of wheat as assistance to UNWFP centres in Afghanistan.

Market litmus may turn red for chemicals sector

Further downgrades on the cards as lukewarm demand may weigh on Q3 showing

RAM PRASAD SAHU
Mumbai, 14 January

The chemicals sector's recovery could be delayed until FY25 if the current trends of weak demand and flat pricing continue. Following a subdued September quarter, the revenue and profit performance of listed chemicals companies are anticipated to fall short of initial expectations of an improvement.

Despite some price stability, the demand trajectory remains uncertain. A disappointing Q3 and ongoing demand issues could lead to further downgrades for companies in the sector.

Specialty chemical majors, after a 17 per cent year-on-year fall in revenues in the September quarter, are expected to report an 18 per cent drop in the top line in the December quarter. The combination of weaker volumes and margin pressure could result in a 34 per cent decrease in operating profit and a 45 per cent decline in net profit. Swarnendu Bhushan of Prabhudas Lilladher Research suggests that while destocking seems to be broadly over, demand remains elusive, raising the possibility of more severe earnings cuts for chemical companies, at least for another year.

Other brokerages also underscore the weakness in demand, but note some relief due to stable product prices. Global chemical demand continues to be weak due to the ongoing economic slowdown in Europe (the largest target market for Indian industrial chemicals), inflationary trends in the EU/US (leading to a decline in consumer demand and industry inventory rationalisation), and overall weakness in China (the world's largest chemical producer). As a result, production levels in these major economies remained below pre-Covid levels during Q3, according to PhillipCapital Research. Given the limited manufacturing and lack of visible Chinese export aggression, along with selective demand recovery, chemical prices have either stabilised or slightly increased, says Surya Patra of the brokerage.

On-the-ground demand in the chemicals sector remains muted across multiple segments. While there are limited signs of recovery in discretionary spending areas like pigments and polymers, textiles and dyes remain weak. Non-discretionary spending areas like agri and pharma are still weak, with sentiment expected to improve from H1FY25, according to Emkay Research. The brokerage has an "add" rating on SRF and Anupam Rasayan India, a "reduce" rating on Navin Fluorine International, and a "sell" on Gujarat Fluorochemicals.

Among larger listed players, SRF's operating profit is expected to grow by 3 per cent sequentially due to margin improvement in the chemicals and packaging business. SRF's chemical sales are likely to be down 2 per cent sequentially due to weak sales of refrigerant gases, thus offsetting a slight recovery in specialty chemical sales. Navin Fluorine is expected to grow 7 per cent quarter-on-quarter, mainly due to deferred CDMO sales from Q2FY24 and a gradual improvement in specialty chemicals and HPP sales. JM Financial Research expects Navin's operating profit margin to be 22.7 per cent (20.8 per cent in Q2FY24) because of the higher contribution of HPP and CDMO sales.

The sector's weak performance and near-term outlook may lead to a correction in stock prices. Kotak Institutional Research expects Tata Chemicals, SRF, Navin Fluorine, and Atul to register the sharpest year-on-year declines, and also quarter-on-quarter declines. Given that the stock prices of most chemical companies have risen in anticipation of results, negative surprises on the earnings front could potentially trigger corrections, according to analysts led by Abhijit Akella of the brokerage.

There are limited signs of recovery in areas like pigments and polymers; textiles and dyes remain weak

PhillipCapital Research maintains a neutral to negative stance on the sector, as the recent sector rally has outpaced earnings recovery and the real recovery in chemical demand could be a protracted process. The brokerage has downgraded SRF to "neutral" based on the visible earnings miss.

UNDERWHELMING
Q3FY24E (Y-o-Y chg in %)

	Revenue	Operating profit	Margin change (bps)	Net profit
SRF	-6	-22	-433	-38
Tata Chemicals	-7	-16	-217	-19
Navin Fluorine International	-11	-29	-561	-41
Atul	5	-7	-158	2
Aarti Industries	-6	-11	-84	-26
Anupam Rasayan	-11	-14	-88	-19
Archean Chemical	0	-16	-698	-4
Clean Science	-19	-24.4	-300	-30.2
Galaxy Surfactants	-11.8	-25.3	-218	-34.9
Tatva Chintan	-17.1	11.7	515	-22.4

E: Estimates; bps: basis points

Sources: IIFL Research, JM Financial Research

Use of agro-weather forecast raises crop yield, cuts carbon emission

VIJAY MOHAN
TRIBUNE NEWS SERVICE

MANAGING CROPS THE SMART WAY

Adopters of the bulletin are able to increase their rice and wheat productivity by 2.25-3.75 quintals and 1.75-4.50 quintals per hectare, respectively, by managing crops in the climate smart mode like scheduling land preparation, timely sowing and spraying pesticides as per the predicted weather for the next four-five days.

CHANDIGARH, JANUARY 21

Farmers adopting the Agromet Advisory Bulletin (AAB) issued by the Met office for cultivation have been able to increase the productivity of rice and wheat crops, leading not only to enhanced economic benefits, but also reducing environmental risks, a study has revealed.

"Adopters of the AAB were able to increase their rice and wheat productivity by 2.25-3.75 and 1.75-4.50 quintals per hectare, respectively, by managing crops in the climate smart mode like scheduling land preparation, timely sowing and spraying pesticides as per the predicted weather for the next four-five days," the study states.

Analysis revealed that by using AAB, farmers could generate more income — Rs 4,100-7,000 per hectare for rice and by Rs 3,200-9,200 per hectare for wheat, the study published by the India Meteorological Department (IMD) this month claimed.

Crop production is a direct output of manageable (agronomic) and unmanageable (weather) inputs. Farmers can cut down losses due to aberrant weather conditions by following weather forecasts.

The IMD is providing AAB based on eight climatic parameters at district and block level under the All India Coordinated Research Project on Agrometeorology-National Innovations in Climate Resilient Agriculture.

The agriculture sector contributes about 18 per cent of the GDP in India and 25 per cent of the GDP of Punjab. It is highly vulnerable to weather aberrations, besides being a major source as well as a sink for greenhouse gases.

Titled "Mitigation and Risk Management of Climate Change in Crop Cultivation Through the Adoption of Agromet Advisory Bulletin in NICRA-Adopted Villages in Punjab," the study has been conducted by experts from the Department of Climate Change and Agricultural Meteorology, Punjab Agricultural University, Ludhiana.

Three villages in Fatehgarh Sahib and Rupnagar districts were selected for the study. A survey of 110 farmers was conducted, among whom 70 were marginal or small farmers and 40 were medium farmers, who adopted the information given by AAB.

Analysis revealed that 65-93 per cent farmers benefited by managing biotic stresses, 65-85 per cent benefited from irrigation management, 75-78 per cent by adjusting sowing and 62-65 per cent benefited by nutrient management.

The study showed that the expenditure borne by AAB adopters was Rs 690-3,750 per hectare on rice and Rs 320-1,670 per hectare on wheat, which was significantly lower than that of non-adopters.

"Farm inputs such as seeds, fertilisers, irrigation water and biotic stress management are becoming costlier and so scientific application and judicious management can reduce input cost, which actually enhances the cost-benefit ratio," the study states.

In the present study, it was estimated that 29.1 metric tonnes of carbon dioxide emissions were reduced from 211.3 hectare of rice area by the adoption of AAB by farmers.

Crop-killing weeds advance across US farmland

REUTERS
16 January

Crop-killing weeds such as kochia are advancing across the US northern plains and Midwest, in the latest sign that weeds are developing resistance to chemicals faster than companies including Bayer and Corteva can develop new ones to fight them.

In many cases weeds are developing resistance against multiple herbicides, scientists said.

Reuters interviewed two dozen farmers, scientists, weed specialists and company executives and reviewed eight academic papers published since 2021 which described how kochia, waterhemp, giant ragweed and other weeds are squeezing out crops in North Dakota, Iowa, Wisconsin and Minnesota as chemicals lose their effectiveness.

Over the last two decades, chemical companies have reduced the share of revenue devoted to research and development spending and are introducing fewer products, according to AgbioInvestor, a UK-based firm that analyses the crop protection sector.

Farmers say their losing battle with weeds threatens grain and oilseed harvests at a time when growers are grappling with inflation and extreme weather linked to climate change.

"We're in for big problems over the next 10 years for sure," said Ian Heap, director of the International Survey of Herbicide Resistant Weeds, a group of scientists in over 80 countries that maintains a global database. "We are in for a real shake-up." The database records reduced effectiveness for glyphosate, one of the most common herbicides, against 361 weed species, including 180 in the US, affecting corn, soy, sugar beets and other crops.

ROOT OF THE PROBLEM

- In many cases, weeds are developing resistance against multiple herbicides
- 21 weed species globally showed resistance to dicamba, the most recent major US chemical, launched in 2017
- Environmental groups argue that farmers should embrace natural weed-control methods instead of chemicals

Some 21 weed species globally showed resistance to dicamba, the most recent major US chemical, which launched in 2017.

Environmental groups argue that farmers should embrace natural weed-control methods instead of chemicals.

Kochia, which spreads as many as 30,000 seeds per plant, can cut yields by up to 70 per cent if left unchecked, according to Take Action, a farmer resource program of the United Soybean Board.

Other factors, including the development of more robust seeds, have pushed overall global crop yields higher. But scientists expect weed problems to worsen, with some weeds showing resistance to chemicals even on first exposure.

Really scary

In Douglas, North Dakota, farmer Bob Finken sprayed dicamba and glyphosate to kill late-season weeds. Neither product eliminated kochia.

"That was really scary," said Finken, 64. "Each year seems to get a little worse." Finken was forced to clear the weeds with harvesting equipment, which risks clogging expensive machinery.

PAU develops 2 new varieties of potato

TRIBUNE NEWS SERVICE

LUDHIANA,

Punjab Agricultural University (PAU) has expanded its research focus and included genetic improvement of the potato crop. The university has unveiled two new potato varieties, Punjab Potato 101 and Punjab Potato 102.

PAU's Vice-Chancellor Dr Satbir Singh Gosal said it is anticipated that the newly developed potato varieties would substantially benefit state's potato growers by improving yields, thereby enhancing farmers' incomes.

He underscored the state's crucial position as the 6th largest contributor to national potato production, generating over 3.0 million tonnes annually from 1.07 lakh hectares of land. He acknowledged Punjab's key role as the major disease-free seed producer, meeting 90% of the country's total disease-free seed potato requirement. In doing so, he emphasised the potato's vital role as a cash crop, significantly enhancing farm income, creating employment opportunities, and ensuring food security for the state.

Dr Ajmer Singh Dhatt, Director of Research at PAU, shared insights into the university's innovative potato breeding program initiated in 2016. He said that after years of unwavering dedication, Dr Sat Pal Sharma and his team achieved a significant breakthrough in 2023. For the first time since its inception, PAU introduced two high-yield potato varieties, Punjab Potato 101 and Punjab Potato 102, distinguished by their white and light yellow flesh, respectively. Both varieties are deemed suitable for main-season cultivation, Dr Dhatt added.

Experts stress organic fertilizers to preserve fertility

STAFF REPORTER
RAJNANDGAON

Experts have stressed the need to use organic fertilizers to preserve the fertility of the soil and boost production.

They also urged the framers to adopt crop rotation along with crop residue management.

Dr. Akhilesh Tripathi called upon them to use modern technology in farming and urged students to spread awareness.

He also inspired researchers and agricultural scientists to research weather forecasting. They said this at a workshop at the Pt. Shiv Kumar Shastri Agricultural College and Research Centre in Rajnandgaon district on Saturday At the workshop, training was imparted to farmers on adopting modern technologies in farming.

The Agricultural Employees Union released the 2024 Almanac.

Urgent need to inculcate soil restoration and climate-resilient practices: Report

'The soil degradation crisis has been plaguing India for the past several decades'

The Hindu Bureau
BENGALURU

Firefly Life Sciences, a city-based company specialising in soil health and nutrition management, in a recent report, has emphasised the urgent need to inculcate soil restoration and climate resilient practices into the country's agricultural policy.

The report titled 'Soil Restoration and Climate Resilient Agricultural Frameworks to Safeguard India's Food Security' argues that soil restoration and climate resilience (SRCR) need to be put at the forefront of India's agricultural paradigm and policy.

"Soil is fundamental to all living organisms and therefore compromised soil will enfeeble all the organisms and interconnected ecosystems dependent on it. Restoring soil and inculcating climate resilience needs to combine traditional and contemporary knowledge and technologies to create robust agricultural practices that can face up to the rapidly growing environmental challenges," states the report.

The report also highlights the potential challenges that could arise in moving towards SRCR - namely, lack of knowledge and awareness, high initial costs, and market barrier. MURALITHARAN A.

The report also highlights the potential challenges that could arise in moving towards SRCR - namely, lack of knowledge and awareness, high initial costs, market barriers, cultural and social resistance and policy and regulations. Besides suggesting that they need to be considered and accounted for to allow a successful conceptualisation and execution of SRCR.

"The soil degradation crisis has been plaguing India for the past several decades. While the methods ushered in by the Green Revolution helped India attain food security, its excesses have emerged in the decades since. One of the major repercussions of this is soil degradation," said Nandita Abreo, founder and director, Firefly Life Sciences.

Ms. Abreo added that due to its weakened soil, India's agricultural production is especially vulnerable to climate change and that this can pose a severe threat to the country's future food security.

The report also said that true climate resilient farming must account for the trade-offs between the pillars of productivity, adaptation and climate mitigation, and strive to find a context-specific balance between these three core objectives of SRCR.

Ban on commercial release of GM crops against national interest: Govt to SC

Making a strong case for growing genetically modified (GM) crops for enhanced food security, the Centre on Thursday told the Supreme Court that India is already importing huge quantities of edible oil extracted from genetically altered oilseeds for domestic consumption and "unfounded fears" of their adverse impact is hurting farmers, consumers and industry.

The apex court reserved its order on a plea seeking moratorium on release of genetically modified organisms into the environment

The Supreme Court reserved its order on a pleas seeking moratorium on release of genetically modified organisms (GMOs) into the environment.

Solicitor General Tushar Mehta, appearing for the Centre, told the court that approximately 55-60 per cent of edible oil consumed in India is imported. "Strengthening of plant breeding programmes including the use of new genetic technologies such as genetically engineered technology is critical for meeting emerging challenges in Indian agriculture and ensuring food security while reducing foreign dependency," Mehta told a Bench of Justices B V Nagarathna and Sanjay Karol. The law officer told the court the total edible oil demand in India in 2020-21 was 24.6 million tonnes while domestic availability stood at 11.1 million tonnes.

"In 2020-21, 13.45 million tonnes (54 per cent) of our total edible oil demand was met through import worth about ₹1,15,000 crore, which includes palm oil (57 per cent of total oil import), soybean oil (22 per cent), sunflower oil (15 per cent) and a small quantity of canola quality mustard oil. In 2022-23, 155.33 lakh tonnes (55.76 per cent) of our edible oil demand was met through import," Mehta said. PTI

33 samples of seeds, fertilisers, pesticides fail quality test

PARVEEN ARORA
TRIBUNE NEWS SERVICE

KARNAL, JANUARY 18

Thirty-three samples of seeds, fertilisers and pesticides have fallen short of quality standards across the district over the past nine months, according to the data of the Agriculture and Farmers Welfare Department.

The revelation has raised concerns about the quality of agricultural inputs in the region, causing losses to farmers.

In all, 436 samples were collected for verification by the department. These included 165 samples of seeds, 96 of fertilisers and 175 of pesticides. Nine samples each of seeds and fertilisers and 15 of pesticide were identified as substandard or misbranded.

"We collect samples of seeds, fertilisers and pesticides periodically to check their quality. In the current financial year, out of the 436 samples, 33 were found to be either substandard or misbranded. Notices were also issued to the manufacturers," said Dr Wazir Singh, Deputy Director Agriculture (DDA).

436 COLLECTED

- In all, 436 samples were collected for verification by the department
- These included 165 samples of seeds, 96 of fertilisers and 175 of pesticides
- Nine samples each of seeds and fertilisers and 15 of pesticide were identified as substandard or misbranded

The department has suspended the licences of 11 traders who allegedly failed to maintain the record of their stock, he added.

The authorities concerned assert that they regularly monitor the quality to ensure that farmers receive only high-quality seeds, fertilisers and pesticides. The DDA said, "Farmers are advised to purchase agro-inputs from licensed shopkeepers only and also obtain receipts for their purchases."

Farmers have already highlighted this issue, emphasising the need for enhanced monitoring and regulatory measures to guarantee the quality and authenticity of essential agricultural inputs.

Fertiliser subsidy bill likely to be within FY24 BE

This is 3/ per cent less than the expenditure in FY23

Govt committed to safe use of GM crops, Centre tells SC

BHAVINI MISHRA
New Delhi,

The government told the Supreme Court on Wednesday that it was committed to the safe use of genetically-modified (GM) crops and "accordingly robust evaluation systems are in place". Bt cotton was approved in 2002 after an elaborate safety-assessment exercise spanning over seven years, the Centre said.

The court is hearing public interest litigations challenging the environment ministry's decision to approve the commercial cultivation of GM mustard.

This is the first time that a GM food crop is set to be commercially cultivated. On the third day of hearing, the Centre told the apex court that India has a robust regulatory framework in place for the regulation of genetically-modified organisms (GMOs) and products thereof.

"The approval to Bt cotton and Bt brinjal by Review Committee on Genetic Manipulation (RCGM) and Genetic Engineering Appraisal Committee (GEAC) has been accorded on the basis of an elaborate set of guidelines and procedures.

These guidelines are based on state-of-the-art international guidance developed after years of consultations by agencies like FAO, WHO, OECD and Codex Alimentarius," the government said in its filing.

The court, on January 11, had expressed displeasure at the GEAC for not considering recommendations of the court-appointed Technical Expert Committee (TEC) before taking its decision in October 2022 to release the GM mustard variety into the environment. The TEC had made certain recommendations, with one member dissenting.

The Centre, represented by Attorney General for India R Venkataramani, had told the court that the GEAC had not considered the committee's report as there was no legal requirement for it to consider such reports.

It should be noted that the release of the GM Mustard was put on hold after the Court asked the Centre to maintain status quo in November 2022.

The Centre also said that the regulatory mechanisms have not faltered and acted in a most transparent manner.

No stubble solution yet, but design tweak to surface seeders may help

Termed Viable Alternative For Small Farmers

Vibhor.Mohan@timesgroup.com

Chandigarh: Most farmers in Punjab who used surface seeders to clear their fields of paddy stubble for the first time in November last year, see it as a viable alternative for small farmers, but those who used cheaper, smaller variants are not satisfied with the equipment's wheat-sowing function and are hoping for modifications in the design.

Surface seeders, which use the mulching technique, are one of the alternatives being suggested to farmers to avoid straw burning.

After Punjab Agricultural University (PAU) came up with the surface seeder last year, farmers who were impressed by it in trials by the agriculture department either borrowed it from farm societies or bought it on subsidy. However, since a section of farmers were apprehensive that it may not be effective in sowing wheat at the right depth, the expected enthusiasm for machine is missing in the first season of its introduction. The price of the surface seeder ranges between Rs 70,000 and Rs 1,05,000. Farmers who use the high-end versions got better results – the 6-foot variant did a better job than the 5-foot variant.

Gurdial Singh, a farmer from Sallopur village in Gurdaspur, said the farm producers' organisation of his village bought three surface seeders and the machines were used over 50 acres this season. "We made a conscious decision to buy only quality equipment. It is important not to use it on fields with stagnant water or loose soils. Results are better than mulching using a reaper. Surface seeder chops the stubble in a better way. I have tried all three crop residue management machines – happy seeder, super seeder and now surface seeder. Super seeder is a heavier machine and can be used over 5-6 acres in a day, but the surface seeder covers 10-12 acres, and too with a smaller tractor," he said. Daljeet Singh, a farmer from Lasara village in Jalandhar's Phillaur, said, "The new equipment comes with low input cost and can be attached to a small tractor. However, it frequently broke down and needed repairs. Also, wheat sowing os not up to the mark and the design needs to be upgraded based on feedback from farmers," he said.

Price of a surface seeder ranges from Rs 70,000 to Rs 1.05 lakh

Avtar Singh from Phillaur added that in 2022, he had gone for mulching of paddy stubble using a reaper, but opted for surface seeder after the last paddy season. "The surface seeder is beneficial to farmers, but wheat sowing is not on expected lines," he said.

Amandeep Singh, a farmer from Bahmniwala village in Fazilkasaid he bought the surface seeder for Rs 95,000, but farmers who went for the smaller version faced problems. "It consumed 3-4 litres (of diesel) for one acre and proved to be cost effective," he said.

Sandeep Singh of Budhi Mall village in Muktsar, said, "It is important to buy the right equipment for good results. I purchased it for Rs 82,000 and am waiting for the subsidy refund. The difference was in the size and I went for the smaller version. One problem I faced is that it is difficult to add urea to the wheat crop after using it. It is ideal for farmers with small landholdings" he said.

Can technological advancements revolutionise agriculture in northeastern states?

NARENDRA SARAWGI

Agriculture is the most important sector for the socio-economic development of the north-eastern region, as it provides the maximum contribution to the region's net domestic product, employment, and livelihood.

Despite the heavy dependence on it, agriculture in the region suffers from several problems, including small and scattered land holdings, monocropping, low mechanisation and productivity, post-harvest losses, poor market linkages, subsistence farming, etc.

Besides food security, sustainability is a major challenge facing agriculture in the northeast region. Conservation of natural resources and adopting sustainable agricultural methods are critical needs. Reducing environmental impact while increasing productivity is a major challenge.

ROLE OF TECHNOLOGY

The answers to many of the challenges and ensuring sustainability in agriculture, more so in the N.E. region, lie in the continuous technological innovation and smart deployment of the same, which are being driven by automation and precision farming.

Digital technologies such as robotics, drones, artificial intelligence (AI), the internet of things (IoT), big data, blockchain, remote sensing, GIS, etc. are transforming agricultural value chains world-wide. The new technologies cut costs, improve efficiency, help reduce wastage of crops and food, create more opportunities in the value chain, and are environmentally sustainable.

SOME IMPORTANT APPLICATIONS OF TECHNOLOGY IN AGRI-HORTI VALUE CHAINS ARE:

Artificial Intelligence: AI can generate real-time actionable insights to help improve crop yield, optimise water usage and energy consumption, control pests, assist in soil screening, provide actionable data for farmers, and reduce their workload.

Blockchain: It enables tamper-proof and precise data about farms, inventories, quick and secure transactions, and food tracking.

Drone Technology: Enables surveying of large areas and data collection to generate better insights; frequent and cost-effective remote monitoring of crops and livestock; analysis of field conditions; and determination of appropriate interventions such as fertilisers, nutrients, and pesticides.

Geographical Information System and Remote Sensing: Helps in analysing the potential of irrigation projects and their impact on land degradation, erosion, and drainage; detection of pests and diseases; monitoring soil condition, etc.

Internet of Things: This is used to monitor and predict light, humidity, soil moisture, temperature, crop health, etc., rainfall, temperature, and other

TECHNOLOGY ADOPTION IN INDIA AND THE N.E. REGION

The start-up boom in recent years in India has seen the establishment of many agri-tech enterprises. According to NASSCOM, there were around 450 agritech startups in India in 2022, with the number growing at 25 per cent year-on-year. It is reported that agritech startups in India offer a $24 billion opportunity.

Progressive farmer entrepreneurs are using these technologies for spotting and controlling crop disease, optimum application of water, fertilisers, and other inputs, forecasting yield, and so on.

SOME IMPORTANT DIGITAL INITIATIVES OF THE GOVERNMENT OF INDIA ARE:

Unified Farmer Services Interface: In June 2021, the Ministry of Agriculture and Farmers Welfare signed an MoU with Microsoft to create an IoT-based 'Unified Farmer Services Interface'. This is a part of 'AgriStack'—a unified platform to provide end-to-end services across the agriculture food value chain to farmers—by creating unique IDs for farmers across the country.

Digital Agriculture Mission 2021–2025: In September 2021, the Union Agriculture Ministry announced the Digital Agriculture Mission 2021–2025 by signing MOUs with CISCO, Ninjacart, Jio Platforms Limited, ITC Limited, and NCDEX e-Markets Limited (NeML) to support agriculture based on new technologies, such as AI, block chain, remote sensing, GIS, drones, and robots.

National Agriculture Market (eNAM): This is a pan-India electronic trading portal that links the Agricultural Produce Market Committee (APMC) mandis.

Direct Benefit Transfer (DBT) Central Agri Portal: The DBT Agri Portal is a unified central portal for agricultural schemes across the country, helping farmers adopt modern farm machinery through government subsidies.

The technology adoption in agriculture in the north-east is very low, and very few agri-tech startups have come up in the region. However, some notable new-age technology-based start-ups from the north-east region have developed the following excellent solutions:

A multi-lingual, artificial intelligence-based application for managing farm activities on a smartphone or computer; a solution for contract farming and farm mechanisation; a smart logistics solution for buying agri-inputs as well as selling the product directly to the markets; a digital platform to facilitate easy access to affordable financial services such as farm loans, crop insurance, livestock insurance, etc.; technology for plant tissue culture and microbial products.

The successful adoption of new-age agriculture technologies in the northeastern states will depend on their cost, ease of operation and maintenance, and government initiatives. A holistic multi-stakeholder approach and ecosystem, mechanisms such as public-private partnerships (PPP), and government support are the critical success factors.

The writer is a senior policy advisor in the Government of Assam

COMING APART AT THE SEAMS

Why is India's cotton dream turning sour?

SANJEEB MUKHERJEE
New Delhi, 11 January

A few days back, Atul Ganatra, president of the Cotton Association of India, presented a grim scenario of the crop's prospects in the 2024-25 season that starts in October. Addressing the association's annual general meeting, Ganatra said the area under the crop could go down by at least 10 per cent in the coming season due to falling yields and realisation, leading to farmers losing interest.

The fear of a decline in acreage comes against the backdrop of India's cotton production probably falling to its lowest in a decade, according to estimates. After 2002, cotton output had jumped sharply due to increasing area under cultivation as well as the yield per hectare rising from 200 to 300 kg to 450-550 kg in a short few years, thanks to genetically modified Bt seeds.

Exports, too, started looking up, touching nearly 13 million bales in 2011-12 — the highest since 2000-01 (1 bale = 170 kg). Imports dropped, and the country was on its way to becoming self-sufficient in cotton. Farmer incomes rose as Bt Cotton, while increasing the yield, also reduced the expenditure on pesticides.

Somewhere along the way, things started to fall apart at the seams.

Threat of the worm

"The Technology Mission on Cotton (TMC-I) launched by the Government during 2000-01 played an instrumental role in increasing both the yield and acreage of cotton cultivation... However, after the conclusion of TMC-I and in the lack of proper technological interventions and appropriate seed technology in the cotton sector, India's cotton production declined," the Confederation of Indian Textile Industry (CITI) said in a note shared with *Business Standard*.

Bhagirath Choudhary, founder and director of the South Asia Biotechnology Centre, Jodhpur, who has tracked the sector from close quarters, says in the last few years cotton production is passing through a phase of deceleration. He adds that data variability, collective scientific ambiguity, and uncertainty on cotton trade policy, cotton seed price control, and low market prices are some of the factors fuelling the frustration among growers, ginners, yarn and textile manufacturers.

"The repeated outbreaks of pink bollworm across three cotton growing zones is another wakeup call," says Choudhary.

The first outbreak of pink bollworm was reported in 2013-14, in Gujarat from where it has quickly spread. It is now one of the biggest threats to infect cotton farms in India and worldwide, and can inflict damage to the extent of 55 per cent and reduce seed cotton yield to an extent of 35 to 90 per cent. It affects primarily the lint quality. Its infestation is reported to cause rosette flowers, flowers dropping, and premature opening of bolls resulting in stained immature fibre and deteriorate the quality of cotton production.

"It is our collective failure in the policy prescription at three levels, which resulted in the PBW developing the resistance to Bt protein," Choudhury adds.

He lists the failures as non-implementation of refuge strategy (planting of non-Bt cotton around Bt cotton plot, rather than quickly adopting to Refuge-in-Bag strategy), lack of mandatory requirement for the expression of maximal Bt protein in approved Bt cotton hybrids, and finally, the approval of large numbers of Bt cotton hybrids, which made it difficult to inspect and maintain quality.

All these, according to Choudhury, are spiralling the cotton crisis into a fireball for rural communities that is threatening their income and livelihood.

Since 2002, no new Bt technology has been introduced in India for cotton, which has also spawned a big market for illegally developed Bt that is causing more harm to farmers. The problems are not just in production; millers and ginners, who had embarked on a massive expansion drive, adding new spindles almost every year, are staring at a problem, as dipping domestic production is pushing up reliance on imports.

"It is a time to double our resolve to intensify research, increase investment, develop collaboration in real sense, and accelerate transfer of technology to address insurmountable challenge in cotton production system induced by climate change, tech fatigue, dwindling growers' confidence, lack of tech approval and policy paralysis," Choudhury says.

CITI, too, advocates a second Technology Mission on Cotton (TMC-2) that will rest on advanced seed technology (high yield and international fibre quality parameters herbicide tolerant, high-density planting, Extra Long Staple cotton, drought tolerant, sucking pest tolerant, etc). It also pressed for adopting global best practices for seed sowing, agronomy, harvesting, handling, ginning and pressing and a mission mode approach with sizable budget allocation for seed and agronomy technology, technology transfer, and clean cotton (least trash, low short fibre content and contamination free).

In June 2023, the regulator for GM crops, the Genetic Engineering Appraisal Committee, asked the developer of Bollgard-2 Roundup Ready (BG-2 RRF), Mahyco Private Ltd, to present a fresh dossier about the hybrids efficacy claims against certain targeted pests and also a new socio-economic analysis of them.

Experts in the field expressed the fear that it could further delay the commercialisation of the updated variant of Bt cotton at a time when illegally grown Bt has been flooding the market. The regulator, though, approved field trials of other genetically engineered cotton hybrids having cry2Ai gene for resistance against pink bollworm. Here, too, the progress was expected to be limited, as states where these trials are to be conducted were not keen to give the mandatory no-objection certificate.

Medium staple country

With the increased usage of Bt, India has largely become a medium-staple cotton country and extra staple cotton that goes into the production of high-value fabric needs to be imported. Extra Long Staple (ELS) cotton is usually between 32 and 36 millimetre in length.

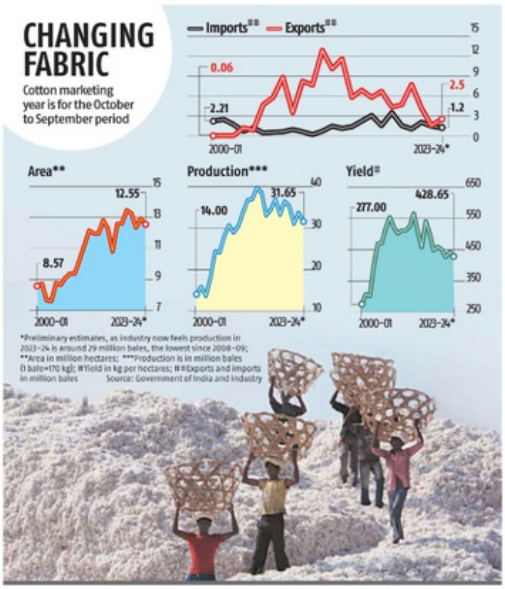
In India, out of the nearly 33 million bales of cotton produced in the 2022-23 season, which started in October last year, the majority is between 26 and 30 mm. Of this, almost 80 per cent is 29 mm, which is considered medium-grade. In India, out of the total domestic consumption of around 31 million bales, consumption of ELS cotton is just around 1 million bales.

As Choudhury explains, all Bt cotton hybrids are based either on medium staple length (24.5-25.5 mm) or long staple length (29.5-30.5 mm). Extra Long Staple (32.5 mm) remains the niche, used to produce high-value fabrics.

CITI, meanwhile, said farmers were reluctant to grow ELS because of its limited market access. "While government initiatives exist to promote its cultivation, the participation from the farming community is low so far because of many reasons," it said.

Last year, the government came up with a pilot project on cotton to augment the supply of cotton, especially Extra Long Staple, with three technology interventions. These include high-density planting and closer spacing planting in low-productivity areas, and a production technology for ELS cotton in niche areas under irrigated farming.

However, unless the first part of upgrading the technology is addressed, the other things might remain a pipe dream.



IMAGE(S): AMIT MUKHARJEE

'2023 was mixed for plantation sector with price recovery in some crops'

V Sajeev Kumar
Kochi

The year 2023 was a mixed one for the plantation sector with price recovery noticed in the case of pepper and cardamom, while coffee prices sustained but at a lower level compared with the previous year. The scenario in tea and rubber was completely different with prices declining steeply and below the cost of production, according to C Shreedharan, President, United Planters Association of Southern India (Upasi).

The main reason for the decline in prices in tea has been excess supply in the global market vis-a-vis the lower export demand due to global headwinds whereas in rubber, various factors such as declining demand from China the major consumer, lower oil prices, global economic crises

Tea production till October 2023 was lower by 3.28 mkg at 1,163.06 mkg

are contributing factors, he said.

LOSING STEAM

In tea, he said Indian production till October 2023 was lower by 3.28 million kg (mkg) at 1,163.06 mkg. Tea exports were lower by 8.19 mkg.The main reason was lower exports to Iran with the quantum of exports declining from 18.64 mkg to 3.77 mkg in 2023. Similarly, Russia's intake from India declined by 5.51 mkg and UAE by 4.42 mkg.

In coffee, the post-blossom production estimate for 2023-2024 was placed at 3,74,200 tonnes, which is lower than the post-blossom estimate of 3,93,000 tonnes during 2023. Exports registered a decline of 0.17 lakh tonnes (lt) and were estimated at 3.96 lt in 2022-23 against 4.14 lt achieved during the previous year.

In rubber, the Upasi president said the domestic production during 2022-23 was estimated at 8.39 lt whereas the consumption was estimated at 13.50 lt. During the current year — 2023-24, as per Rubber Board projections, the production is estimated to be higher at 8.70 lt whereas consumption is estimated to increase to 14.1 lt. Natural rubber prices during 2023 declined to ₹149.39 per kg from ₹162.21 per kg reported in 2022, a decline of 8 per cent.

IISR develops new granular lime-based formulation

Our Bureau
Kochi

ICAR-Indian Institute of Spices Research, Kozhikode has developed a new granular lime-based Trichoderma formulation, a fungal biocontrol agent.

The formulation named 'Tricholime', integrates Trichoderma and lime into a single product, making the application easier for farmers.

Controlling soil acidity is crucial for obtaining optimal yields from crops, as excess acidity can affect the availability of essential plant nutrients, adversely impacting crop productivity. Lime has traditionally been employed to counteract soil acidity, but simultaneous application of lime and beneficial microorganisms like Trichoderma is not generally recommended.

'Tricholime', integrates Trichoderma and lime into a single product

Farmers have to wait for a period of two to three weeks before incorporating other beneficial micro-organisms in the soil.

FIGHTING PATHOGENS

Trichoderma, being a fungal biocontrol agent, has proven effective in suppressing several soil-borne plant pathogens and serves as a successful bio-pesticide and bio-fertilizer in crop production. Recognizing the Trichoderma and the challenges posed by traditional lime applications, the scientists at IISR developed 'Tricholime' to integrate lime and Trichoderma.

Tricholime can successfully eliminate the need for a time-consuming two-step process.

This lime-based formulation neutralizes the soil acidity while promoting plant growth and shields crops from soil-borne pathogens, all in a single application, said R Dinesh, Director, ICAR-IISR, and one of the inventors of this formulation technology along with V Srinivasan, R Praveena and S J Eapen.

This formulation also benefits the crop by improving the physical condition of the soil, enhancing secondary nutrient availability and boosting soil microbial activity, he added.

IISR hopes that the technology behind this product can also be extended to include other beneficial bioagents, opening new possibilities in product development to support sustainable organic farming.

How India, EU can make FTA negotiations fruitful

JOHN A CLARKE
EX-DIRECTOR, INTERNATIONAL AFFAIRS, EUROPEAN COMMISSION

EUROPE goes through regular spasms of trade scepticism. It is happening now too as the bloc struggles to redefine its relations with China, rows back on its climate agenda due to populist protests over green policies and keeps quiet about its free trade agenda — since we mustn't scare the horses before the European elections (whose influence, like Christmas, seems to arrive earlier and earlier each time).

Which is why commentators in recent weeks are bemoaning or celebrating the failure of this geopolitical commission's trade policy, with its meagre harvest of free trade agreements (FTAs) in four years (Vietnam, New Zealand and Chile).

So will the free trade negotiations now underway between the European Union (EU) and India fall victim to these anti-trade currents?

To answer this question, one needs to recall the curious gestation of these negotiations. Leaders, ignoring official advice, decided in May 2021 to relaunch negotiations that had started in 2007-08 and were suspended in 2013. In the years preceding the relaunch, officials met regularly to assess if conditions were ripe to restart, but concluded that they were not. The decision to resume negotiations, therefore, was clearly for geopolitical reasons: an early sign of Europe's Indo-Pacific tilt, a part of each region's post-Covid recovery strategy, and a recognition of the need to diversify markets and sources of supply.

The relaunch itself was a 'close-run thing', as the Duke of Wellington had said in the Waterloo's context. For 13 months, nothing happened. Each side accused the other of foot-dragging, lack of interest, etc. And once negotiations actually did start in 2022, lofty rhetoric soon gave way to haggling over the same subjects that had bedevilled 2013: agricultural and car tariffs, patent length, procurement, financial services, business visas for Indian entrepreneurs. The declared aim to conclude the negotiations in 2023 soon became a mirage. And of course, India has a poor track record of FTAs.

So, the scepticism is understandable. But the news of the FTA's demise is premature for two reasons. First, all negotiations are difficult, including FTAs — easy to start but very hard to finish (and knowing when to stop is the hardest call of all). So it is with EU-India, which is now entering what

CONNECT: PM Modi with European Commission President Ursula von der Leyen. Both the EU and India are aware that in today's volatile political climate, neither has a surfeit of friends. PTI

negotiation theorists call the standard 'mid-game' — getting down to the basics of trade, tariffs, rules, against the sweet sound of rolling-up of sleeves.

Secondly, both the EU and India know that in today's febrile political climate, where neither has exactly a surfeit of friends, they need to diversify. India can benefit from the stability and size of the EU market for its goods, services and professionals; the EU can make hay in the relatively untapped Indian market. The EU also needs a success story with India following multiple failures of its trade policy. The two sides — the world's biggest, albeit flawed, democracies — could partner on an agenda straddling economic and food security, connectivity, human development and the fight against climate change.

> It's time for Europe to reflect urgently on what is realistically possible, try to see the world from an Indian and Global South perspective and adjust its ambitions.

But for the FTA to succeed, at least two things must happen. First, India will have to make tough political calls and open some procurement, allow new service sectors and improve access for cars, dairy, wines and industry, notwithstanding its 'Make in India' motto.

Secondly, the EU will have to reduce its ambition several notches — on procurement, access to sensitive sectors, and above all on the 'sustainability' agenda.

To internationalise its net-zero 'Green Deal' aims, the EU has tabled a broad sustainability agenda, hoping that the leverage of 450 million consumers will entice India on board. That agenda encompasses health and safety, sustainable food systems and a chapter on sustainable development, committing the parties to adopt and enforce key human rights and environmental conventions — including their respective climate pledges.

This risks overloading the Indian boat. Whilst India is ready to make sustainability pledges in the best-endeavour framework of G20, it will not do so in a binding treaty subject to sanctions or withdrawal of trade concessions. The EU's agenda is easily painted as intruding into India's sovereignty: not just green protectionism, but even regulatory imperialism. With elections looming, India wants to avoid a debate on "sustainability with neo-colonial undertones".

The EU has not helped itself by introducing in parallel sustainability laws applicable to both imports and domestic products — the Carbon Border Adjustment Mechanism, which taxes imports that are not subject to greenhouse emission trading schemes, regulations on corporate due diligence up the supply chain, a prohibition on imports linked to forced labour, and now a regulation forbidding goods associated with deforestation. While well meant (and often necessary to tackle global problems), India sees this suite of rules as a Trojan horse to level the playing field for Europe's companies and farmers who face stringent environmental regulations from which 'dirty' imports are exempt.

At the very least, these measures are seen to impede market access. What is the value of a concession on soya or timber if the product cannot be sold in Europe at all due to its environmental footprint? Giving with one hand and taking away with the other?

So, we risk a deeply paradoxical situation whereby negotiations might stumble on an issue where India and the EU not only share the same fundamental goals, but where their cooperation in an increasingly unstable, divided world is more vital than ever. Both sides, especially Europe, need to keep the bigger geopolitical benefits of an agreement in mind, and adjust. Nobel laureate Amartya Sen, in his work *The Argumentative Indian*, described India's long tradition of dialectics, self-questioning and above all its capacious tolerance for others' views. If EU-India 2024 is to avoid repeating the misunderstandings of 2013, it is time for Europe to do the same — to reflect urgently on what is realistically possible, to try to see the world from an Indian and Global South perspective and adjust its ambitions. Perhaps the time has come for an 'argumentative European'.

Farmers to get iron, zinc-rich potato seed by January end

Bhavey Nagpal
nagpal.bhavey@hindustantimes.com

SHAMGARH (KARNAL): The mini tubers of a new variety of potato that is rich in iron and zinc contents, and is produced through a hi-tech technique in an insect-proof net by Potato Technology Centre (PTC) in Shamgarh, Karnal, will be out for farmers by the end of this month.

These mini tubers are naturally bred, miniaturised seed potatoes raised and multiplied under a greenhouse in virus-free conditions using aeroponics technique in soilless media.

Jitender Singh, subject matter specialist, said the quality seeds of the latest kufri uday variety developed through the technique will prove to be a boon for the farmers and the end consumer will be able to get highly nutritious potatoes.

The mini tubers are naturally bred, miniaturised seed potatoes. HT

"The variety, which is rich in antioxidants and has an attractive colour, is easy to cook. This is an early bulking variety than its competitor pukhraj and is suitable for the soil in the north Indian plains," he told the HT. The technique established at PTC is one of the largest in India and the only one in Haryana that is actively working in collaboration with Central Potato Research Institute, Shimla.

In comparison to net house production, the yield in aeroponics technique is four to five times higher and more tubers are obtained in less time, Singh said.

"Micropropagation of culture tubes procured from CPRI, Shimla, was conducted at our tissue culture lab facility and were hardened followed by transplanting at our aeroponics unit resulting in the production of high-quality mini tubers of potato seed. Generally, they grow up to five gm, but here we can also control its growth as per the requirement and takes at least 60 days to get ready. A farmer can directly sow up to 40,000 mini tubers per acre and later follow the process that will make it ready to be sold in the market," he added.

Agri officials said the north Haryana districts of Kurukshetra, Yamunanagar, Karnal and Ambala cover nearly 70% of the total state production, where other popular varieties, including kufri pukhraj, two varieties of kufri chipsona and kufri frysona are grown.

Jintender Mongia, deputy director, PTC, said "The mini tubers will also be showcased at the Potato Expo on January 12-13, likely to be attended the by agriculture minister. By the end of this month, farmers can buy seeds online or directly by coming to the centre."

Income vs price support: price deficiency payment option for MSP

HARISH DAMODARAN

FARMERS, FOR the most part, operate in a buyer's market. Since their produce — barring maybe milk — is harvested and marketed in bulk, it leads to sudden supply increases relative to demand, putting downward pressure on prices.

Such market conditions also mean farmers are price takers, not price makers. Lacking the market power to influence the prices of their produce, they sell at prevailing supply-and-demand-determined rates. Worse, while their crops are sold wholesale, they pay retail prices for everything they buy from fertilisers to soap.

It is not surprising that farmers demand minimum support prices (MSP) for their crops. As Lok Sabha elections approach, there could be a louder clamour for a "legal guarantee for MSP".

Price vs income support

Most economists oppose government-fixed MSPs based on cost-plus pricing, with no consideration to market demand. They say farmers should plant what the market wants, as reflected in crop prices at a given point in time. Cost-plus MSPs that are oblivious to demand will distort production decisions by farmers, resulting in the oversupply of some crops and undersupply of others.

Economists largely believe it is better to give farmers income, instead of price, support. That would mean transferring a fixed sum annually into their bank accounts, whether on a per-farmer (as in the Centre's PM-Kisan Samman Nidhi) or a per-acre (Telangana's Rythu Bandhu) basis.

Direct income support schemes that benefit all farmers may, however, be unfair to the real producing farmer, who invests more resources, time, and effort in the field. These farmers, unlike those for whom agriculture is a secondary or incidental livelihood source, may be justified in seeking some kind of price assurance for a crop they would harvest a few months down the line. Given that they, more than other businessmen, are exposed to both price and production risks (from weather, pests, and diseases), a demand for MSP guarantee is probably not unreasonable.

Price support can also help promote crop diversification. Farmers are more likely to grow pulses, millets, and other nutrient-dense, less water-intensive crops than rice, wheat, or sugarcane if they are assured of MSP on the former.

HOW BHAVANTAR BHARPAI YOJANA, HARYANA'S PRICE DEFICIENCY PAYMENTS SCHEME, HAS FARED

	BAJRA	MUSTARD	SUNFLOWER
2021-22			
Area registered (acre)	11,28,367.71	15,61,348.88	27,824.38
Area verified (acre)	8,83,202.87	14,86,787.36	24,568.22
MSP (Rs/quintal)	2,250	5,050	6,015
Purchase (tonnes)	859	–	2,002
PDP (Rs crore)	440*	–	–
2022-23			
Area registered (acre)	15,26,180.86	15,37,444.45	48,179.86
Area verified (acre)	11,67,708.27	14,00,955.18	46,018.82
MSP (Rs/quintal)	2,350	5,450	6,400
Purchase (tonnes)	80,382	5,78,416	35,710
PDP (Rs crore)	396**	–	36.38***

*At Rs 600/quintal; **At Rs 450/quintal; ***At Rs 1,000/quintal. In 2023-24 kharif, area registered under bajra stood at 17,76,406.07 acres, area verified at 13,46,385.77 acres, MSP at Rs 2,500/quintal, and purchase at 3,67,199 tonnes.

How to guarantee MSP

One traditional way is to force buyers to pay MSP. Sugar mills are required by law to pay growers a "fair and remunerative" or a "state advised" price within 14 days of purchase. But implementation can be difficult, and private trade may choose to not buy.

The other traditional option is for government agencies to buy the entire marketable produce offered at MSP. But that is physically and fiscally unsustainable.

There is a third option: price deficiency payments (PDP). The government does not physically buy or stock any crop; it simply pays farmers the difference between the market price and MSP, if the former is lower. The payment would be on the quantity of the crop the farmer sells to the private trade.

MADHYA PRADESH: PDP was tried out first in Madhya Pradesh through its Bhavantar Bhugtan Yojana. The market price for a crop under this scheme was its average modal (most-quoted) rate in the Agricultural Produce Market Committee (APMC) *mandis* of Madhya Pradesh and two other growing states during the month of sale.

The price difference *vis-à-vis* the MSP was payable on the actual quantity sold by the farmer, backed by an *amabandh patra* (sale agreement with trader), *tol parchi* (weighment slip), and *bhugtan patra* (payment letter signed by both parties).

The scheme was implemented during the 2017-18 *kharif* season for eight crops — but despite 21 lakh farmers registering and about Rs 1,952 crore being paid out, the scheme couldn't be continued for lack of Central support.

HARYANA: Haryana's PDP scheme, called Bhavantar Bharpai Yojana (BBY), is being implemented mainly in *bajra*, mustard, and sunflower seed, although technically it also covers groundnut, *chana*, *moong*, and several vegetable and fruit crops.

Farmers have to register themselves on the government's 'Meri Fasal, Mera Byaura' portal, along with details of their land and area sown under different crops. After registration and crop area verification by officials and satellite imaging, the farmer is eligible to obtain MSP via BBY.

Haryana has opted for a mix of physical procurement and PDP under BBY, depending on the gap between the MSP and market price.

The road ahead

One reason Madhya Pradesh and Haryana have been able to deliver MSP to farmers in some crops other than rice, wheat, and sugarcane is the existence of an APMC mandi infrastructure and systems for farmer registration in these states. This makes it possible to record each transaction, and to pay the difference *vis-à-vis* the MSP based on that.

A nationwide PDP scheme with 50% Central funding could perhaps incentivise other states to follow the examples of Madhya Pradesh and Haryana. They could, for a start, build the market infrastructure and systems that would ultimately enable even their farmers to get MSP, whether by law or otherwise.

LONGER VERSION
indianexpress.com/explained

El Nino to retreat by April-June, good news for Indian economy

A normal monsoon would be a boon for the agricultural sector, boosting farmer incomes, stabilizing food prices, and easing inflationary pressures

SPS Pannu

THE El Nino weather phenomenon, which led to the erratic monsoon in 2023 that hit India's agricultural sector, is still active in the Pacific Ocean where it originates, but is expected to withdraw during April-June this year which is a good sign for the Indian economy.

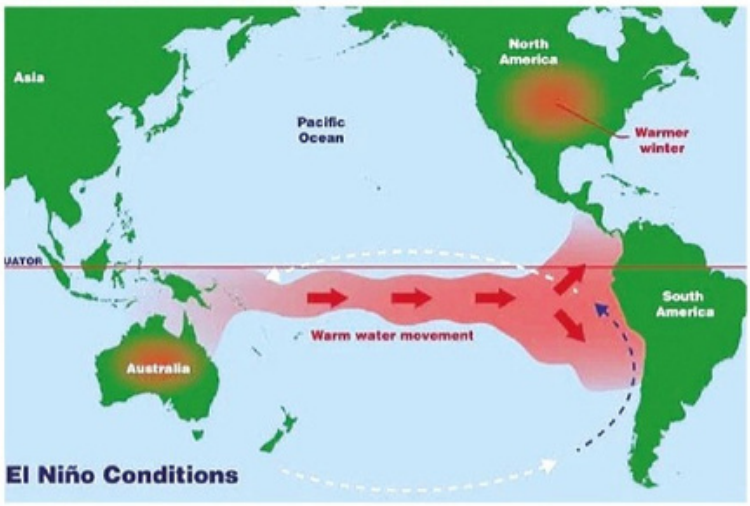
The US's Climate Prediction Center has stated in its latest forecast on January 11 that "collectively, the coupled ocean-atmosphere system reflected a strong and mature El Nino".

However, it concluded: "El Nino is expected to continue for the next several seasons, with ENSO-neutral favoured during April-June 2024 (73 per cent chance)."

EENSO neutral refers to normal surface sea temperatures (75-80 degrees Fahrenheit) and is generally associated with fairly normal weather patterns. The Climate Prediction Center carries out regular reviews of the complex ocean-atmosphere system for its forecasts. El Nino is viewed with concern in India as it disrupts the monsoon leading to drought in certain parts of the country and often excess rain in others as happened in 2023.

Although the exact impact that the ocean currents in the Pacific will have on the Indian monsoon will become clearer in the months ahead, news of El Nino turning neutral during April-June could mean that this phenomenon would abate and not disrupt the monsoon. Historically, more than half of El Nino years have caused droughts during the monsoon, with all-India rainfall falling below 90 per cent of the long-period average.

A normal monsoon is critical for India's agricultural sector, with 52 per cent of the net cultivated area depending on it. The monsoon rains also play a crucial role in the replenishing the water levels in the country's reservoirs across states which can be used for irrigation for the next crop season.



However, it's crucial to remain vigilant and keep monitoring the evolving situation in the Pacific Ocean and its impact on Indian weather patterns. The months ahead will be critical in determining how smoothly the El Nino transition unfolds and its ultimate impact on the Indian economy

Rain-fed areas produce nearly 90 per cent of millets, 80 per cent of oilseeds and pulses, 60 per cent of cotton and support nearly 40 per cent of India's population and more than half the livestock.

In 2023, India experienced "below normal" rains and an abnormally dry August largely due to El Niño conditions. The monsoon had got off to a delayed start in June after which there was excess rain in July followed by a deficit in August and then excess rains in September again in certain parts of the country, such as Punjab and Haryana, which hit the standing crop.

This had resulted in a sharp increase in the prices of vegetables, especially tomatoes and onions that triggered a spike in inflation and stretched household budgets. The erosion in farmers' incomes has a cascading effect on industry as well since the demand for tractors sold by companies such as Mahindra & Mahindra and two-wheelers marketed by auto majors like Hero MotoCorp and Bajaj comes down.

Rising prices of rice, wheat, pulses and spices push up the rate of inflation and stretch household budgets leaving less money to spend on industrial goods. The government also intervened to keep prices in check by banning exports of wheat and non-basmati rice and onions. This again leads to a drop in farm incomes and also exports which earn vital foreign exchange.

The high inflation rate caused by a spike in food prices also forces the RBI to increase interest rates, which, in turn, has a dampening impact on economic growth as loans for industry and consumers turn costlier.

Growers switch to heat-tolerant wheat to fight climate crisis impact

Zia Haq
Zia.haq@htlive.com

NEW DELHI: Taking steps to mitigate the impacts of the climate crisis, cultivators in key food-bowl states have switched to heat-tolerant wheat varieties on a large scale this season, a change analysts attribute to growing awareness about changing weather patterns.

Following two consecutive years of heatwaves and extreme weather, which shaved off cereal output and stoked prices, wheat growers have planted a record 80% area under climate-resilient varieties that should help bolster the country's food security roiled by adverse weather, according to a latest survey by the agriculture ministry.

Heatwaves around March, when the winter staple nears maturing, are becoming frequent in the world's second-largest grower, denting quality and output. In 2022, scorching weather restricted India's wheat production to about 100 million tonnes against domestic consumption requirements of 103.6 million tonnes, sparking an entrenched bout of inflation.

In 2022, scorching weather restricted wheat production to about 100 million tonnes. HT FILE

"Our survey shows that in both Punjab and Haryana, 80% of the wheat area this year has been sown with climate-resilient and bio-fortified varieties," said Gyanendra Singh, director of Indian Institute of Wheat and Barley Research (IIBR). This year, the country's wheat crop in all major states is in a robust condition, he said, adding that a cold wave sweeping parts of the north India will help to drive up yields.

Madhya Pradesh, Punjab, Haryana, Uttar Pradesh and Rajasthan are the country's main producer states.

Farmers have sown about 33.1 million hectares under wheat this season, 10% higher than the normal area of 30.7 million hectares, according to latest official data released on Monday. "We expect a record output of 114 million tonnes," an official said, requesting anonymity.

> Our survey shows that in Punjab and Haryana, 80% of the wheat area this year has been sown with climate resilient and bio fortified varieties
>
> **GYANENDRA SINGH,** IIBR direcor

The government's estimate of wheat output from the 2022-23 winter season stood at a record 112 million tonnes.

A bumper harvest should have led to falling prices, substantial state stocks and loosening trade regulations.

Yet, the world's second-largest wheat grower is battling high cereal inflation for at least 12 months – normally a sign of shortages – puzzling policymakers. Output couldn't have been more than 102-103 million tonnes, private traders say.

'Agri, industrial products, services, IPR issues to top USTR- Goyal talks'

BROADENING TIES. Katherine Tai will engage with stakeholders to reinforce US commitment to bolstering ties

Our Bureau
New Delhi

US Trade Representative Katherine Tai and Commerce Minister Piyush Goyal will discuss a broad set of issues, including agriculture, industrial products, services, and the protection of intellectual property, to strengthen the resilience of bilateral trade relationship at the Trade Policy Forum meeting next week in New Delhi, the US government has said.

"The United States-India trade relationship continues to grow stronger and benefited both nations throughout the past year as Ambassador Tai and Minister Goyal reached several milestone agreements that delivered crucial market access for American farmers and producers, and high quality products to Indian consumers," per a statement issued by the Office of the USTR ahead of Katherine Tai's India visit.

STRONGER RELATIONS. Katherine Tai will first meet with her Indian counterpart Piyush Goyal on January 12 and then the two will co-chair the 14th Ministerial-level meeting of the US-India Trade Policy Forum FILE PIC

FACILITATING COOPERATION

The USTR will be in New Delhi from January 12-14, the statement confirmed. On January 12, Tai will first meet with her counterpart Goyal and then the two will co-chair the 14th Ministerial-level meeting of the US-India Trade Policy Forum. "Under Ambassador Tai and Minister Goyal's leadership, the Trade Policy Forum has helped remove trade barriers and facilitate cooperation on key issues," the statement noted.

On January 13, Tai will meet civil society representatives, business leaders, and stakeholders to discuss the Biden-Harris administration's engagement and commitment to fostering closer ties between the two countries, it added.

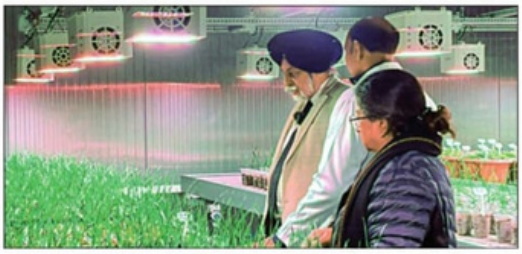
AGREEMENTS REACHED

The agreements reached between India and the US in the past year included a 70 per cent reduction of the tariff on pecans, the removal of retaliatory tariffs on almonds, apples, chickpea, lentils and walnuts, boric acid, and diagnostic reagents, and commitments for additional tariff reductions on frozen turkey, frozen duck, as well as fresh, frozen, dried, and processed blueberries and cranberries, the statement pointed out.

The US and India also agreed to resolve all seven outstanding World Trade Organisation disputes.

PAU's new wonder: 5-6 paddy, wheat crops a yr

Amaninder.Pal
@timesgroup.com



PAU VC Prof S S Gosal and PAU School of Biotechnology director Prof Parveen Chhuneja inspect plants in a chamber of AccelBreed

Chandigarh: Ever wondered what wheat breeders do in the midst of summer in North India, when there is no production of wheat crop or what kind of experiments paddy breeders indulge in during winter, when mercury hovers below 10°C and there is no production of rice?

To keep their breeding experiments afloat during adverse weather conditions, breeders resort to shuttle breeding. During summer in Punjab, wheat breeders move to cold areas of Lahaul and Spiti. Similarly, when winter prevails in North Indian plains, rice breeders move to warm research fields of Cuttack.However, even this strenuous exercise of shuttle breeding helps in generating no more than two crops per year In an initiative that will help agricultural scientists have multiple generations of various crops in a year — especially wheat and paddy — the Punjab Agricultural University, Ludhiana, has set up a facility wherein a scientist will be able to get five-six generations of wheat and four-five generations of paddy varieties in a year.

The facility — named AccelBreed — will artificially provide an ecosystem favourable to accelerated breeding for multiple crops, helping scientists conclude their experiments quicker, instead of waiting for years.

This will be the first-ever such facility in any state- or Centre-run university of the country. So far, this facility was available only in the Varanasi branch of Philippines-based International Rice and Research Institute (IRRI). "Given our ecosystem, we can grow wheat and paddy only once in a year. If our scientists follow the natural crop cycle, it takes them years to conduct experiments on existing crop varieties or to develop new varieties. In a speed breeder facility, we shorten the crop's maturity period. Experiments, which otherwise would take five-six years to conclude, can be concluded in one-two years using this facility", said Prof Praveen Kaur Chhuneja, director of PAU's School of Agricultural Biotechnology.

She added, "Speed breeding can shorten the generation time of crop plants, allowing crop scientists to take five-six generations per year by manipulating light spectra, temperature, humidity, and CO2 concentration. This will help scientists develop new crop varieties with better yield and quality traits in a shorter period. Breeders can harvest crop seeds in a matter of just five-six weeks."

Around 40,000 plants of various crops can be artificially bred in one go in the speed breeder, named Accelbreeder by PAU. Accelbreeder has eight chambers for crop breeding — four small, three medium and one large.

The facility has been developed using a Rs 5-crore grant provided by the Centre's department of biotechnology. PAU had submitted the proposal for the project in 2019, which was eventually approved in March 2022. "Since we will depute our own staff for the centre, recurring cost will be only in the form of expenditure on electricity bills," added Prof Chhuneja.

Aim to make India self-reliant in pulse production by 2027: Shah

NEERAJ MOHAN
TRIBUNE NEWS SERVICE

Union Home Minister Amit Shah at Vigyan Bhawan in New Delhi. ANI

NEWDELHI, DECEMBER 4

To encourage farmers for the cultivation of pulses, Union Cooperation Minister Amit Shah launched a portal for the procurement of tur dal to help farmers sell their produce at the minimum support price (MSP) fixed by the Centre.

The initiative aims not only to facilitate the sale of farmers' produce at the MSP, but also to foster self-reliance in pulse production, thereby addressing the challenge of substantial pulse imports that soared to 1.9 million tonnes in 2023.

'Tur dal will be procured from farmers and it is Prime Minister Narendra Modi's guarantee," Shah said, addressing a national symposium on 'self-reliance in pulses'. He outlined an ambitious target of achieving self-reliance in pulse production by December 2027, with the ultimate aim of eliminating any need for pulse imports from January 2028.

Through this e-samridhi portal, farmers can register and sell their produce to National Agricultural Cooperative Marketing Federation of India (NAFED) and National Cooperative Consumers' Federation of India Limited (NCCF) at a minimum support price or market price. A similar facility will be launched in future for urad and masoor farmers as well as maize farmers, said the minister, who also transferred, via direct benefit transfer, about Rs 68 lakh to the accounts of 25 farmers who had sold tur through the portal. —TNS

BIZZ BUZZ

Consumers' demand will dictate the next agriculture revolution

Andhra Pradesh is sitting pretty following the success of AP Community-Managed Natural Farming systems

WHEN I was doing my graduation in agriculture, and that was some 50 years ago, one of the popular slogans was "from lab to land". Knowing the significance and importance of ushering in an intensive agriculture, the slogan was perhaps aimed at imbibing a spirit of scientific rigour among future agricultural scientists.

Even at that time, I used to question myself, why can't we make science a two-way channel. After all, agriculture has been practiced from time immemorial and there is a lot to learn from the wisdom that farming communities entail. My argument therefore was for rewriting the slogan, as: "From lab to land and from land to lab."

As you guessed it right, my voice was lost in the din. But after half a century later, the society now realises the folly of ignoring what was traditionally known. Not only a folly, the intensive farming practices that have been ushered in over the past few decades has actually led to enormous devastation of natural resources, and is the reason why food farming systems are blamed for releasing a third of the global Green House Gas (GHGs) emissions.

Delivering a plenary talk at the 19th Organic World Congress in New Delhi, in 1977, I had said: "With soil fertility declining to almost zero in intensively farmed regions; excessive mining of groundwater sucking aquifers dry; and chemical inputs, including pesticides, becoming extremely pervasive in environment, the entire food chain has been contaminated. Further, as soils become sick, forests are logged for expanding industrial farming, erosion takes a heavy toll leading to more desertification. With crop productivity stagnating thereby resulting in more chemicals being pumped to produce the same harvest, the farmlands have turned toxic."

Devinder Sharma

While there are no lessons learnt, it is heartening to see a parallel international movement growing in favour of agro-ecological farming, savouring the principles of farming in alignment with nature. For over three decades now, a silent revolution has been in the making. It is now becoming more visible.

In India too, despite agricultural research and education not being in favour of anything that challenges the corporate-driven intensive agriculture design, I see the movement for agro-ecology growing. A large number of farmers and civil society groups, who have demonstrated confidence in farming in tandem with nature, have laid the foundations. Despite reluctance, policy makers are coming under increased public pressure to reframe policies in favour of environmentally safe and healthy farming practices. It may take some more time, but the growing consumer awareness at a time when the globe climate enters the boiling phase, will see a push for a transition towards agro-ecological farming.

Besides numerous stalwarts of organic farming and its different variants like permaculture, bio-dynamic farming, natural farming and regenerative agriculture, the movement is coming together as a much needed transformation from chemical to non-chemical farming.

With Andhra Pradesh emerging as a leader with the success of AP Community-Managed Natural Farming (APCNF) systems, which is being managed by a government-sponsored non-profit company Rythu Sadhikara Samstha (RySS), having already shifted or in the process of shifting nearly eight lakh farmers from chemical to non-chemical farming; and with several state governments having formulated organic farming policies, the space for agro-ecological farming is only expanding.

While the Organic Farming Association of India (OFAI) has been regularly holding bi-annual organic conventions, what brings a whiff of fresh air is not only the expanding network but also another effort being made to set up of a Farmversities Alliance. The underlying aim is to 'regenerate and revalue organic and natural farming models, local economies, indigenous knowledge systems and ancient wisdom traditions'. Unlike agricultural universities, which rely on research, education and extension as the three activities that scientists are expected to engage in, the Alliance will focus on education, co-existence and minimalisation. These are the principles of non-violent economics that Mahatma Gandhi had also talked about.

Simply put, it leads to rebuilding farming systems that will hopefully shift the power over farming from the control of global corporations.

This is happening at a time when the agribusiness corporations are moving from Green Revolution (call it Agricultural Revolution 3.0) towards the next phase, the Agricultural Revolution 4.0, which brings a synergy between various emerging technological tools, including artificial intelligence, robotics, satellite imageries, and digital technology and thereby further tighten the corporate control over agriculture. Already, a renewed thrust to push farmers out of agriculture in the name of climate change is happening in several developed countries, with the aim to build on industrially produced synthetic foods.

But this should not be demoralizing. Why I say so is because ultimately what drives the global agenda is how the people perceive it. The withdrawal of three contentious farm laws by a steadfast farming community is a glaring example. With the call for sustainable agriculture growing, even some of the big multinational giants have been forced to launch multi-billion dollar initiatives for regenerative agriculture.

Setting up of India's first independent Academy for Agro-ecology at Vijayawada will help fine-tune the gap in agro-ecological research and create a training environment for non-chemical farming.

But be watchful of regulatory norms that plan to set standards for natural farming. Organic farming and natural farming are two streams of the same sustainable farming system that relies on moving away from the harmful chemical farming systems that have turned farm lands toxic and polluted the water bodies.

I wonder why standards (and also caps on the quantity applied) to chemical farming were not enforced in a way that could have at least lowered the heavy intake of harmful inputs, and reduced food contamination.

Policy makers have in the past also followed industry dictums and will go by what the industry perceives as a threat to their business.

While the Farmversities Alliance will work to take safe food movement to every village and city of this country, concentrated efforts need to be made to reach out to consumers, who are already paying a heavy price with food contamination. Decolonising our minds based on a rethinking required that clearly draws the link between food and medicine is the need of the times.

That is why I have always maintained that while the Green Revolution relied on farmers to increase production, the next revolution in agriculture will be based on what the consumers demand. The times have changed. If at one time the thrust was on increasing grain output, the time now is for ensuring quality. If consumers demand naturally-grown healthy food, farmers will have to cater to what they need. And that is the truth, plain and simple.

(The author is a noted food policy analyst and an expert on issues related to the agriculture sector. He writes on food, agriculture and hunger)

Our import duty regime needs urgent correction

The budget is an opportunity to rectify inversions. We need generally lower tariffs and not just item-wise fixes for better trade performance and integration with global value chains

Indian policymakers are expected to fix inverted import duties for sectors like textiles, leather and engineering goods, so that inputs are not charged at a higher rate than ready-to-use products. The commerce ministry has reportedly reached out to the finance ministry to sort out such distortions for more than a dozen items in the Union budget. Manufacturers have long sought corrections, as high input duties increase local production costs, but government action has been slow. Still, it's a good sign that another attempt may soon be made. After all, enlarged domestic costs not only make it harder to compete overseas, it can even mean that imports work out cheaper in many cases in spite of tariffs on finished products. Hence, an inverted duty regime tends to work against 'Make in India.' In any case, for Indian factories to participate more in global value chains, we must rationalize our tariff regime so that it is not an outlier amid globally sprawled participants with lower charges, and assure investors of rate stability in the future.

To be sure, several duty inversions have already been addressed by the government over past years. In some of these cases, however, the apparent fix took the form of tariff hikes on final-product imports. Also, an item-by-item approach has proven insufficient to untangle a jumble of complications we have ended up with. Apart from basic customs duty, there are other levies, with duty drawback and remission schemes covering several sectors. Some input items are said to serve multiple ends that are taxed differently, so what's an inversion in one case may not be for another. The very complexity of our entry levies could deter businesses looking at factories located in India as links in their trans-border operations.

Instead of a rate system that displays excessive variability without a clear rationale (and what's arbitrary is often in the eye of the would-be investor), we need a broad policy of tariff reduction that conveys a coherent purpose: a general openness to trade. This will not only push local manufacturers to get globally competitive, but is critical in a globalized world of products made with components from various countries.

The signals sent out by India's tariff policy have not been helpful. By the World Trade Organization's analysis, average import tariffs for origin countries with which India does not have free-trade agreements have risen to 18.3% in 2021 from 13.5% in 2014. Although these are nowhere near the largely three-digit levels that kept our economy closed before 1991, the uptrend has attracted adverse attention abroad for defying the spirit of globalization. While our rates are not so high as to barricade imports, they still have distortive effects. To cheapen local factory output across the board, inputs generally need to be cheaper; and to drive domestic efficiency and quality upwards, what's made in India needs increased exposure to foreign competition. Of course, since not all players would be able to survive sudden import-barrier drops, a definitive reversal of our tariff trend would carry the risk of a shake-up with more losers than winners. To mitigate this, a calibrated reduction path may be needed. Still, minimally, what's important is to signal a clear direction in which our policy is headed. There would be fiscal implications too, no doubt, but tariffs should not be treated as a revenue source. In any case, the money lost would be far outweighed by the eventual gains if manufacturers achieve the competitiveness needed to become 'China plus' suppliers to the world at large.

GSP Crop Science eyes ₹1,800-cr revenue

Target is to reach Rs 2,500 crore in next 3-4 years with the addition of overseas business especially in Brazil says Bhavesh Shah, MD, GSP Crop Science

MUMBAI

AGROCHEMICALS manufacturer GSP Crop Science is eyeing Rs 1,800 crore in revenue in 2024-25, following its domestic as well as overseas market expansion, a top company executive has said.

"In 2022-23, our annual revenue was at Rs 1,600 crore. We are looking at Rs 1,800 crore revenue in FY25. Overall our target is to reach Rs 2,500 crore in next 3-4 years with the addition of overseas business especially in Brazil," GSP Crop Science Managing Director Bhavesh Shah said. Shah said the company is working towards

reducing its dependency on China for raw materials and planning to produce intermediaries needed to develop crop solution products. "In order to reduce our raw material dependency on China, we are planning to gradually produce intermediaries needed for manufacturing our products. We are setting up our third manufacturing unit in Dahej in Gujarat with an investment of Rs 100-110 crores. In this unit we will initially produce 4 intermediaries," he added. The company is focusing more on research and development (R&D) and has two centres, technical and formulation, in order to reduce its dependency on China for raw materials, mainly intermediaries, and also for developing new innovative products, Shah added. He said the company has two R&D units, one for formulation in Jammu and one each for formulation and technical in Ahmedabad in Gujarat. "Almost 7-8 per cent of our revenue is spent on R&D. We have applied for over 150 patents and we have patents for 70 products.

SUBSIDY EXPENDITURE THIS YEAR WILL BE LOWEST SINCE FY19

Explicit budget subsidies to drop 28% to ₹4 trn in FY24

Subsidy bill may not rise steeply in FY25 if global soil nutrient prices don't flare up

SANDIP DAS & ARUNIMA BHARADWAJ
New Delhi,

THE UNION GOVERNMENT'S total expenditure on explicit subsidies — food, fertiliser and LPG — is likely to drop 28% to ₹3.98 trillion in the current fiscal year, from ₹5.49 trillion in FY23.

This is due to the softening of global prices of soil nutrients and the termination of the extra grains supplies under the National Food Securities Act, effective December 2022, according to information gathered from various government sources.

This means subsidy expenditure this year will be the lowest since FY19 (₹2.36 trillion). In FY21, the government incurred an all-time high subsidy spend of ₹7.14 trillion partly because of provisioning of ₹3.8 trillion towards repayment of loans taken from the National Small Savings Funds to finance food subsidies.

The Budget Estimate of the total spending on the three subsidies in the current fiscal is ₹3.74 trillion, with ₹1.97 trillion for food, and ₹Rs 1.75 trillion for fertilisers.

The rise in total subsidy over the BE this year is still lower than in recent years.

"Unless there is a sharp spike in the global price of fertilisers in the last quarter of the current fiscal, overall expenditure on account of subsidies should be substantially lower than last fiscal," an official said.

According to back-of-the-envelope calculations, subsidies in FY25 could cross ₹4.15 trillion if the annual rise in the minimum support prices (MSP) of rice and wheat in the next year crop year is at the same level as in the current year, and global prices of fertilisers broadly remain at the current year's levels.

To cover the additional expenses due to the rise in global prices in recent months, the government last month had provided an additional ₹13,351 crore under the fertiliser subsidy against the budget estimates (BE) of ₹1.75 trillion for the current fiscal.

Sources said after a recent increase in global diammonium phosphate (DAP) prices from lower levels prevailed in the first four months of current fiscal, overall fertiliser subsidy for FY24 would also depend on the future price trajectory of the soil nutrients, which the country imports to meet two-thirds of its domestic consumption.

Global prices of DAP fell by 110% to $454/tonne in June, 2023 from a record high of $954/tonne in April, 2022. However, the price of critical soil nutrients has risen to $535/tonne last month.

However, fertiliser subsidy in FY24 is likely to be less than the record outgo of ₹2.53 trillion last fiscal owing to the spike in global commodity prices.

It would still be for the fourth year in a row that subsidies on soil nutrients would cross ₹1 trillion.

In terms of volume, imports account for a third of domestic soil nutrients consumption of around 65 million tonne (MT) annually

Last month, the government had made an additional provision of ₹5,589 crore towards food subsidy largely to cover extra spending on the free grains scheme, also referred as Pradhan Mantri Garib Kalyana Anna Yojana (PMGKAY) against the budget estimate of ₹1.97 trillion in the current fiscal.

The government had spent ₹2.87 trillion on account of food subsidy because of additional foodgrains provided under PMGKAY in addition to highly subsidised food grains supplied under National Food Security Act during first three quarters of FY23.

PMGKAY or free ration scheme was subsumed with NFSA from January 2023 for one year. Under the scheme, around 48 MT of foodgrains are supplied to 800 million beneficiaries annually.

The government has extended the free ration scheme for five years till end of 2028 which would cost the exchequer around ₹11.8 trillion due to a projected increase of 7-8% in the minimum support price (MSP) of the relevant crops — rice and wheat and coarse grains — annually, and other costs such as transportation, storage and incidentals.

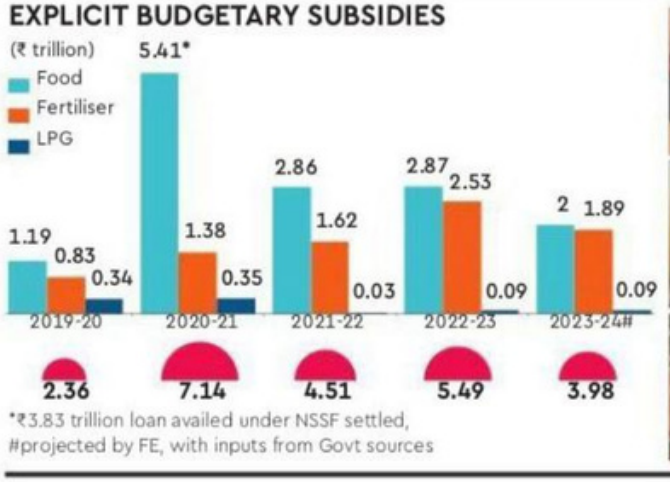
Sources said because of the Food Corporation of India's sale of more than 5 million tonne (MT) of wheat in the open market so far this fiscal, the subsidy burden could decline by around ₹15,000 crore to ₹16,000 crore by end of FY24.

"We have realised about ₹10,000 crore by selling wheat in the open market this fiscal so far," a food ministry official told FE.

The government is aiming to sell 10 MT of wheat in the open market from FCI stock to curb price rise by the end of FY24.

Meanwhile, with the expansion of 7.5 million additional LPG connections to be released the Pradhan Mantri Ujjwala Yojana (PMUY) in 3 years under the scheme, the total subsidy outgo for LPG this fiscal is estimated at ₹9,800 crore.

The subsidy under the PMUY has been increased to ₹6,110 crore in FY23 from ₹1,569 crore in FY22.



RUN-UP TO THE INTERIM BUDGET 2024-25

Address:
207, Prakash Deep Building, 7 Tolstoy Marg, New Delhi-110001

Contact Us: 011-43065365 | Email Us: info@acfiindia.com
Visit Us: www.acfiindia.com

DISCLAIMER