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### THE MAR HINDU

### Prices of onion hit rock bottom

Farmers are suffering major losses as they are unable to recover even their input costs



No Sting:Another cause for further decline in prices of the edible bulb is the impending monsoon.File Photo

After being on a steady decline for more than a month, prices of onions have now hit rock bottom at Rs.3.5 per kilogram in Delhi's wholesale market.

While it is a happy situation for consumers, the farmers are suffering major losses as they are unable to recover even their input costs.

On Wednesday, the average wholesale rate of onions in the Capital's Azadpur mandi hit an all-time low of Rs.6.17 per kg.

The best-quality onions are being sold at a wholesale rate of Rs. 8.25 per kg as compared to Rs.10.5, which was recorded just a month ago. The poorquality and the smaller ones are being bought by traders at Rs.3.5 per kg, a jump of Re.1 from April. The retail prices in the city range between Rs.19 per kg and Rs. 21 per kg.

When compared to the data of onion prices at Azadpur Mandi in the previous year, then it's the lowest this month. On May 25 last year, the rates were Rs. 18.50 per kg. In August 2015, the rates jumped to a staggering Rs. 53 per kg, and the average cost itself was Rs. 39. In January, too, the price was as high as Rs. 17 per kg.

The reason for the constant fall in prices is the bumper harvest of onions this year. "Demand of this staple kitchen commodity remains almost the same throughout the year, except on occasions like Navratri where it only decreases. But, we have a huge surplus of onion produce this time which is far more than the average consumption," said Rajender Sharma, member of Azadpur, Agriculture Produce Market Committee (APMC).

### Monsoon dampener

Another cause for further decline in prices of the edible bulb is the impending monsoons. According to traders of Azadpur mandi, touted to be Asia's largest wholesale fruits and vegetables market, poor to medium quality onions cover almost 70 per cent of the total daily arrival of the vegetable.

"Rains are going to come in about 15 days, so we are not left with much time to do away with the poor-quality onions. Otherwise, the rains will rot them and they would have to be thrown away," he added.

For farmers, the situation is a nightmare. "The farmers are badly hit as they spend at least Rs. 12 per kg in the entire process of producing the crop, excluding their labour cost, which alone amounts to about Rs.13,000," said another member of APMC.

### The reason for the constant fall in prices is the bumper harvest of onions this year

### More time to repay farm loans

Farmers have been given one more year to clear their agriculture loans taken from district central cooperative banks, primary cooperative societies and rural development banks in the backdrop of draught, Kadur MLA Y.S.V. Datta has said.

He told presspersons on Tuesday that farmers of Uttara Kannada, Dakshina Kannada, Shivamogga and Udupi districts had been covered under this facility.

"I have told the farmers here not to hurry to repay the loan by May 31. Some vested interests have misguided them," he said.

He said that Taluk Rural Coopertative Credit Bank had brought the plight of farmers to his notice during his previous visit.

### **Extreme heat beneficial to farmers**

Proper and sustained exposure of tilled soil cleanses it of pests, necessitating less expenditure on chemicals



PREPARATION: A farmer ploughing his field to churn the soil in Narnoon mandal in Adilabad district.-Photo: S. Harpal Singh

The common man may be a frustrated lot owing to the extremely hot summer, but, farmers and agriculture scientists are thinking differently. For the latter, the abnormally hot weather, which has had temperatures in excess of 40 degrees Celsius since early March, means less of headache on account of crop pestilence as long exposure of the churned land to hot sun will only destroy the pests in it.

"There will be a proportionate reduction in pestilence in kharif season as almost all the pests in pupal stage and in the shape of spores would have been killed due to the hot weather," explained Adilabad Agriculture Research Station Principal Scientist and Head Sreedhar Chauhan. "The abnormally hot weather preceding kharif benefits cotton, soyabean, redgram, blackgram and greengram," he opines.

"Exposure of soil for a good number of days will result in farmers incurring less on administering chemicals," stated Scientist (Agronomy) D. Mohan Das. "The farmers should not allow residual crop to be left in the fields for a prolonged period," he added.

According to the agronomist, the heat destroys the pupas of pink bollworm and sucking pests like heliothis and spodoptera. These are extremely dangerous for cotton crop, he revealed.

"Another of the most important aspects associated with prolonged exposure of soil to extremely hot sun is the increase in the soil capacity to soak and retain water. The surface run off of water during the initial rains will be much less when soils are exposed to sun properly," revealed C. Narsingu, retired Adilabad Agriculture Officer as he talks of the farmer-friendly summer heat.

Mr. Sreedhar Chauhan however, cautions farmers on the timing of sowing of seeds this kharif in the wake of the lands getting exposed to hot sun for a

longer period. "Farmers should not take up sowing until the at least 60 mm of rainfall is recorded," he suggested.

"If the heat in the soil does not dissipate sufficiently, there is the danger of seed loss. So it is better to let the soil cool sufficiently which happens only when the quantum of rainfall crosses 60 mm," he explained.

### ASCI to study best marketing practices

A team comprising officials from the State government and experts from ASCI would visit different States to study the best marketing practices within the country. The joint team would start the exercise with a visit to the neighbouring markets in Karnataka.

Minister for Irrigation T. Harish Rao, announced this after chairing a twohour-long deliberations held at ASCI's Bella Vista campus on Wednesday. The ASCI Chairman, K. Padmanabhaiah, led the experts' team and came up with suggestions to improve the agricultural marketing activities.

The priority initiatives for cooperation include knowledge support for eintegration of markets, research and evaluation studies and capacity building activities.

### **Training for fertilizer dealers**

A training programme for fertilizer dealers for implementing the Mobile Fertilizer Management System effectively will be inaugurated here on Friday.

The inauguration is slated for 9 a. m. at the FACT Udyogamandal Club, said a press release here.

The training programme is being organised in cooperation with various fertilizer producers and the Department of Agriculture. For more details contact: 9446457391.

### Drought-hit farmers told to cultivate oilseeds



Officials are educating Bundelkhand ryots on the benefits of growing sesame.

To help farmers recover from successive crop losses in drought-affected Bundelkhand, the Uttar Pradesh government is encouraging them to increase the cultivation of oilseeds, especially sesame (til), in the coming Kharif season.

The State has increased subsidy on oilseeds. The government will now provide farmers a grant of Rs. 1,500 per quintal in the Kharif season (sesame, groundnut and soyabean) and Rs. 800 per quintal in the Rabi season (rye, mustard, rapeseed and linseed). The grant will be applicable to all species of oilseeds ageing 15 years. Relaxing the norms in Bundelkhand, a government spokesperson said the grant payable on oilseeds would not be limited to 50 per cent.

#### **Additional subsidy**

In all seven districts of Bundelkhand, officials are holding 'ghostis' (small meetings) to educate farmers about the benefits of cultivating sesame. As

farmers feared that increase in production will bring down the price, last season the government introduced an additional Rs. 80 per kg as subsidy on the crop, said Joint Agriculture Director Pankaj Tripathi.

"We are telling farmers to not restrict sesame production for industrial use. They can also use the produce at home, as fuel — to prepare items such as puri or paranthas," Mr. Tripathi said.

It becomes even more viable for farmers to grow sesame in view of the menace of "Annapratha" prevalent in the region. Annapratha is an age-old tradition in Bundelkhand where farmers let loose their cattle, especially the unproductive and pregnant cows, to graze freely.

"Our latest videography of fields has shown that the "anna" cattle do not eat sesame. They find it bitter. It is a safe crop to grow," Mr. Tripathi told *The Hindu*.

To further promote sesame, 'til laddoos' would be introduced in anganwadis and mid-day meals, he said.

### Abandoning cattle

Regular droughts over the years have worsened the "Annapratha" as distressed Bundelkhand farmers are even more inclined to let loose their unproductive animals. The situation has aggravated due to the drying up of waterbodies, depletion of forest covergrazing areas.

### Thirunelly seed fete begins tomorrow

Thirunelly seed fete, a seed festival organised jointly by the Thirunelly grama panchayat, Save our Rice campaign, Thanal, Kudumbasree Mission, ATMA and NABARD, will be held at the weekly market of the Kudumbasree at Kattikulam on Friday and Saturday.

O.R. Kelu, MLA, will inaugurate the programme at 10 a. m. on Friday. The two-day programme is aimed at sensitizing the farming community to the significance of conserving traditional seeds of paddy, vegetables and tuber crops, the organisers said in a release here .

Various programmes, including a seminar on organic farming practices and on ground challenges, exhibition-cum-sharing of close to 200 varieties of paddy seeds, 60 varieties of vegetables and tuber crops and a food festival of the Kudumbasree Mission will also be held.

### 'No immediate shortage of fertilizer for kharif crops'

### If water scarcity continues, then there may be shortfall: MCF director

The shutting down of the urea production unit of Mangalore Chemicals and Fertilizers (MCF) Ltd. since May 7 will not immediately create a shortage of fertilizer in the hinterland for kharif crops, according to MCF director K. Prabhakar Rao.

The water-intensive unit has been closed down due to water scarcity, after the Mangaluru City Corporation stopped water supply, two million gallons a day (MGD), to the company from the Thumbe vented dam.

In an informal chat with media on the sidelines of a meeting at the office of Deputy Commissioner here on Wednesday, Mr. Prabhakar Rao said that if the scarcity of water prolonged due to the late arrival of monsoon, then it could create some problem.

He said that now urea produced at the MCF was in stock at warehouses in the State. But past experience suggested that eight month production stock was consumed in four months of the kharif season.

MCF Ltd. has a market share of around 30 per cent to 40 per cent in the State. It produced 3.8 lakh tonnes of urea per annum.

The company supplied urea to markets in Kerala, Andhra Pradesh and Maharashtra.

### Fertilizer

"Since fertilizer is an essential commodity as per the Essential Commodities Act, the Ministry of Chemicals and Fertilizers decides on the movement plan of our product," he said. The Ministry also factors in the possible shortfall in production while deciding on imports, he said.

He said that the country produced 21 million tonnes of fertilizer annually against the demand for 30 million tonnes. Fertilizer was normally sourced from China and West Asia.

MCF is the lone company in the State which manufactured urea, diammonium phosphate, NP 20:20:20:00:13, ammonium bicarbonate-food grade, sulphuric acid and other products.

MCF will stand to lose in terms of profits, loss of inventory, and wastage of raw material if the shutdown prolongs, he said.

### Monsoon cheer as El Nino ends

This could cause monsoon to spill over to October: Officials

Australia's weather bureau said the withering El Nino — among the strongest in history and responsible for two years of consecutive droughts and record summer temperatures in India — had ended.

While that bodes well for the monsoon, weather officials in India said this could also be a precursor to floods during August and September and monsoon possibly spilling over to October.

The Australian Bureau of Meteorology said on Tuesday that there was "…little chance of [sea surface temperatures] returning to El Niño levels, in which case mid-May will mark the end of the 2015–16 El Niño."

Typically, an El Nino — marked by above-average temperatures in the Pacific —



That begins to cool is followed by a neutral phase before transitioning into La Nina.



### Question mark on government wheat output estimates

Overall wheat arrivals in mandis have been only 25.29 mt so far this marketing season, as against 30.49 mt during the same period last year.



When both procurement and mandi arrivals are down by over 5 mt, many grain traders and analysts are asking how production can be 7.5 mt more than 2014-15.

Huge question marks are being raised over the Centre's wheat production estimate of 94.04 million tonnes (mt) for 2015-16, which is significantly higher than the previous year's figure of 86.53 mt.

The agriculture ministry's output numbers are being taken with more than a pinch of salt on many counts. The first has to do with procurement and market arrivals. Government agencies have till now procured only 22.84 mt of the 2015-16 crop in the ongoing rabi marketing season (April-June) and that figure is unlikely to cross 23 mt. This is not just below the target of 30.5 mt, but even the 28.09 mt procured last year.

Even overall wheat arrivals in mandis have been only 25.29 mt so far this marketing season, as against 30.49 mt during the same period last year. When both procurement and mandi arrivals are down by over 5 mt, many grain traders and analysts are asking how production can be 7.5 mt more than 2014-15.

Agriculture ministry officials declined to comment on the current official production estimates.

"It seems this government is overanxious to show that the farm sector is booming, when that is hardly the case," said Ashok Gulati, former chairman of the Commission for Agricultural Costs & Prices.

Interestingly, in 2014-15 also, the agriculture ministry had originally reckoned the crop's size at 95.76 mt — marginally lower than the record 95.85 mt achieved in the last year of the UPA regime — before eventually revising it down to 86.53 mt.

2014-15		2015-16	
2nd AE (18 Feb '15)	95.76	2nd AE (15 Feb '16)	93.82
3rd AE (13 May '15)	90.78	3rd AE (9 May '16)	94.04
4thAE(17 Aug '15)	88.94		
Final (15 Feb '16)	86.53	- Jurean	-

But for 2014-15, the initial high estimate was made in February 2015, before the large-scale damage to the standing crop from unseasonal rains and hailstorms had taken place.

This time, it is the opposite: the first advance estimate pegged production at 93.82 mt. The second estimate, released earlier this month, has revised it further upwards to 94 mt-plus (see table).

"It isn't clear how they have arrived at 94 mt. Our assessment is that it would be between 84 to 86 mt," said a top executive from a leading multinational grain trader and branded atta maker.

His views were seconded by the representative of a major domestic commodity trading house: "The government's own data shows the country's wheat acreage to have fallen from 31.47 million hectares to 29.09 million hectares this year. Even with average per hectare yields of 3 tonnes — which seems difficult given the very poor soil and sub-soil moisture levels, aggravated by high temperatures and absence of winter rains — you get only around 87 mt."

An equally important reason to doubt Krishi Bhawan's estimates relates to prices. "Last year, I was getting wheat from Rajasthan and Madhya Pradesh at Rs 1,640-1,650 per quintal and from Uttar Pradesh at Rs 1,750 through April-May.

This time, prices started at Rs 1,840-1,850 and have now hit Rs 2,000 per quintal. If production is higher, why should prices go up, that too during the marketing season?" said S Pramod Kumar, executive director of Sunil Agro Foods Ltd, a Bangalore-based flour miller.

Wheat is currently wholesaling in Delhi at about Rs 1,700 per quintal. Even in central UP mandis such as Etah, Bareilly, Shahjahanpur, Hardoi, Sitapur and Kanpur, prices are ruling above Rs 1,600 per quintal.

"Unlike last year, when farmers were desperate to sell at the minimum support price (MSP), we are now in a seller's market. After many years, market prices have actually gone above the MSP of Rs 1,525 per quintal during the season itself," observed the MNC executive. One casualty of the Centre's wheat output and procurement overestimation may be stocks with the Food Corporation of India (FCI).

These are likely to dip well below 30 mt by end-June and just over the minimum buffer norm of 27.58 mt for that date.

"There will not be enough wheat available under the FCI's open market sale scheme this time.

The Centre should cut the import duty from 25 to 10 per cent, which will allow us to contract overseas wheat and reduce pressure on domestic supplies," said Kumar.

The landed cost of Australian prime white wheat at Chennai or Tuticorin ports will now work out to \$240-245 or Rs 16,200 per tonne. Black Sea origin wheat from Ukraine, Russia, Kazakhstan, Bulgaria or Romania is available even cheaper at \$205-210 or Rs 14,000 per tonne.

### Agro-forestry: Poplar's popularity dip, no takers for PM Modi's timber farming call

Punjab's farmers are losing interest in planting new trees, with prices halving from their peaks.



Gurpreet Singh Sandhu growingwheat in his poplar plantation. (Express Photo: Anju Agnihotri Chaba)

Sandeep Singh Randhawa grew paddy and wheat on his 65-acre land at Talwandi Lal Singh village in Gurdaspur district's Batala tehsil. That was till the late eighties, when he first planted poplar on the edges of his field. The returns encouraged him to expand the area under these trees — each

giving 4-5 quintals of wood in around six years — to 57 acres by the mid-1990s.

But in the last two years, Randhawa has stopped planting new poplars after felling mature trees, reducing overall acreage to 42 acres. "When I sold my first trees in the mid-nineties, I got Rs 500 per quintal. That rate hasn't changed, even while plywood prices have gone up four times to Rs 36-38 per square feet", he complains, adding "I'll wait for a few years before planting again.

Harmohan Ghuman from Khera Bet village near Ludhiana also started poplar farming in mid-eighties on 30 acres, before gradually raising it to cover his entire 150 acres. He, too, hasn't planted fresh trees for the past two years. "It's a mystery why poplar prices are falling when its products are selling at such a high rate. I've been asking farmers to reduce area. Unless we create a gap between demand and supply, the prices will not rise", says Ghuman, who is also secretary of the Tree Growers Association promoted by the Punjab Agriculture University.

Mandeep Singh of Adda Kanwa village in Gurdaspur too, had only poplars on his seven acres until recently. After getting the trees from two acres axed, he hasn't re-planted that area since.

Mandeep, Ghuman and Randhawa are among Punjab's 10,000-12,000 farmers, who cultivate poplars over an estimated 90,000-100,000 acres — mostly in the northeast Kandi region districts of Ropar, Nawanshahr, Hoshiarpur and Gurdaspur in the Shivalik foothills.

A common grouse uniting them is prices, which have halved from the Rs 900-1,000 per quintal levels till 6-7 years back.

All this comes ironically even as Prime Minister Narendra Modi, only two months ago at a Krishi Unnati Mela in New Delhi, encouraged farmers to undertake timber plantation along the edges of their fields. This, he stated, would help diversify their income and reduce risks from regular crop agriculture. Farmers, however, are a disillusioned lot. Many want to return to growing paddy and wheat, which bring comfort of government procurement at minimum support prices.

The absence of any government regulation or organised market has allowed unscrupulous middlemen and ply-board factory owners to create a "false slump", they claim.

"They tell us that prices are low because much-cheaper China ply is available in the market. Has anyone really seen this so-called China ply? They are only making fool of farmers," alleges Randhawa. Punjab's forest department has been promoting poplar, which it sees as a means to replenish the dwindling green cover in the state, which has a mere 6.5 per cent area under forests and trees.

The department distributes poplar saplings free of cost, but has no authority for purchase or supporting the prices of the trees they raise.

"We can assist farmers by supplying good planting material and technical know-how. But price control isn't in our hands", admits Kuldeep Kumar, principal chief conservator of forests.

Ashok Juneja, chairman of the Punjab Plywood Manufacturers' Association — the state has some 300 ply-board units — expressing concern says, "as it is the backbone of our industry". He suggests that in order to encourage its cultivation, the plywood industry be given agro-based industry status.

"We must not be charged commercial power rates, the 12 per cent central excise should be waived, and the state value-added tax reduced from 13.6 to 6 per cent".

But, farmers like Gurpreet Singh Sandhu of Rara village in Hoshiarpur's Tanda teshil, are not as pessimistic.

Pointing to the neatly-lined poplars covering 70 out of his 90 acres, Sandhu believes farmers can make money even in slumps such as the present one.

Farmers typically plant 290-325 trees per acre.

Taking an average of 300 trees weighing four quintals each, the revenue would come to Rs 6 lakh even at Rs 500/quintal.

As against this, expenses would be Rs 6,000-7,000 per acre annually, which works out to not more than Rs 45,000 over six years.

"You require very little labour, not much fertiliser or pesticides, and 15-20 per cent of the water that paddy consumes.

True, the money comes after six years, but you can grow wheat or sugarcane during the first 2-3 years when the plants are still short.

I have harvested 12 quintals of wheat in poplar fields, which isn't very low relative to the normal ... Besides, the trees have improved the quality of my soil", avers Sandhu. Farmers were obviously making more money when prices were at Rs 900-1,000/quintal.

"They should instead wait for market prices to go up again. It is bound to happen sometime" is his advice.

This waiting game, of course, not every farmer can play. The ones with smaller holdings would have most trees maturing at the same time; if prices are low at that point, profits will be hit.

That is not the case with larger growers, who have trees in more area and maturing at different periods.

They may make less on sale of trees during slumps, but that will be more than compensated when prices improve.

### A new PPP model for smallholder agriculture

With an enabling environment, many of the tiny FPOs now coming up can grow to scale and offer a rural version of the Startup India story.



Small holdings may be a constraint to achieving higher productivity, but there have been attempts to overcome this through a movement of producers' aggregation. This new model of 'PPP' or people-to-people partnerships is yielding positive outcomes.

### Written: Pravesh Sharma

While a lot of media attention has focused on rural distress arising from back-to-back droughts, even linking these to policy distortions encouraging water-guzzling cropping practices, there hasn't been much reporting on certain basic changes in India's agricultural landscape over the past two decades.

The most obvious reason being their gradual pace, unlike natural calamities like droughts and hailstorms that are sharp, pointed events with instant news value. Of the most significant changes is the composition of farm produce. About two decades ago, some three-fourths of the value of India's agricultural GDP was constituted by staples like cereals, pulses and oilseeds. But today, that share has diminished to a fourth; the balance is largely accounted for by socalled high value agriculture (HVA) produce that include horticulture, livestock, fisheries and fibres.

Significantly, it is small holders who cultivate less than five acres — the average size of Indian farms is just over 2.8 acres — who have invested heavily in HVA. Their share in the supply of HVA produce has registered steady increase. It attests to their ability to adapt to demand and compensate for smaller size of holding through producing crops that generate more value per acre.

Small holdings may be a constraint to achieving higher productivity, but there have been attempts to overcome this through a movement of producers' aggregation. This new model of 'PPP' or people-to-people partnerships is yielding positive outcomes.

Over a thousand farmer producer organisations (FPOs) have registered across the country in recent years, with their numbers growing every day. These new generation collectives are learning to overcome the constraints endured by the earlier wave of agricultural cooperatives, which clearly failed to deliver on the promise of empowering farmers. The fresh effort at aggregation through FPOs has been boosted by stronger legislation enshrined in the Companies Act — as opposed to the various state-level cooperative laws —which guards against the political and bureaucratic capture of these institutions.

Two examples are worth mentioning.

The first one is a small project started in the early 1990s by an NGO, PRADAN, in Kesla block of Madhya Pradesh's (MP) Hoshangabad district to aggregate tribal women poultry producers.

It has blossomed into a commercial venture spanning MP, Jharkhand, West Bengal and Odisha, clocking revenues of Rs 286.92 crore last year.

This unique cooperative enterprise has over 9,000 women shareholdermembers, each provided assistance to set up a poultry unit of 400-1,000 birds. By locating 30-40 farms within a tight cluster, the enterprise is able to achieve production and cost efficiencies one might see in industrial-scale farms.

Commercial viability has further been ensured through a vertically integrated supply chain: The cooperative owns a state-of-the-art hatchery producing 8 million chicks per year and a modern feed unit, apart from providing management, financial and veterinary support services to its members.

The integration of the production chain has helped de-risk the enterprise's women poultry rearer-members from marketing and financial volatility inherent to agricultural markets.

The cooperative plans to expand by enrolling 20,000 women-farmers through its model that has proven to be viable, scalable and inclusive. Though the model's backbone has been the hardworking woman poultry producer, PRADAN's professional approach and committed cadre of workers are equally responsible.

A similar success story, with an even larger membership of one lakh-plus farmers, to be cited is that of the Madhya Bharat Consortium of Producer Companies (MBCPC).

This is an apex-level producer company promoted by 49 FPOs in MP, with support from another committed NGO, the Bhopal-based Action for Social Advancement. In its first full year of operations ended March 2016, MBCPC recorded a turnover of Rs 69 crore and is targeting Rs 100 crore in the current fiscal.

MBCPC has, in the past few months, procured over one lakh tonnes of pulses through its FPOs for government agencies.

Besides, it has entered into two unique MOUs. The first is with EM3, a private agri-services provider to establish machinery banks for high-end farm equipment that can be custom-hired by MBCPC's farmers as per need.

The second MOU is with the Jawaharlal Nehru Agricultural University at Jabalpur to source breeder seeds of crops like cotton and soyabean for multiplication. The resultant certified seeds will be directly marketed to farmers by MBCPC at prices significantly lower than that of leading brands.

There are many such producer aggregation experiments happening in other states, too, enabled by NGOs and private sector firms.

Government policy in agriculture is still largely focused on subsidies, whereas what the sector requires — especially with HVA today — is institutional innovation that gives producers access to capital, technology and markets.

With an enabling environment, many of the tiny FPOs now coming up can grow to scale and offer a rural version of the Startup India story.

### Radha Mohan Singh interview: 'Doubling farm incomes our priority'

The Pradhan Mantri Fasal Bima Yojana, effective from this kharif season will be a game-changer. Farmers will pay the lowest ever premiums of 1.5-2 per cent, said Radha Mohan Singh.



Agriculture Minister Radha Mohan Singh. (Illustration: Subrata Dhar)

With back-to-back monsoon failures impacting farm output and incomes in the last two years, agriculture minister Radha Mohan Singh has had a lot on his plate. Yet, it has not stopped the Narendra Modi government from unveiling plans for the agriculture sector that he claims are path-breaking in this interview with HARISH DAMODARAN.

### What are your government's achievements in agriculture? How is its approach to the farm sector different from that of the UPA regime?

The Prime Minister, in his very first address after taking over, made it clear that this is a government dedicated to gaon, garib, kisan (village, poor and farmer). He has also set a goal for doubling of farmers' income by 2022.

The previous government had no focussed plan for agriculture other than hiking minimum support prices (MSP) or crop loan write-offs.

Even there, most farmers in Uttar Pradesh, Bihar or West Bengal never got the official MSPs, just as the Comptroller and Auditor General found gross irregularities in the farm loan waiver scheme. Our approach is more long-term, aimed at enhancing farm productivity, reducing costs, improving price realisations through marketing reforms, and providing adequate protection against crop losses from unforeseen events. All these will lead to increased farmer incomes.

### Can you be more specific ?

Let's first take productivity, for which a primary requirement is delivering water to every field.

There are 89 large and medium irrigation projects pending for the last 15-20 years. In this year's Budget, we have earmarked Rs 12,517 crore for completing 23 of these. Besides, a separate corpus fund of Rs 20,000 crore has been created through NABARD.

These will help in expeditious implementation of projects that would ordinarily never have seen light of the day.

But large projects apart, we are laying equal emphasis on drip and sprinkler irrigation under the Pradhan Mantri Krishi Sinchayee Yojana.

About 5.6 lakh hectares were brought under micro-irrigation in 2015-16 and we are targeting another 8.3 lakh hectares this fiscal.

The objective is to provide universal access to irrigation, while simultaneously ensuring that farmers produce more crop from every drop. So, your government's main focus is to boost productivity at the farm level... Yes, increasing productivity and also bringing down production costs. I would like to highlight two major initiatives.

The first is the soil health card scheme. Under it, every farmer will be provided a soil health card indicating the nutrient status of his field.

If he knows his soil is deficient in any particular nutrient, it will allow him to make the right choice of fertiliser and also what crop to grow.

We have already collected over one crore samples that will enable distribution of five crore soil health cards. In 2016-17, we will collect 1.5 crore samples to prepare another 8 crore soil health cards.

All farmers will, thus, get covered. Our aim is to provide soil health cards to every farmer at an interval of two years. It will eventually contribute to balanced fertiliser use and higher crop yields. The second big step has been to make neem-coating mandatory for every grain of urea that is sold.

Earlier, an estimated 30 per cent of the urea being produced, on which we incur around Rs 50,000 crore subsidy in the name of the farmer, was getting diverted to chemical factories and for other non-agricultural use.

But today, all that has stopped and there is no black-marketing of urea. Not a single question on urea shortages was raised in Parliament in the whole of 2015-16, which has happened for the first time in history! 100 per cent neem-coated urea has also reduced farmers' usage by 10-15 per cent, as the nitrogen release is slow and more efficient.

That again translates into lower cost and higher productivity. What about agriculture marketing reforms to enable farmers get better prices for their produce? Each state today has its own APMC (agriculture produce market committee) law, under which you need a separate trading license for every mandi.

The worst victim of this is the farmer, since he can sell only to the arhatiyas having the rights to trade in that particular mandi.

All efforts to reform this system had failed till we launched the National Agricultural Market scheme to integrate 585 mandis through a common e-trading platform and allow farmers to sell to buyers anywhere in India wanting to transact through this online portal.

We have convinced 17 states to reform their APMC Acts to enable three things: e-marketing of farm produce through the NAM platform, a single license to trade in mandis across the state, and a single point for levy of market fees.

We expect about 200 mandis to be integrated under the NAM e-trading platform by September, another 200 by March and the balance 185 by March 2018.

Unfortunately, some states like Bihar, West Bengal, Kerala and Tamil Nadu are yet to come on board. Farmers have suffered in the last two years from drought and other natural calamities.

What is your government doing differently in this regard? The Pradhan Mantri Fasal Bima Yojana, effective from this kharif season will be a game-changer.

Farmers will pay the lowest ever premiums of 1.5-2 per cent.

The government would fully subsidise the gap between the actuarial premiums and the rate payable by farmers.

Moreover, there is no artificial capping of sums insured resulting in lower claims to farmers, as was the case with past crop insurance schemes.

Besides, we have substantially stepped-up calamity relief assistance.

The UPA government during the four years from 2010-11 to 2013-14 approved a relief of only Rs 12,516.20 crore to states affected by drought and hailstorms.

Our government provided Rs 9,018 crore in 2014-15 alone and another Rs 13,497.71 crore last year.

Also, earlier farmers could claim relief only when 50 per cent or more of their crop suffered damage from disasters. We have brought down that threshold to 33 per cent, apart from raising the compensation amounts themselves by 50 per cent.

### From plate to plough: A barren field

NDA government's plans for agriculture are still to bear fruit.



Not surprisingly, farmers are unhappy and agriculture is stagnant. Farmer suicides are perversely high and rural indebtedness remains a grave issue.

As the Modi government celebrates two years in office, any review of its functioning will be incomplete without examining its record on the farm front. In the two years (FY15 and FY16), while the economy grew at 7.2 per cent and 7.6 per cent respectively, agriculture and the allied sector grew at - 0.2 per cent and 1.1 per cent.

This implies an average growth rate of less than 0.5 per cent per annum of the sector that employs close to half the country's labour force.

Two years ago, the current government's election manifesto promised, among other things, to make Indian agriculture more "productive, scientific and rewarding".

In particular, it mentioned to "take steps to enhance the profitability in agriculture, by ensuring minimum of 50 per cent profits over cost of production".

In the case of irrigation, it promised to "introduce and promote low water consuming irrigation techniques and optimum utilisation of water resources".

However, during these last two years, farmers' margins over costs, which hovered between 20 and 30 per cent in most agri-commodities during the terminal years of UPA 2, have declined.

In most agri-commodities, profitability is down to less than 10 per cent, and in some others, even negative.

This was mainly due to back-to-back droughts in 2014 and 2015, downswing in global agri-prices, and lower-than-anticipated increases in procurement prices.

Now, the government seems to have replaced the promise in the manifesto with the assurance that farmers' incomes will be doubled by 2022. The country awaits conceptual and operational clarifications on this new goal.

On the promise of efficient utilisation of water, there have been no major initiatives except slogans like "har khet ko paani" and "per drop, more crop".

The Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), under which these schemes are launched, lack the resources to fulfill any of these promises.

The total expenditure budgeted under the PMKSY for FY17 is Rs 5,717 crore, which is far less than what is required to achieve the target of "har khet ko paani". In all probability, this slogan is likely to remain a dream for at least a decade.

However, the government can be lauded for at least three initiatives: Pradhan Mantri Fasal Bima Yojana (PMFBY), Jan Dhan and Direct Benefits Transfers (DBT) and e-National Agricultural Market (NAM).

On April 1, 2016, the Modi government launched a revised crop insurance scheme (PMFBY) to combat the farm crisis and agrarian distress.

It is a commendable step in the right direction though it has come somewhat late.

However, like with many schemes, this one too has been designed without sufficient groundwork, which will cripple its performance.

For example, efficient and timely assessment of crop damage and payments needs installing automatic weather stations, digitisation of plots, linking them with Aadhaar and bank accounts, and using latest technologies ranging from drones and doves (low earth orbits) to satellites. This is still a work-inprogress and unless the PMO shows perseverance, it may fizzle out.

Second, the PMO gave high priority to financial inclusion and to Jan Dhan.

As on May 4, about 22 crore Jan Dhan accounts had been opened with 61 per cent of them in rural areas. Here too, challenges like increasing dormancy of agents, falling first-time accounts, and operational hiccups like lack of connectivity mar the system. Close to 27 per cent of the accounts are zero-balance.

More than half of these accounts have not been utilised to receive payment from the government's welfare schemes or food and fertiliser subsidies through direct benefits transfer (DBT). The Shanta Kumar panel suggested moving to DBT in both food and fertiliser subsidies, with a view to plug leakages that hover between 30 and 40 per cent of expenditure.

The budgeted amount on food and fertiliser schemes is Rs 2,05,000 crore for FY17, plus pending bills of more than Rs 1,00,000 crore.

If one shifted to DBT and put the savings in water management, the shape of agriculture and the fortunes of Indian farmers can change for the better.

Third, conceptualising and embarking on creating an unified electronic national-level farmers' market (e-NAM) is a bold step in the right direction.

But if NAM is to succeed, one needs to streamline fees and taxes at statelevel wholesale markets, reform agriculture produce market committees (APMCs), introduce grades and standards, etc.

Further, encouraging commodity market trade will also help revive the price-discovery role of markets.

But all these are medium to long-term measures, which will take time to bear fruit.

One only wishes that they were taken in the first year of the Modi sarkar. But it is better late than never. An average agri-growth of less than 0.5 per cent per year during FY15 and FY16 should prod the Modi government to robust action.

Monsoon failure and collapse in global agri-prices are not in the hands of the government, but it is during such a crisis that a government's vision is tested.

Not surprisingly, farmers are unhappy and agriculture is stagnant. Farmer suicides are perversely high and rural indebtedness remains a grave issue.

The government needs to move fast and deploy bold steps on the agri-front if it wants the farming community to benefit and poverty eliminated.

An action-oriented mission-mode execution of agendas set by the wellmeaning slogans, backed by sufficient resources may facilitate a turnaround.

## BusinessLine

### Inkel forays into modern farming biz



A file photo of Inkel farm near Malappuram in Kerala

Inkel Limited, a Public Private Partnership initiative of Kerala government, has adopted modern agricultural technologies to help conserve water and increase production at its farm projects in the State.

The success of the technology – which involves nourishing plants with just the right quantity of water delivered drop by drop, right to their roots, unlike the wasteful flooding technique – has prompted Inkel to employ it at the farms being developed under its agri-business vertical. The technology is being pioneered in Piravom in Ernakulam district. Spread across five acres, the farm grows fruits including Redlady Papaya, Rambutan and plantains. The fruits are expected to be harvested in September-October this year, and the yield projected at over 50 tonnes.

According to T Balakrishnan, Managing Directror, Inkel, Kerala is overdependent on neighbouring States for its food needs. According to estimates, vegetables worth around ₹3,000 crore are imported into the State every year. However, the State produces only about five lakh tonnes of vegetables of the total annual requirement of around 25 lakh tonnes. To bridge the demandsupply gap for safe-to-eat fruits and vegetables, Inkel has forayed into the modern farming business.

The company has also built polyhouses at Piravom and Malappuram for producing vegetables, including green chillies, yard long beans, bitter gourd and cucumber.

As part of its expansion plans, the firm is also implementing a modern farm at Palakkad. The venture will also support local farmers with training on modern farming techniques and practices.

Diverse technologies will be demonstrated to the farmers and they can opt for the one best suited for their crop. We will also plant fruits and vegetables in the area, he said.

### 'GST will help in removing distortions in agri market'

Need to spread benefits of online portal for trading in farm goods, says Additional Secretary, Finance Ministry

The Centre is making efforts to create consensus for the smooth passage of the Goods and Services Tax (GST) in Rajya Sabha in the forthcoming session of Parliament which would create a uniform market for all goods and services including agriculture commodities, a senior government official has said. With this move, the government would be able to create a uniform market for all goods and services in the country and the agriculture sector – where multiple distortions exist – would gain despite it being a State subject, Ajay Tyagi, Additional Secretary, Finance Ministry said at a seminar on National Agriculture Market (NAM) organised by the PHD Chamber of Commerce & Industry on Wednesday.

Tyagi pointed out that the agriculture market in the country was suffering from lack of uniformity not only between States but also within States at the 'tehsil' level.

"Having uniformity within States is a big challenge as a lot of vested interests are at play in agriculture mandis in various 'tehsils'. There is a need for uniformity within a State and a single license fee at mandis," he said.

### Agri e-market

The e-NAM, an online portal for trading in agriculture produce launched in April, seeks to create a market for agriculture goods where prices are uniformly discovered, there is standardisation of products and where farmers get their due, the Additional Secretary said, adding that there should be more effort to disseminate information on this in semi-urban are rural areas.

"People need to be told why is the NAM beneficial for everyone including farmers, consumers, spot markets and financial markets," he said.

The e-NAM will initially enable farmers in eight States – Uttar Pradesh, Madhya Pradesh, Jharkhand, Himachal Pradesh, Gujarat, Telangana, Rajasthan and Haryana – to sell online 25 commodities in 21 wholesale mandis.

The commodities that will initially be sold online include chana (black gram), castorseed, paddy, wheat, maize, turmeric, onion, mustard, mahua flower, tamarind and shelling pea.

### Darmona tea tops leaf and dust auctions

Only 7.52 lakh kg was offered for Sale No: 20 of Coonoor Tea Trade Association (CTTA) auctions. It was the lowest volume offered so far in 2016.

Nearly 93 per cent of this offer was sold with average price falling to ₹96.62 a kg from ₹97.51 in the previous week.

Darmona Estate's Pekoe Dust, auctioned by Paramount Tea Marketing, topped the Dust tea auction and the entire CTC market when Om Enterprises bought it for ₹201a kg. Darmona Estate's Red Dust, auctioned by Paramount Tea Marketing, closely followed when Om Enterprises bought it for ₹200 per kg. These were the only grades which crossed the ₹200/kg mark.

Darmona Estate topped the Leaf tea auction also when its Broken Orange Pekoe fetched ₹171, closely followed by its Broken Orange Pekoe Fannings at ₹170.

In the orthodox market, Kodanad topped at ₹246 a kg followed by Havukal ₹219 and Karibetta ₹218.

#### Castorseed declines on weak offtake

Castorseed price moved down on weak demand from crushers and limited demand for castor oil.

Traders said that as export demand for castor oil fell, buying from crushers reduced on Wednesday. With this good supply also exerted pressure on the seed price.

About 1.05 lakh bags arrived in Gujarat and price moved down by ₹4 to ₹604-614 per 20 kg.

In Saurashtra region, about 2,200 bags arrived and price declined by ₹2 to ₹603-613 per 20 kg. Castor oil lost ₹2 to ₹635/10 kg.



Following the spot, prices on futures too slid as market participants booked the profit.

On the Rajkot Commodity Exchange (RCX), castor June contact declined by ₹19 to ₹3,139 a quintal and RCX September contact decreased by ₹29 to ₹3,284.

RCX spot castor traded down by ₹5 to ₹3,092.50 per quintal.

# THE TIMES OF INDIA

### Agriculture minister flags off krishi raths

The minister for agriculture development, animal husbandry and fisheries, Randhir Kumar Singh, on Wednesday flagged off Krishi Rath to mark the beginning of the month-long Jharkhand Krishi Mahotsav. The state government seeks to promote awareness among the masses about the farming facilities provided by the Centre and state government.

The state agriculture department, which has nearly doubled the allocation for agriculture this financial year by introducing a separate budget for the department, is focused on agriculture.

Singh said the Krishi Rath initiative was launched last year to inform farmers about facilities available to them. "The initiative has yielded positive results. A lot more remains to be done," said Singh.

While Krishi Mahotsav will conclude on June 25, the raths (56 in total) designed to disseminate information about agriculture-related schemes and facilities, will cover four blocks each by June 9.

Director of the state agriculture management and extension training institute (SAMETI), Ajay Kumar Singh, said the crop insurance policy has been redesigned to suit farmers' interest and krishi rath will help educate farmers about the scheme.

"The Pradhan Mantri Krishi Sinchayee Yojana, Pradhan Mantri Fasal Bima Yojana, availability of a single window for farmers, support available for construction of dobhas, soil health card, rainwater harvesting, availability and distribution of seeds are among the major issues that farmers should be aware about," said Kumar Singh. He also added that the initiative will also help farmers explore new farming practices.

### Farmers demand more water release for sugarcane

Swabhimani Shetkari Sanghatna's local unit in a written application requested district collector Amit Saini to lift ban on water lifting from river beds. The SSS local leaders claimed that ban has badly affected farmers from Radhanagari to Shirol who could not lift water from the bed.

District head Bhagwan Kate, Jalindar Patil, Bandu Patil, Shivaji Mane and Janardan Patil met district collector Saini on Tuesday.

The delegation stated that the district administration has banned water lifting from Panchganga river bed for more than 15 days. We were supposed to get one more round of water through the dams but so far there has been so communication from water resources department or district administration. Most of the farmers have cultivated crops that need water currently. In such situation, which has gradually developed--authorities concerned are still not making any provisions to release water through the dams. Even if it rains after 15 days, the dams are going to get water but if we do not get water now, we will not be able to save the crops. No rains can save them from dying then, the delegation stated.

District collector Saini said, "I will personally talk with water resources department again and see if we can release some water for agriculture purpose. There is no policy or intension to cut water share of agriculture."

### Delta farmers await water from Mettur

While waiver of crop loans taken from cooperative banks, as part of chief minister J Jayalalithaa's electoral promise, has come as a big relief for farmers, they expect her to deliver a lot more to revive the ailing agriculture sector by ensuring uninterrupted supply of water for irrigation.

The requirement of water for kuruvai cultivation remains a top priority for farmers in the delta region, which pins its hopes on water release from the Mettur dam as usual on June 12 if the level touches the 90-feet mark.

On assuming office for the second consecutive time, Jayalalithaa ordered waiver of crop loans taken from cooperative banks by small and marginal farmers at a cost of Rs 5,780 crore to the exchequer.

While extending their happiness over the announcement, the farmers expressed the hope that the chief minister would ensure that the kuruvai cultivation in the delta districts of Thanjavur, Tiruvarur, Nagappattinam and part of Trichy could be be taken up this year as the release of water from the Mettur dam on time is unlikely given the present water level of 47 feet. Since 2013, the situation has been unfavourable for full cultivation of 4 lakh acres in Thanjavur, Tiruvarur and Nagappattinam districts and this year is unlikely to be any different.

"Once again we are left to do Kuruvai cultivation in 40% of the total area, that is 1.22 lakh acres, that too if the farmers get enough power supply to pump water from wells. So we are demanding 16 hours of power supply daily. With only three weeks left for June 12, the chief minister should take a call immediately to save the livelihood of farmers," says general secretary of the Federation of Farmers Association, Cauvery Delta Districts Arupathy P Kalyanam.

### Drought doubles woes of chilli farmers in Odisha

Even as chilli price in the market has nearly doubled, there will be no respite for the consumers any time soon as production due to the drought is likely to fall this year.

The red and green varieties together, Odisha produces nearly 74,000 tonnes of chilli per annum. It is cultivated on 70,000-80,000 hectares in the state. Sambalpur and Ganjam are the major chilli producing areas, though a

sizeable number of farmers grow the crop in Jharsuguda, Balangir, Koraput and Puri districts as well.

Market inputs showed average price of good quality red chilli has since increased to Rs 180 a kg while the price of the green variety ranges between Rs 80 to Rs 100 a kg.

Chilli production in the state was almost stable in the last three years. But the production may fall by 20-30% this year due to the prevailing drought condition, said Susanta Kumar Das, deputy director, horticulture.

Given the nationwide demand and export prospects, chilli is a kind of agricultural produce that can fetch huge profits for the farmers. There is no chilli mandi in the state. Neither has there been any official move to create a proper market linkage to help the producers get higher returns, said a senior official in the horticulture directorate.

He said chilli production in Odisha is quite less than the national average of 1.9 tonne per hectare. Over the years a chilli market has been developed at Kuchinda in Sambalpur district. Traders from different places of the state and outside buy the produce from Kuchinda. But, that is no mandi, he said.

Andhra Pradesh is a high chilli consuming state. Yet it exports chilli to Odisha and other parts of India because of mandis and market linkage created for the farmers. "We have the same climate, but far behind in production," said A K Nahak, a chilli farmer of Lunghui village in Ganjam district.

"We are often forced to sell chilli to middlemen at a distressed price," he added.

### 'Gift to farmers': IFFCO slashes price of DAP, NPK fertilizers by Rs 1000

In a move that will come as a huge relief to farmers across the country, fertilizer giant Indian Farmers Fertiliser Cooperative Limitedhas slahed rates of DAP and NPK fertilizers by Rs 1000 per tonne with immediate effect.

This was announced by the biggest cooperative of the country on Wednesday. The decision will bring down the per-bag price of these fertilizers by Rs 50 across the country.

"This is one of the biggest reduction of rates for the benefit of farmers and is a sort of gift and service to the farmers of the country," said US Awasthi, MD & CEO,IFFCO.

The IFFCO move comes at a time when farmers in several parts of the country are facing unprecedented crisis due to drought.

According to the government, this year's drought has affected over one lakh villages in 313 districts across 13 states.

Prime Minister Narendra Modi has held a series of meetings with chief ministers of the drought-affected states.

PM Modi is likely to announce several long-term measures to tackle the problem.

### Saharanpur farmers refuse compensation for crop loss from PM's rally, call it a 'privilege'

Raees Ahmad, a Saharanpur farmer, has declined monetary compensation for his cane crop which got destroyed as his land was converted into the venue for Prime Minister Modi's rally on Thursday. Ahmad is not the only such farmer. Munnawar Ali, on whose field helipads are to come up, has also refused compensation, both farmers expressing happiness at the "privilege" that their land is being used for the event.

Ahmad, 55, said, "PM Modi is our guest. How can I ask compensation for a guest's visit? It is not our culture. I am proud that he will address the nation from my land. In fact we are waiting for him eagerly. The Prime Minister is coming to our village. What can be more glroius to me than that?" The compensation refused by him was calculated at over Rs 10,000.

Modi will be addressing the rally near Delhi Road here. A grand stage has been constructed here. Ahmad had grown cane on 8 bighas of land that he has taken on lease from the Madrassa Mazahir Ulum. Raees said that the local lekhpal informed him of the compensation he was to get. "Our MP, Raghav Lakhanpal Sharma also assured me that I would get compensation, but I refused. The PM is doing a lot for the country. I could not ask for money in his name," Ahmad added.

Meanwhile, three helipads have been constructed on 21 bighas of land just 200 metres from the rally point, on a plot owned by Ali, who has also refused compensation. "I had to sow paddy in the field. Now the work will postponed only a week and that period doesn't matter for the new crop. It is a rally of our Prime Minister, so the question of accepting compensation does not arise," he said.

Although Ali will have to make his land ready again for sowing as the helipads have ruined the paddy field completely, he declined the compensation amount of Rs 8,000.

### Compensate us if kuruvai crop fails, demand farmers

With the water storage at Mettur dipping to 16 tmc, the short-term paddy cultivation in Cauvery delta districts including Thanjavur, Tiruvarur and Nagapattinam is likely to be severely affected.

At 4pm on Tuesday, the water level at the dam stood at 47.04 ft (15.99 tmc). "The water level is depleting as the inflow was just 106 cusecs per second while the outflow was 500 cusecs per second," said a PWD official. He further said that the present water release from the dam is only to meet the drinking water needs of Salem.

This has given rise to demands from farmers that the government should step in. "Farmers who suffered more than 50 per cent crop loss were paid relief of Rs 15,000 per acre by the government last year. We are expecting such relief this year," A Venkatesan, a functionary from Tamilaga Vivasayigal Sangam in Salem district told TOI.

But the southwest monsoon is expected to be good this year. "If the monsoon is good, Mettur dam may get good inflows in August," said Manickam Gounder, another farmer from Mettur dam area.

Until a few years back when the water was released on the scheduled date, the farmers in delta districts carried out kuruvai cultivation in four lakh acres. The acreage has come down by half in the last four years, say farmers.

President of Cauvery Delta Farmers' Welfare Association Mahadhanapuram V Rajaram says farmers, in the absence of kuruvai, will have to think of alternative crops until samba.

Others say farmers who own pump sets will take recourse to groundwater. District secretary of Thanjavur District Cauvery Farmers' Protection Association Swamimalai Vimalanathan says: "Those who have pump sets are already half way through the summer corp. So, only around 35 per cent of total area may go for kuruvai if water is not released." Farmers are worried that if rains fail in summer, they will have to go for groundwater for samba also.

Farmers in Salem and Dharmapuri have urged the state government to carry out the planned Cauvery Surplus Water Scheme at the earliest. The government had sanctioned Rs 1,300 crore for the scheme, which involves construction of a series of barrages and check dams so water when released is stored better instead of being let out into the sea. Farmers are also demanding that the Cauvery should be linked to Sarabanga, Thirumanimutharu and Vasishta rivers for better utilization of water release.

### Nigeria facing 'tomato Armageddon' over crop infestation

Rose Edet never thought buying tomatoes for her busy Lagos restaurant would be an issue. But the rising cost is causing her a headache and affecting her customers' favourite Nigerian dishes.

"We are facing tomato Armageddon," she told AFP in the Ikoyi district of the city. "I have never seen this situation before in my 36 years in existence."

Tomato prices in Nigeria have been steadily climbing for months, caused by unrest in northern and central states where the crop is grown and this has affected farmers' ability to plant and harvest.

Fuel price increases and a fall in imports due to a foreign exchange shortage have contributed to the scarcity and now a major crop infestation has worsened the already bleak tomato outlook.

The Tuta absoluta moth, dubbed "tomato Ebola" by local farmers, has destroyed more than 80 percent of tomato farms in the northern state of Kaduna, its agriculture commissioner Manzo Daniel said Tuesday.

More than 200 tomato farmers have incurred losses of more than one billion naira, with fears the moth could wreak havoc across the wider north.

A wholesale basket containing hundreds of tomatoes now sells for 42,000 naira (\$212, 186 euros), up from 300 to 1,500 naira before the outbreak, he added.

In neighbouring Kano, a new tomato processing plant set up by Africa's richest manAliko Dangote to reduce Nigeria's reliance on imports and boost domestic production has been forced to shut.

The factory, which only opened in March, requires 1,200 tonnes of the fruit every day but is not getting enough, said managing director Abdulkareem Kaita.

- 'The new oil' –
- Tomatoes are an essential ingredient for many Nigerian dishes, from fiery pepper soups and stews, and even to garnish suya, the popular spicy grilled meat sold at roadside stalls across Nigeria.

The effect of price rises and shortages are adding further hardship to Nigerians already struggling with a lack of fuel for cars and generators, power outages, and spiralling inflation.

Edet and others say they have been forced to switch to imported tinned tomato paste but prices of puree have also shot up.

"A pack of tomato puree that sold at 40 naira has now risen to 55 naira," said Kano housewife Zainab Abdullahi. Many Nigerians have taken to Twitter to complain, with some re-posting photographs of the Tomatina festival in Spain, which every year hosts what is dubbed the world's biggest food fight.

One user wrote of the pictures of revellers hurling tomatoes at one another and splashing in the fruit's juice and pulp: "If only these guys know the price of tomatoes in Nigeria today."

Another commented that tomatoes were "like gold now in Nigeria" while a third said three tomatoes she bought for 200 naira were more than expensive than a litre of fuel at 145 naira.

"Tomatoes is the new oil in Nigeria," wrote a fourth.

- Jollof crisis –
- -

Nigeria's President Muhammadu Buhari marks a year in office on Sunday, with focus on his record tackling Boko Haram's Islamist insurgency in the northeast, endemic corruption and the economy.

Few would have predicted that the fall-out of a tomato crop infestation would be an issue as the anniversary approaches.

Kaduna's government has sent a team to Kenya to find a remedy against the moth, which lays eggs on tomato plants and develops into a hungry caterpillar that feeds on leaves, stems and fruit.

Meanwhile rumblings of discontent are getting louder, particularly over the effect on the beloved national dish, jollof rice.

Lagos trader Fatimo Olubunmi said it was her three children's favourite food but the tomato scarcity has forced her to switch to using tinned tomatoes and dry pepper.

"This is not the original taste. My children don't feel happy with the current situation. Mo rogo (I'm in trouble)," she said in Yoruba.

At Kamson Catering Service in Lagos' Obalende district, customers have been complaining, said Faith, a cashier.

"They don't feel good but we explain to them that tomatoes are the issue. They love jollof rice but because of tomatoes now, we are now increasing our prices," she said.

"I can only hope that things will get better," added Edet. "Otherwise this scarcity will get to a crisis stage."

## THE ECONOMIC TIMES

Rajasthan seeks Israeli technique to strengthen agricultural sector



The Rajasthan agriculture minister is accompanied by 16 farmers from the state who have visited wide ranging facilities in Israel and have expressed general appreciation for the techniques displayed to them.

JERUSALEM: Rajasthan has sought Israeli technology to increase crop yield, strengthen dairy sector, help water management, learn grafting techniques and increase shelf life of fruits and vegetables with the purpose of doubling its farmer's income in the state.

"We already have a strong cooperation going on with Israel in the agriculture sector. Their help, extended through the establishment of two Centre of Excellence and a third one under development, is highly appreciated appreciated by us," said Agriculture Minister Prabhu Lal Saini, who is leading a delegation from the state on a five-day tour of Israel to strengthen cooperation in the agriculture sector.

"These Centre have helped boost production of citrus, pomegranate and date palm. We are now looking to further strengthen this partnership through technology transfer," he said.

"We have similar agro-climate conditions in Israel and Rajasthan. Like Israel we also face scarcity of water, have arid climate and a short winter. The farmer accompanying me are impressed with the facilities and technologies displayed to us on this trip. We seek greater cooperation to take this partnership ..

partnership to the next level," Saini told PTI.

The Rajasthan agriculture minister is accompanied by 16 farmers from the state who have visited wide ranging facilities in Israel and have expressed general appreciation for the techniques displayed to them.

"Our government led by Chief Minister Vasundhara Raje aims to double the farmer income by 2020 and first step towards this is to expose farmers to agri-business industry. The delegation here has been brought with the purpose of providing farmers exposure to best international practices so that they can gain knowledge to boost their production and income," Saini said.

"There is so much to learn from Israel in the field of dairy sector, water recycling, horticulture etc. But the farmers are particularly interested in learning grafting technique and identifying technologies to increase shelf life," he added.

The Rajasthan minister has also invited Israel to be a partner country in Global Rajasthan Agri-tech Meet (GRAM) from 9-11 November in Jaipur.

The head of MASHAV, Israeli foreign ministry's wing dealing with international cooperation in the field of agriculture, Gil Haskal, said that India is Israel's largest development partner and he sees a lot of potential to further enhance this cooperation.

"Everything is do-able and everything is possible with proper technology. There has to be a will and that is what Rajasthan and Israel can show," Haskal said in the context of difficult agri conditions existing in both the places.

He mentioned a pilot project in the Arava desert region in Israel where farmers are growing tropical fish under totally adverse conditions.

The Rajasthan delegation has visited several Israeli facilities during its hectic five day schedule to gain maximum exposure.