









#### **BASAI WEEKLY NEWS UPDATES**

FEBRUARY 05-11, 2023

# Food subsidies could again be funded outside of Budget

#### Zia Haq

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NEW DELHI: After a widely appreciated clean-up of the books of the Food Corporation of India (FCI) by the Union government, which paid off its ballooning debt of ₹3.39 lakh crore in 2020-21, food subsidy may again have to be funded off-budget, not an ideal thing, experts say.

Off-budget funding refers to the practice of financing an expenditure that is not fully accounted for in budgetary allocations. It often helps the government to lower the fiscal deficit number.

Presenting the Budget 2023-24 on February 1, Union

THE SUBSIDY ON FOOD FOR 2023-24 IS ESTIMATED TO BE ₹1.97 LAKH CRORE, COMPARED TO ₹2.87 LAKH CRORE IN 2022-23

finance minister Nirmala Sitharaman pegged the fiscal deficit—the gap between what the government earns and spends—at 5.9% of GDP for FY24, reiterating her commitment to bring it down to 4.5% of GDP by FY26.

The latest budget has been widely seen as signalling a path towards fiscal consolidation, or

actions to reduce debt, while pushing growth through higher investment in assets.

A large fiscal deficit influences sovereign credit-worthiness ratings assigned by global ratings agencies. A poor rating increases the government's borrowing costs.

Lower fiscal deficit projected in the budget comes on the back of a cut in the estimated spending on food, fertiliser and fuel subsidies for 2023-24. Spending on these items — which accounts for the largest revenue spend after interest payments — is estimated to be at ₹3.74 lakh crore for FY24, down 28% from the revised estimates for the

continued on →13

ond Chinese balloon spotted in Latin America that defence officials said was also conducting espionage activities. They framed the two episodes as part of an increasingly brazen espionage campaign that's ignored other nations' borders.

(With inputs from agencies)

#### FOOD SUBSIDY

ongoing financial year, Budget documents showed.

The subsidy on food for 2023-24 is estimated to be ₹1.97 lakh crore, compared to ₹2.87 lakh crore in 2022-23. However, budgetary allocations may not be enough for the FCI, which will have to resort to borrowing off-budget both in 2022-23 and 2023-24.

The FCI is the Centre's main grain-handling agency, which utilises the food subsidy to provide grains to 800 million people.

Statement 25 of the expenditure profile of the Budget 2023 shows two things. One, the FCI is provisioned to borrow ₹15,000 crore in the ongoing financial year. Two, for 2023-24, the FCI will again borrow ₹40,000 crore through external commercial borrowings (ECB) and another ₹1.05 lakh crore through "others", which denote borrowings from banks and a usual source, the National Small Savings Fund (NSSF).

The elimination of the FCI's accumulating debts in 2020-21 was part of a broader policy to eliminate hidden subsidies by accounting for them in the fiscal deficit, a stance spelt out by the finance minister in the Union Budget 2021-22.

"Because the government was serious enough to clean the books of FCI, it is a little difficult to understand why the government would again fall back on this kind of borrowing. It is not logical in my view," said N R

Bhanumurthy of the Dr BR Ambedkar School of Economics, Bengaluru.

India's accounting practices are cash-based. An expenditure is incurred only when a debit is charged against the government's bank accounts. By making the FCI rely on incessant borrowing to fund its operations, rather than paying it directly, the government has managed to limit its fiscal deficit in the past.

#### MUSHARRAF

to rein in anti-India terrorist groups.

Musharraf, who was born in Old Delhi on August 11, 1943 to a career diplomat, rose through the ranks of the Pakistan Army – seeing action during the 1965 war and joining the Special Service Group – before he was appointed army chief by Sharif in October 1998.

Just weeks after then PM Atal Bihari Vajpayee visited Lahore in a bus at the invitation of Sharif to try to make a breakthrough in bilateral relations by signing the Lahore Declaration in February 1999, Pakistani troops disguised as irregular fighters secretly infiltrated across the Line of Control (LoC) in the Kargil sector, triggering a brief but fierce border conflict that ended disastrously for the Pakistani side.

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In addition to suffering huge casualties at the hands of the Indian army and air force, Pakistan was forced to withdraw its troops after then-US president Bill Clinton threw his weight behind the Indian side, instead of brokering a peace deal as sought by Sharif.

The growing differences between Musharraf and Sharif prompted the premier to dismiss the army chief while he was on an official visit to Sri Lanka in October 1999 and to prevent the aircraft bringing Musharraf to Pakistan from landing at Karachi air-

# Science must drive policy

The cracks in Doda homes show why fragile ecosystems need to be studied scientifically

Residents in Jammu and Kashmir's Doda town are in panic after 300 people were moved out on Friday as deep cracks appeared across several structures, and at least three buildings collapsed. Coming just weeks after demolition began in Uttarakhand's Joshimath, where authorities are busy removing structures compromised by deep cracks and sinking foundations, the new incidents have naturally sparked a wave of concern in the region.

Authorities have signalled that the saves of the

Authorities have signalled that the cause of the problem and its extent is not yet known in Doda. On Saturday, a team of geological experts visited the region to collect samples from affected areas. This report should be expedited in a transparent manner to alleviate panic and precipitate science-backed action. In the meantime, the local government must consider helping out families who have had to leave their homes. In Joshimath, despite cracks appearing in residential buildings and the ground sinking in some neighbourhoods in the initial days, local authorities did little. Residents alleged that repeated complaints didn't move the needle, and the administration only started paying attention when the crisis spread beyond one neighbourhood. The disaster in Joshimath — which earlier was characterised as land subsidence, only for some scientists to suggest later that it may have been a landslide - showed us how important timely and scientific research is for citizen welfare and public good. The critical lessons learnt from Joshimath must now be applied to Doda without any delay.

It is too early to say what caused the cracks in buildings in Doda, whether there was any connection to road projects and infrastructure development or the fact that the region sits on a seismic zone 4 Still, the government may want to consider undertaking a comprehensive study of vulnerable ecosystems and earthquake-sensitive zones in the Himalayan region to create robust baseline geological knowledge about these areas which will be useful not only during natural and human-made disasters, but also for evaluating big ticket infrastructure and power projects, and whether a fragile ecosystem can support them. Far too often, scientific reports and assessments are pushed on the back burner — either delayed or not taken seriously. Yet, the tremendous human and environmental costs of similar tragedies tell us that it is time to give science a far bigger role in drafting India's public policy.

## Shrimp farming proves boon for Malwa farmers

#### ARCHIT WATTS

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#### MUKTSAR, FEBRUARY 5

As farmers of the Malwa region are reaping the benefits of shrimp farming, the area under cultivation in Muktsar district has doubled in the past year. Currently, the district has nearly 600 acres under the shrimp farming, which was 280 acres in 2022.

Further, the district has achieved first position in the state in shrimp farming. Shrimp farming is currently being done on nearly 1,200 acres in Muktsar, Fazilka, Bathinda, Mansa and Faridkot districts.

This type of farming requires saline water and the salinity level should be above 5 parts per thousand (PPT). In these districts, the land with such saline water is easily available due to waterlogging.

It takes nearly Rs 14 lakh to dig a pond in one hectare (2.5 acres), purchase seed, feed, equipment, etc. A farmer can avail the benefit of this scheme



Workers bring out shrimps from a pond in Muktsar. TRIBUNE PHOTO

#### MUKTSAR LEADS FROM FRONT

- Area under shrimp farming doubled in one year, from 280 acres to 600 acres. Of the nearly 1,200 acres in the state, 50% cultivation area is in Muktsar district
- "A total 2,200 acre area is under aquaculture in the district," says Kewal Krishan, Assistant Director, Department of Fisheries

up to two hectares.

The shrimp gets ready for harvesting in approximate 120 days. The season usually begins in September and lasts till November-end. Mostly traders from coastal states come to buy shrimp here, they transport it in air-conditioned vans. The average price of

shrimp has remained Rs 400 per kg in the recent past.

A number of farmers are now even making a profit of Rs 4-5 lakh per acre per year from their land which turned infertile years ago.

Notably, the Centre and the state government, under the Pradhan Mantri Matsya Sampada Yojana (PMMSY), are providing 40 per cent subsidy to the general category and 60 per cent to the SC/ST and women for shrimp farming.

The subsidy of nearly Rs 1 crore has been disbursed in the ongoing financial year for Muktsar, but reportedly the amount for SC/ST and women hasn't been released.

Dharminder Singh of Bhagsar village, said, "Shrimp farming has proved a boon for people like me, who are having waterlogging-affected land. In 2021, I got 50-quintal shrimp from nine-kanal pond. Further, I got the price of Rs 483 per kg for it. But the input costs increased this season."

Kewal Krishan, Assistant Director, Department of Fisheries, said, "Though the input costs increased, we expect that the area under shrimp farming will go up by 150 acres. Currently, 2,200 acres is under the aquaculture in the district, which also includes some village ponds. Of this area, 600 acres is under shrimp farming."

## Farmers sidelined on pathway to growth



DEVINDER SHARMA FOOD & AGRICULTURE SPECIALIST

F the 2023-24 Budget has rolled out the roadmap for 'Amrit Kaal'—the 25-year period culminating in the centenary of Independence—agriculture has been clearly left behind. Amid the glitter of an increase in capital expenditure, fiscal consolidation and the promise of continuity in growth policies, the Budget certainly makes the right noises. But then, there is another part of India—popularly called Bharat—comprising two-thirds of the country's population, where a deafening silence prevails.

With 70 per cent of the rural population dependent on agriculture, they are trying to ascertain as to why they have been ignored and given short shrift on the pathway to attaining growth.

No miracle can be expected in agriculture without first making adequate, investments. Over the years, public sector investments have been on a steady decline. As the RBI had observed, between 2011-12 and 2017-18, public sector investments had hovered around 0.3 and 0.4 per cent of the GDP Compare this with just the revenue foregone to the industries, around 5.5 per cent of the

GDP, and you get a fair idea as to why agriculture, which engages 47 per cent of the workforce, remains largely neglected. Further, the celebration around this year's Budget provisions is a clear pointer to the economic priorities.

Nevertheless, continuing with the RBI's projections for declining investments in agriculture, the Economic Survey-2022-23 too acknowledges that public sector investments in agriculture in 2020-21 were the lowest in the decade. Add to it the total allocations announced for agriculture and allied sectors in this year's Budget, it becomes obvious as to why agriculture seems to have been pushed off the growth track. Let's be clear. There can be no separate 'Amrit Kaal' for agriculture. It has to be an integral part of the broader economic design.

As percentage of the total Budget, the share of agriculture has come down from 3.84 per cent to 3.2 per cent. This year, the allocation is Rs 1.15 lakh crore, against the revised estimate of Rs 1.24 lakh crore a year earlier. Two years earlier, Budget-2021 had made the allocation of Rs 1.48 lakh crore for agriculture and allied sectors. In other words, in the past two years, the budgetary support for agriculture has remained almost the same.

Further, this year, the projection for the PM Fasal Bima Yojana — the flagship programme for crop insurance has come down by 12 per cent, and that of the PM-Kisan Samman Nidhi Yojana by 12 per cent. This scheme provides farmers with a direct income support of Rs 6,000 per year. The



Apart from the reduction in allocation for the schemes that ensure price protection, what irks farmers is that the Budget is silent on the MSP. Since the average monthly income of a farm household is estimated at ₹10,218 by a survey, a turnaround in agriculture hinges on enhanced and assured price support for the farmers.

UNFAIR: A 'beautifully balanced' Budget cannot meet expectations by keeping agriculture out. FILE PHOTO

MGNREGA allocation, too, has been drastically reduced by 33 per cent.

More glaring is the steep reduction in the allocation for the two schemes that provide for price stabilisation support to farmers, outside the wheat-paddy procurement system. The budgetary provisions for the PM-Aasha scheme that offers minimum support price (MSP) for oilseeds and pulses, which was drastically curtailed last year, has now been left with a provision of only Rs 1 lakh, Similarly, the budgetary provision for the Price Support Scheme (PSS) and the Market Intervention Scheme (MIS) - which provides for Rs 1,500-crore market intervention and price support - has also been reduced. This support meant a lot for farmers who were throwing on the streets crops like tomato, potato and onion, and also for plantation

crops like rubber, coffee etc.

Apple growers from Himachal Pradesh and Kashmir are a worried lot. They are not sure how these drastic cuts in the MIS allocation will impact the procurement of 60,000-80,000 tonnes of C-grade apples that the HP Government makes under the MIS, for which 50 per cent share comes from the Centre. This scheme provides a cushion to the apple growers from a price shock.

Apart from the reduction in allocation for the schemes that ensure price protection, what irks farmers is that the Budget is silent on the MSP. After the withdrawal of the three contentious laws, farmers

have been demanding a legal assurance for the MSP that is announced for 23 crops every year, but which largely remains on paper, except for wheat and paddy in some states. Since the average monthly income of a farm household (including from non-farm activities) has been estimated at a low of Rs 10,218 by the Situation Assessment Survey for Agricultural Households-2019, any turnaround in agriculture obviously hinges on enhanced and assured price support for the farmers.

This makes a strong case for guaranteeing higher prices for the farmers. After all, if the government can introduce a minimum sale price for sugar mills, increasing it now to Rs 31 per quintal, this is exactly what the farm-

ers are also demanding. If the mills can be ensured a guaranteed price, farmers too can be guaranteed a higher price. No amount of a dedicated fund for agricultural startups, building the digital public infrastructure, and boosting the agriculture value chains can ensure higher incomes to farmers. It hasn't happened anywhere in the world.

Making MSP a legal entitlement is, therefore, the only way out of the tangle. If farmers get more money in their hands by way of a guaranteed MSP, it will eventually flow into the markets, thereby boosting rural demand.

While the first step towards a green transition in agriculture has already been spelled out, it has to be backed up by an elaborate time-bound programme. Funding for 10,000 bio-input resource centres and the promise of leading one crore farmers away from chemical to non-chemical farming systems in the next three years is a laudable initiative for the food systems' transformation. Being the International Year of Millets, shifting towards nutritiously rich and ecologically safe millets cultivation too would require a package of public support, including higher MSP, to make their cultivation attractive.

To achieve the topmost of the seven priorities spelt out in the visionary statement, inclusive development will be possible only if agriculture becomes economically viable and reorients towards climate resilience. While the shift towards a greener economy is quite apparent, a 'beautifully balanced Budget' cannot meet expectations by keeping agriculture out.

# Ensuring nutritional security is the way forward

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

undernourished.

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

Notwithstanding these achievements in food production and the implementation of the National Food Security Act to ensure food and nutritional security, millions of people in the country continue to grapple with hunger and malnutrition. This dire situation will persist in the future due to the widening food supply-demand gap with the progressively growing population, expected to be about 152 crore by 2030 and 170 crore by 2050, and the decelerating pace of food production in view of the intensely increasing pressure on soil and water resources. Moreover, the impact of climate change is expected to be huge; it may reduce India's agricultural capacity by about 40 per cent and cause up to 30 per cent loss in yield of some staple ECONOMIC SURVEY 2022-23

Agriculture & food mgmt: From food security to nutritional security



MSP for all mandeted crops fixed at 1.5 times of all-India weighted average cost of production since 2018



Continued growth in institutional credit to the agricultural sector



315.7 million tonnes of foodgrains produced in India in 2021-22



11.3 crore farmers covered under PM-KISAN for financial support



**₹13,681** crore sanctioned under post-harvest support & community farms



1.74 crore farmers and 2.39 lakh traders covered under National Agriculture Market Scheme (e-NAM).

crops by 2050. It will be challenging to sustain crop productivity and production to meet the needs of the growing population and ensure food security. A report of the National Academy of Agricultural Sciences says that by 2050, India will need 405 MT foodgrains, 342 MT vegetables, 305 MT fruits and 39 MT edible oils.

These figures represent a significant increase from current levels, and if production is not augmented, serious food shortfalls and food insecurity can be expected. India will not be able to meet the UN goal of a 'zero-hunger world' by 2030. Higher production has to be achieved in the face of continuously degrading soil health, depleting water resources, climate change and a

weak agricultural policy. Therefore, for achieving assured food security, emphasis should be on the selection of site (soil, water) suitability-based high-vielding crops and their varieties: enhancing the capacity of farmers to adopt climate-resilient technologies judiciously to produce more from every unit of time, land, soil, water and inputs (fertilisers, pesticides and energy), and that too sustainably; and anticipatory adoption of strategies for guarding of the food production system against various risks to agricultural production,

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

Undemutrition is severely reducing the performance capability of the people and eventually hurting the economy of the country. The main reason for the persistence of malnutrition is a nutritionally poor diet due to inadequate access (particularly of resource-poor, incomedeficient population) to fruits and vegetables. It is reported that the average per-capita daily consumption of fruits and vegetables in India is well below the required quantity

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

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

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

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

> The author is former Director of Research, PAU, Ludhiana

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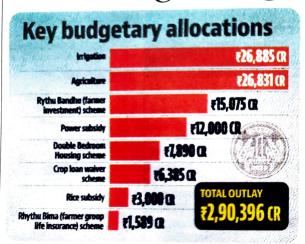
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WALK-IN-INTERVIEW for One temporary post of Junior Research Fellow (Rs. 31,000/- per monts during 1st and 2nd year and Rs. 35,000/- per month during 3rd year + HRA admissible, (HRA will be given only if accommodation is not provided in the Institute campus) Project: "Developing hybrid nanofertilizers by using zeolite and hydroxyapatite for sustainable fodder production" will held on dated 28.02.2023 at 11.00 AM. For more details i.e. Qualification, Emoluments & other condition please see the full advertisement at Institute's website www.igfri.icar.gov.in. Chief Adm. Officer (SG) & Head of Office

# Farm, irrigation get lion's share in T'gana budget.



#### Srinivasa Rao Apparasu

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HYDERABAD: Farming and irrigation got the lion's share in Telangana's 2023-24 budget presented by state finance minister T Harish Rao in the assembly on Monday that had a total outlay of ₹290.396 crore.

While ₹26,885 crore was allocated for irrigation, ₹26,831 crore was earmarked for agriculture. Continuing its focus on farming, the state government allocated ₹6,385 crore towards a crop loan waiver scheme of up to ₹1 lakh to each farmer, ₹15,075 crore towards Rythu Bandhu (payment of ₹10,000 per acre to each of

around 6.4 million farmers every year) and ₹1,589 crore towards Rythu Bima (paying ₹5 lakh each to the families of farmers who die in distress).

This budget was the last one tabled by the BRS government in its present (second) term. The state is scheduled to go to the polls this year.

The tax-free budget proposes a total revenue expenditure of ₹211,685 crore and capital expenditure of ₹37,525 crore. This is around ₹34,000 crore more than the previous budget of ₹2.56 lakh crore for the current financial year that ends on March 31.

"The state government accorded highest priority to infra-

structure development and public welfare in the latest budget," Rao said. A total of ₹2,500 crore were allotted to building and maintaining roads, and an additional ₹2,000 crore for maintenance of rural roads. Rao criticised the Centre for creating hurdles in the progress of the state. "Despite this, Telangana will forge ahead and play an important role in nation building in the years to come."

Meanwhile, the opposition BJP and Congress alleged the budget presented inflated numbers and makes false promises.

"People are fed up with such gimmicks and will see through this and say no...," Union minister G Kishan Reddy said.

# Costlier wheat hits staples; flour prices get 22% higher

#### Zia Haq

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NEW DELHI: Wheat prices have remained stubbornly high in India, declining only marginally despite several measures undertaken by the government to cool prices, with a cascading effect on rates of wheat products from atta (flour) to biscuits and confectionary.

Daily retail wheat flour prices on February 1 were 22% higher on an annualised basis, while wholesale prices leapt 31%, official data show.

Winter sowing of the staple grain in the world's second-largest consumer has held steady. The country hopes to reap a record 111-112 million tonnes, with harvesting two months away. In 2022, India was hoping to harvest 110 million tonne of wheat, but a prolonged heatwave around reaping time crimped output to 106.84 million tonne, about 2.5% lower than the preceding year's 109.59 million



Domestic wheat prices rose to ₹32,500 per tonne in January. HT

tonne. The Centre last week decided to sell 3 million tonnes from its wheat stock in the open mark for bulk consumers like flour mills, even as state reserves have fallen to the lowest level in six years. This helped prices to slide by 6-7% before rising again. In May last year, India banned wheat exports amid limited supplies from the Black Sea region due to Russia's invasion of Ukraine.

Higher wheat prices have stoked inflation of everyday products. Britannia Industries, which makes biscuits such as Good Day and Little Hearts, raised prices of its entire product range by nearly 22% in the past year, according to a Comtrade, a commodity analyst.

Rates of regular sliced bread and whole loaves have increased by an annualised 11% and 7%, respectively, data from the All India Bread Manufacturers' Association showed.

Domestic wheat prices rose to a record high of ₹32,500 per tonne in January, way above the government-set minimum support price of ₹21,250.

Retail food inflation dipped to 4.2% in December, the latest available data, from a high of 8.6% in September. But cereal inflation at 13.8% year-on-year in December continued to be high.

The government's decision to offload 3 million tonne in the open market is also aimed at lowering procurement prices. The government buys rice and wheat from farmers at these rates to run the world's biggest food welfare programme that entitles about 800 million people to receive 5kg of rice and wheat every month.

## Alternatives to gypsum developed for better agri yield

#### PARVEEN ARORA

#### KARNAL, FEBRUARY 6

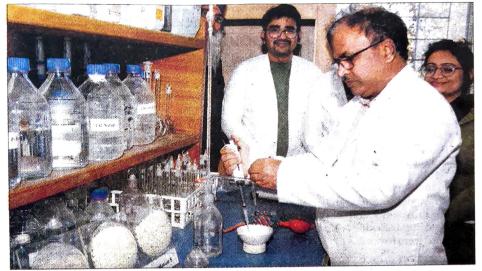
To address the problem of the non-availability of quality gypsum, scientists of the ICAR-Central Soil Salinity Research Institute (CSSRI) have developed alternatives to the mineral.

They have developed three categories of sulphur-based formulations, which are suitable for different soil sodicity and the presence of a high proportion of sodium ions.

As per scientists, at present, gypsum is supplied to Haryana and Punjab from Rajasthan, which is not meeting the minimum standard of 70 per cent purity set by the Bureau of Indian Standards (BIS).

"The lower availability of quality gypsum for sodic soil (popularly known ausar/kallar soils) reclamation is a major challenge in productive utilisation of such lands. These alternatives developed by our scientists will reduce the dependency on the mining material," said Dr PC Sharma, Director, ICAR-CSSRI.

"Our scientists — Dr Arvind Kumar Rai, Dr Nirmalendu Basak, Dr Parul



Scientists at the ICAR-Central Soil Salinity Research Institute in Karnal. SAYEED AHMED

#### SUBSTANDARD MINERAL SUPPLIED FROM RAJASTHAN

As per scientists, at present, gypsum is supplied to Haryana and Punjab from Rajasthan, which is not meeting the minimum standard of 70 per cent purity set by the Rureau of Indian Standards (BIS)

These formulations are highly reactive and get oxidised within one crop season by soil microorganisms. These help alleviating the stress developed due to excessive alkaline salts in soil

Sundha, Dr Rameshwr Lal Meena, Dr Raj Mukhopdhyay and Dr RK Yadav—in collaboration with Reliance Industries Ltd, Mumbai, under the publicprivate partnership programme, took five years to develop these alternatives," said the Director.

"These alternatives were evaluated in 83 locations in Punjab, Haryana, UP, MP, and Rajasthan. In fields with very lower sodicity, these showed eight per cent increase in yield and in highly sodic fields of wheat, rice,

cotton, and berseem (fodder crop), around 225 per cent increase was witnessed," said Dr Sharma.

These formulations are highly reactive and get oxidised within one crop season by soil microorganisms. These help in alleviating the

stress developed due to excessive alkaline salts in soil he said.

"Sodic soils occupied over 3.77 million hectares of India and this area is likely to be increased in cultivated irrigation commands of the country by 2030." he said.

Principal scientist Dr Rai said the formulation developed by them had over 90 per cent purity, which is higher in comparison to gypsum.Besides, mined they have also developed desulfurisation flue-gas gypsum, another reclamation option, in collaboration with the National Thermal Power Corporation (NTPC), Vindhyachal, Singrauli, he said.

These alternatives will ensure the circular economy of by-products from petroleum and thermal power plants," he said.

"A study on the reclamation potential of these products has been completed and these are recommended for use in sodic soils. These materials will be made available with farmers as powerful reclamation agents this year," said the Director.

# Oilseed prices disappoint farmers

#### NITISH SHARMA

TRIBUNE NEWS SERVICE

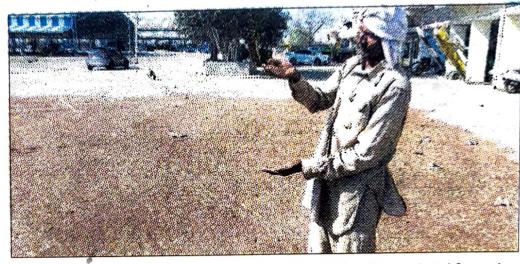
#### AMBALA, FEBRUARY 7

The arrival of toria oilseeds at the grain markets of Shahabad in Kurukshetra and Ambala City have begun, but the prices being offered by the private players for the seeds have left the oilseed farmers disappointed.

While last year, toria was fetching Rs 6,100 to 6,900 a quintal, this year the farmers are being offered just Rs 5,200 to 5,500 a quintal.

Shiv Kumar, a farmer who reached the Shahabad grain market, said: "I have sold 16-quintal of toria oilseeds for Rs 5,452/quintal today, while last year I had sold my produce for around Rs 6,500/quintal. Now, I will sow sunflower and hope that I will get some good returns."

Kapur Singh, a farmer of Basauli village in Punjab, who reached the Ambala City grain market with his produce, said: "Last year, I sold



This year, farmers are getting just ₹5,200 to ₹5,500 a quintal for toria.

my toria seed crop for Rs 6.600/quintal but this year I have been told that I may get around Rs 5,000/quintal only. So this season, I am unlikely to reap any profits. Last year I suffered a yield loss in sunflower due to multi-flowering caused by poor seeds, I just wish to get good quality seeds this year." Pawan Garg, a trader, said: "The arrivals have started but the buying has been sluggish. The industry players are buying cautiously. Even the thousands of quintals of unsold stock of the previous year will get carried forward this year. A number of people in anticipation of a further increase in prices had held their stocks, but the prices crashed and stocks remained unsold. Not only toria, the yellow mustard which was sold over Rs 7,200 to 7,300/quintal last year is unlikely to see those levels this year."

Krishan Kumar Malik, secretary, Shahabad grain market, said: "Around 3,240 quintals of toria seeds have arrived so far and the stocks are being procured by the private traders."



# 20 districts have water-stressed blocks, says MoS

#### **IN PARLIAMENT**



#### SANJEEV SINGH BARIANA

**CHANDIGARH, FEBRUARY 9** 

TRIBUNE NEWS SERVICE

Minister of State for Jal Shakti Bishweswar Tudu today said as many as 20 out of 23 districts in Punjab have waterstressed blocks. He was replying to a question posed by

Badal during the Lok Sabha session. The MoS said 256 districts in various states had water-stressed blocks.

SAD MP Sukhbir Singh

Sukhbir told that more than 80 per cent of groundwater blocks in Punjab had dried up "in a bid to provide foodgrain to the rest of the country" and asked about the proposals that the Centre was working on to address the issue of sav-

Tudu said as per the assessment of groundwater resources by the Central Ground Water Board (CGWB) and the state government in 2022, out of 153 blocks in the

ing water for future needs.

state, as any as 117 were over exploited, four critical and 15 semi-critical. He added that only 17 blocks had been categorised as safe.

The assessment report showed that the annual ground water extraction for all uses in the state was 28.02 billion cubic metres (BCM) and of this 26.69 BCM was utilised only for irrigation purpose.

The minister said the Centre

was working on a master plan to recharge groundwater on the basis of a report prepared by the CGWB. He added that Punjab has 11 lakh rainwater harvesting and artificial recharge structures to harness 1,200 million cubic

Besides setting up the Directorate of Ground Water Management, the Punjab Government has also engaged Israel-based firm, Mekorot, to finalise

metres of rainwater.

water conservation.

Meanwhile, SAD MP Harsimrat Kaur Badal, during the Budget discussion in Parliament, today also raised the water crisis loom-

ing large in Punjab.

# Area under paddy down ILhectares

Appreciating the state government for promoting crop diversification, Union Jal Shakti Minister Gajendra Singh Shekhawat said the state had managed to reduce the area under paddy cultivation by 1 lakh hectares. He was replying

The state, in 2019, had announced a payment of Rs 7,000 per acre to those farmers who will diversify more than 50 per cent of their kharif season paddy area. — TNS

to a question on use of water in

the Lok Sabha today.