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THE HINDU

Consultation process launched afresh on marine fisheries policy

After a lull over murmurs of protest by the fishermen outfits over the decision not to include them in the committee to draft the new marine fisheries policy, a fresh exercise has been launched to resume the consultation process.

Indications have also been given that representatives from the industry will be included in the committee shortly. Union Agriculture Minister Radha Mohan Singh after receiving representations from National Fishworkers' Union and other outfits in New Delhi on March 10 gave an assurance that they would not take any decision in a hurry.

Later, there were indications that due to elections in the States of West Bengal, Tamil Nadu, Kerala, Asom, and Puducherry, the government wanted to make consultation process more effective by taking the stakeholders into confidence.

At a meeting held here on Wednesday at Central Marine Fisheries Research Institute, the second after a similar interactive session on February 11, many wanted a ban on bottom trawling and the use of ring nets by a group of fishermen on the shoreline to prevent juvenile fishing.

Bottom trawling is an industrial fishing wherein large nets with heavy weights are spread along the sea floor to drag shrimp and other high value fish but in the process kill several unwanted fish.

“The thrust of the talk on the policy-formulation is to ensure sustainable fishing and improve the livelihood conditions of fishers,” an official said.

CMFRI Principal Scientist Shubhadeep Ghosh, Joint Director of Fisheries Koteswara Rao and Central Institute of Fisheries Technology Principal Scientist U. Sreedhar were present.

An interactive session held in February sought a ban on bottom trawling

Onion prices hit a new low

Rates crash in Delhi owing to a glut of supplies from M. P., Maharashtra



Steep plummet: At the Azadpur Mandi in the Capital, the kitchen essential is being sold at Rs. 7.86 per kilo on an average.— Photo: Sushil Kumar Verma

: After having to deal with repeated spikes in the prices of onions during the last fiscal, there is finally a huge respite for people. Wholesale rates of the edible bulb have crashed to as low as Rs 4.5 per kilo in the Capital owing to a glut of supplies from Madhya Pradesh and Maharashtra.

Bumper harvest

The bumper harvest this year, however, has left farmers in tears with reports suggesting that prices have fallen to an all-time-low of Rs. 30 paise per kg at Madhya Pradesh's mandi in Neemuch district.

“There has been surplus onion production across the country this time, and the demand is relatively low. 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,” said Rajender Sharma, member of Azadpur, Agriculture Produce Market Committee (APMC).

In Delhi, which primarily relies on these two states among a few others for onions, the situation is equally grim. At the Azadpur Mandi, the kitchen essential is being sold at Rs. 7.86 per kilo on an average.

The best-quality onions are being sold at a wholesale rate of Rs. 10.5 per kg, whereas the poor-quality and the smaller ones are being bought by traders at Rs. 4.5 per kilo. The retail prices in the city range between Rs 18 per kilo and Rs. 20 per kilo.

If data of onion prices at Azadpur Mandi of over a year is compared, then it's the lowest this month. "In August last year, the rates were a staggering Rs. 53 per kilo, and the average cost itself was Rs. 39. In January also the price was as high as Rs. 17 per kg," said Mr. Sharma.

The last time the country's largest wholesale market recorded an all-time low of Rs. 6 per kilo was on February 15, 2014.

Seed is better preserved this way

Effective procedure of Adivasis to preserve seed for cultivating millets needs to be popularised



WAY FORWARD:tram Laxmibai displaying the airtight basket with seeds-
Photo: S. Harpal Singh

One of the important aspects of biodiversity conservation is seed preservation but, this area is perhaps the least bothered about in the gamut. While the non-tribal farming communities have jettisoned seed preservation technique completely after taking to foodgrain hybrids, the Adivasis in Adilabad district find no use for it despite the instance of cultivating desi or indigenous varieties.

As there is a sort of revival of the tradition of cultivating local varieties of millets by the aboriginal tribe farmers in the interior and far flung areas in the tribal belt, the need to revive the seed preservation technique has become imperative. Preserving seed could also help farmers in reducing their investment, according to agriculture experts.

“We are cultivating local variety millets in a limited extent which does not require us to preserve seeds beyond a few months. The little quantity of seeds which we get in one season is used up in the ensuing season,” explained Atram Madhav Rao, a Gond Adivasi farmer from Seetagondi village in Sirpur (U) mandal.

“I have some quantity of sama (little millet) and bhadi (barnyard millet) from 12 years back,” revealed Laxmibai, Madhav Rao’s mother. “Using this technique I can preserve seeds for longer even,” she added.

The technique which Laxmibai talked about is simple yet effective going by its potential to preserve seed. The seed which are needed to be preserved are stored in an airtight bamboo basket. The basket, its size varying with the quantum of seeds to be stored, is first lined with a thick layer of neem leaves from the inside. A thick layer of ordinary ash is covered over it and the seeds are placed over it.

After closing the lid of the basket, it is smeared with clay mixed cow dung to make it air tight.

“This mixture ensures that the seed remain without decaying or losing their potency to germinate over a long period,” Laxmibai stated.

The Integrated Tribal Development Agency (ITDA), Utnoor, will now take up awareness programmes aimed at reintroduction of the simple seed preservation technique among the Adivasis where it is promoting cultivation of desi varieties of millets.

“We need to do so, so that farmers who are cultivating the local varieties get self-sufficient in terms of seeds at the earliest,” observed ITDA Project Officer R.V. Karnan.

The ITDA is promoting cultivation of indigenous millets under the Vanabandhu Kalyan Yojana. It has procured seed from Adivasi farmers and distributed in areas where the tradition had been lost.

New virus attacks brinjal crop



WITHERING CROPS:The brinjal plant that has been infected by a virus at Kosur village in Karur district.

The scientists of the Indian Council for Agricultural Research (ICAR) have noticed a new viral disease in brinjal crop at Kosur village in Krishnarayapuram block of Karur district.

The disease, called tomato leaf curl virus (*begomovirus*), came to light when a group of scientists and officials of Horticulture Department made a diagnostic visit to the village a few days ago. The disease has been ascertained by a virologist at the National Research Centre for Banana (NRCB) in Tiruchi.

It is said that the virus was transmitted by cotton whitefly (*Bemisia tabaci*). It was found on two acres of brinjal (Manapparai local variety), which was about 50 days old. The incident level was around 20 to 30 per

cent and the disease is spreading rapidly despite the farmers taking up spraying insecticides regularly.

“The disease, which is noticed on tomato crop, is noticed on brinjal probably for the first time in the region. It has to be quarantined as the virus spreads very fast,” J. Draviam, Senior Scientist and Head, Kirishi Vigyan Kendra, Karur.

Speaking to *The Hindu*, he said whitefly, which is a sap-sucking insect, might have spread the virus in the region. There was a possibility of noticing the disease in neighbouring Tiruchi district too. The disease would paralyse the plants, thus wiping out any yield.

He said the plants would have shunted growth. New leaves would be reduced in size and wrinkled. The leaves would curl downward. Flowers might appear and they would fall before fruit was set.

Removal and destruction of virus infected brinjal plants was the best way to prevent spreading of the disease.

L. Sornamanickam, Assistant Director of Horticulture, Karur said that information about the disease had been communicated to all field-level officials. Farmers had been advised to destroy the plants, if they were affected.

Mr. Draviam said the occurrence of the disease was communicated to the Centre for Integrated Pest Management Centre in Tiruchi.

Promoting organic farming

In a bid to create awareness and popularise the use of both agriculture and horticulture crops grown organically, the Agriculture Department is holding an organic fair on April 16 on its premises.

Over 500 farmers, who grow crops organically, from seven taluks in the district are expected to take part.

M. Mahanteshappa, Joint Director of Agriculture Department, said that there would be over 35 stalls displaying these crops. Similarly, varieties of food recipes of millets would be displayed. Farmers and representatives of NGOs

and agriculture officials would explain to visitors about the importance of using millets and crops grown under the organic method. People would be enlightened about leading a natural holistic, healthy life, he said.



Healthy initiative: The Agriculture Department will hold a fair on April 16 to popularise the use of millets and crops grown organically.— PHOTO: M.A. SRIRAM

Underlining the importance of growing crops under Javik Krishi (organic), Mr. Mahanteshappa said that organic farming primarily aims at cultivating land and raising crops in such a way, so as to keep soil alive and in good health. It is the use of organic wastes (crop, animal and farm wastes, and aquatic wastes) and other biological materials to grow crops. He said it was high time that people were educated about having pesticide-free food. Deputy Directors of Agriculture Department Chandrakala and Somashekar explained the benefits of using millets and crops grown organically.

It is high time that people are educated about having pesticide-free food

M. Mahanteshappa, Joint Director, Agriculture Dept.

Water recharge pit brings cheer to farmer

Narasimha Reddy of Nigidona village in Warangal district went for a farm pond as a last resort



Rich dividends: The pond dug up on the agricultural field of Narasimha Reddy in Nidigonda village. –Photo M. Murali

After exhausting all means to get water for irrigation, farmer D Narasimha Reddy of Nigidona village went for a farm pond as a last resort.

The water harvesting pit is not only paying off but motivating other farmers as well. Mr Reddy was vexed with farming owing to declining soil fertility and water availability. “I have 20 acres and most of which remains unused. I went on digging bore-wells ten times all over my field but in vain. I incurred huge expenditure but did not get water,” he explained.

Waste water

Mr Reddy dug up a 30 feet deep, 80 feet wide and 160 feet long pit in the field and let all the waste water drain into that. The water used in house and field trickle into the pit. After four months, it held little water and recharged the ground water in the field that gave him enough confidence to go for paddy crop.

“The pit helped recharge one bore well in the field. That bore wells yield enough water for farm operations now,” the elated farmer said.

Speaking to *The Hindu*, Mr Reddy said he learnt new methods from farmers in Siddipet. He is also growing vegetables using drip irrigation method that he found very useful.

Mr. Narasimha Reddy now spends more time educating his fellow farmers on the need to conserve water.

He says opting for trenches and small farm ponds across agricultural fields helps increase productivity and recharge ground water.

‘Trenches and small farm ponds in agricultural fields helps increase productivity’

Nizamabad marketyard connected to national markets

Under the National Agriculture Marketing (NAM) policy the Nizamabad Agriculture Marketyard has been connected to the national markets for trading of food grains and other agriculture produce online, here on Thursday evening.

After launching the web portal relating to the NAM in New Delhi Prime Minister Narendra Modi addressed the gathering of farmers at various places across the country. His speech which was telecast lasted for 20 minutes and was heard by farmers at the marketyard here.

Among those who attended this programme included Minister for Marketing T. Harish Rao, Agriculture Minister P. Srinivas Reddy, Members of Parliament K. Kavitha and B.B. Patil and local MLA Bigala Ganesh Gupta.

Speaking on the occasion, Mr. Harish Rao said that a total of 44 agriculture market yards were linked to the e-marketing in Telangana State. He said that with the e-trading farmers could get profitable price.

Sellers outnumber buyers at cattle fairs

At the Khanapur cattle jatra at Mailar, Bandedappa Sangappa is desperate to sell his two bullocks. With his daughter’s wedding six months away and rabi crop failing because of drought, his hope is to get a good price for his bullocks. But then there are no buyers in sight.

The biting drought has upset the demand-and-supply equation at cattle fairs in Bidar district. A visit to the Amareshwar jatra in Aurad, Khanapur jatra at Mailar, and Mangalpet jatra in Bidar and Bhalki showed that there were more sellers than buyers.

Most farmers this correspondent spoke to said they would not have sold the animals if there was no drought. The irony is that it is precisely because of drought that there are no buyers.



Mr. Sangappa quoted a price of Rs. 42,000 per bullock, but said he would sell if someone would pay him even Rs. 35,000.

Similar was the plight of Vithalrao Chauhan, who came to the Bhalki market as he had “no cash in hand to do anything”.

He said he had not touched his plough for three seasons now. “The last time we reaped some crop was in 2014 kharif season. I got some red gram and millets. Later, I lost two crops. I have not yet decided whether to prepare my land for sowing this year,” he said. He has a set of bullocks that are nine years old. “My brothers told me they would die in a few years anyway. But I just don’t want them to die in my house,” he said.

Baburao Rangare was visibly upset as he had come to Mangalpet jatra to sell his buffalo. “I should be the first farmer in seven generations of my family to sell a milch animal. We usually sell calves or bulls, and that is considered normal,” said the 65-year-old farmer, and added that he had not seen such a crisis situation since 1971.

‘Draw up summer action plan’

Collector Siddarth Jain on Thursday directed the officials of Panchayat Raj, Rural Water Supply, and Sarpanches and Panchayat Secretaries to coordinate with each other to tackle drinking water crisis in the district as the mercury levels were on the rise.

Reviewing the summer action plan and developmental works of Madanapalle revenue division at CLRC Building at Madanapalle, the Collector said that for immediate relief, Rs. 40 crore would be spent to tackle acute drinking water problem. He asked the officials to chalk out an action plan for summer, giving top priority to Neeru-Chettu works to reap maximum results before the start of monsoon rains in June. He exuded confidence that compared to last year, the drinking water problem would be less severe this year.

The Collector, who inspected the Handri-Neeva canal works from Anantapur border to Punganur, warned that strict action would be taken against contractors and engineers if works were not executed as per schedule. "Providing drinking water through HNSS canal by August is top on the government's agenda. If the officials and contractors have any problems at the work front, they should immediately bring it to the notice of the government. Tunnel work should be expedited and completed within 90 days," he said.

Farm ponds

Mr. Siddarth Jain observed that in view of difficulty in cultivation of paddy and sugarcane crops in western mandals, particularly bordering Anantapur and Karnataka, steps would be taken to give a major thrust to horticulture in the region. He directed the officials to go in for optimal use of mechanised farming by deploying all available technological knowhow, and galvanise farmers to adapt to modern farming. "Creation of farm ponds is given top priority, and this will go a long way in rejuvenating the groundwater levels," he said.

The revenue and civil supplies wings would be prompted to set up centres to purchase about 4 lakh metric tonnes of slim-variety rice from farmers at Rs. 1,450 per quintal.

The Collector maintained that steps would be taken to release budgets to all the welfare hostels in the district promptly and biometric system would be made mandatory for more efficient administration.

Tamballapalle MLA Shankar Yadav, Sub-Collector Kritika Batra, HNSS senior engineer Muralidhar Reddy, officials of various government departments took part in the meeting.

Fall in tender coconut prices worries farmers



A boy taking tender coconut water to beat the heat in Vijayawada on Thursday.— PHOTO: V. RAJU

Drop in tender coconut and ripe coconut prices are causing severe losses to the farmers in Andhra Pradesh. Though there is demand for coconut water in the ongoing summer, traders are not offering good price, the farmers said.

Farmers are raising coconut groves in thousands of acres, particularly in Konaseema districts. Some farmers have taken up coconut farming as inter-crop in paddy fields, but the fall in prices has shattered their dreams.

The arrival of Kerala tender coconuts has decreased the demand for the local produce. Kerala coconuts, which are bigger in size compared to AP, are dominating the local market, ryots said.

“The price of a tender coconut at the farm is Rs. 5 and that of a ripe coconut is almost the same. We have to invest huge amount for raising the orchards, pesticides, maintenance of the orchards and for transportation of the produce after the harvest. There is no profit to the farmers this year,” the coconut farmers said.

In West and East Godavari districts, Narsapuram, Bhimavaram, Palacole, Achanta, Siddhantam, Marteru, Kovvur, Amalapuram, Razole, Kothapeta, Ambazipeta, Ravulapalem, Rajahmundry, Kadiyam, Jaggannapeta and other places are famous for coconut orchards. Coconuts gardens are also being

raised in Nellore and parts of Prakasam, Srikakulam and Vizianagaram districts.

Some of the famous varieties of coconuts are Godavari Ganga, Gautami Ganga, Kera Sankara and Kera Bastar. Ganga Bondam is the noted variety which is known for tender coconuts in Konaseema area.

“We are investing around Rs. 25,000 per acre per crop. The farmer has to bear the labour charges for plucking and transporting the yield to the trader. But, the price in the market is about Rs. 800 per 100 coconuts. Price of ripe coconuts will increase only during festivals and auspicious days and during normal days we are selling each coconut at Rs.4 to Rs.5,” said a farmer J. Adinarayana of Amalapuram.

Doctors’ advice to patients to drink tender coconut water and rising mercury levels are increasing the demand. But, the Kerala produce arriving in huge quantity has become a competition for the local farmers, the traders said.

“I am importing tender coconuts from Srikakulam district at Rs. 1500 for 100 ‘bondams’ (tender coconuts). But, the stocks arriving from Kerala is discouraging the local traders. We are selling one tender coconut at Rs.20, but people prefer Kerala coconuts which contain one litre of water,” said a trader Kalidindi Ramasunder Raju of West Godavari district.

Coconut farmers are not ready to harvest crop due to less prices

Kerala tender coconuts dominates the yield in AP

Demand for tender coconut water increased due to increased heat waves

Poultry farmers asked to manage heat stress in birds

With temperature likely to increase in the next three days, poultry farmers were asked to prepare feed so as to manage the stress in birds.

A press release from Agromet Field Unit of Veterinary College and Research Institute and Regional Meteorological Centre, Chennai, said that the sky will remain dry and the maximum and minimum temperature will be

40 degree Celsius (104 degree Fahrenheit) and 27 degree Celsius (80.6 degree Fahrenheit).

Wind speed

Wind speed will be around six km per hour mostly from southeast direction.

Precautionary measures need to be taken as the heat stress will continue in poultry even during night hours, it said.

Feed should be prepared very carefully to manage summer stress, particularly excess protein should be avoided and amino acid level to be balanced.

Also, reduce cereals and add oil to balance energy in feed, the press release issued here added.

Grower cuts down banana plants after they wither owing to lack of water



Drought woes: Grower Mahesh Patil with the withered banana plants in Abbe-Tumkur village in Yadgir district.

Acute drought and severe shortage of water have caused a huge loss to a banana grower in Abbe-Tumkur village in Yadgir district who is now seeking compensation.

Mahesh Patil (42), who cultivated banana in 15 acres of land, has been forced to cut down the plants as they withered due to shortage of water. He is preparing land for the next crop.

He developed the field and cultivated 15,000 trees by spending nearly Rs. 15 lakh in February 2015.

He was expecting the first yield in March this year.

But, his dream did not come true when the banana plants did not give any yield owing to shortage of water after borewells drilled went dry due to the depletion of groundwater level.

“I have suffered a loss and cut down the plants that have withered as there was no option,” he said

Mr. Patil further said that he was, in fact, expecting a bumper crop but for lack of enough water.

The State government should release compensation to ensure that no banana grower suffered a loss, Mr. Patil urged. When contacted, Satish Kumar, Deputy Director of Horticulture Department, told *The Hindu* recently that taluk-level officials have visited the field to assess the loss incurred by Mr. Patil. We will send a detailed report to the government immediately recommending release of compensation to the farmer,” Mr. Satish Kumar said.

What to make of the latest IMD monsoon forecast?

The Hindu decided to find out whether these forecasts have worked in the past. Answer (based on 10 years of forecast data): not very accurately

Following the India Meteorological Department’s forecast of an ‘above normal’ monsoon of 106 per cent of the Long Period Average (LPA) on Tuesday, *The Hindu* decided to find out whether these forecasts have worked in the past. Answer (based on 10 years of forecast data): not very

accurately. Still, as the IMD puts it, they convey useful information and forecasting itself will only get better with better tools. Here's a Q&A on the things to know about monsoon forecasting:



Picture shows a vegetable vendor sitting under an umbrella on a tarpaulin sheet at a market during monsoon rains in Mumbai in June, 2013. PHOTO: REUTERS

To start with, what is LPA?

Long Period Average (or LPA) is defined as the average of the rainfall received during a fifty year period between 1951 and 2000, which comes to about 89 cm.

How does IMD give out its forecasts?

IMD classifies its rainfall forecast into five 'ranges' based on the percentage value of its LPA: deficient (less than 90), below normal (90-96), normal (96-104), above normal (104-110) and excess (more than 110).

How good have these forecasts been in the past?

An analysis of ten years' forecast data shows that the IMD's April forecast got the 'rainfall range' wrong 70 per cent of the times. The June-July forecast, considered a revised and a more accurate monsoon forecast got the 'rainfall range' wrong 60 per cent of the times. (See charts). In other words, if the IMD said that rainfall would be 'below normal', it could turn out to be 'deficient'. There have also been a few years when despite a prediction of

below-normal rainfall, rainfall was above normal, with many regions experiencing devastating floods.

June forecast against actual rainfall (2006-2015)

April forecast against actual rainfall (2006-2015)

In deciding whether the IMD's rainfall range was right or not, *The Hindu* factored in the margin of error that the IMD attaches to its prediction statistics. Usually the April forecast comes with a margin of error of $\pm 5\%$ and the June forecast with a margin of error of $\pm 4\%$. Even accounting for this error margin, *The Hindu* found the actual rainfall range deviated from predicted levels.

M.S. Swaminathan, head of the M.S Swaminathan Research Foundation and a keen watcher of monsoon forecasts as they matter to the farmers, said that in most cases when the IMD predicted a normal monsoon, it would so happen that rain that is supposed to fall in a month, falls in a matter of two days, with many places even flooding. "IMD forecasts do not provide much insight into the spatial distribution patterns of the rain and that is where they need to improve their services," he said.

What purpose do they serve, then?

We asked the IMD to explain how important these rainfall ranges were, and how it affected the extent of monsoon rainfall to be received in a given year. Laxman Singh Rathore, Director General of Meteorology at the IMD, told *The Hindu* that the intention of the agency in giving out these predictions was only to convey the direction in which the weather pattern is likely to develop and not to exactly predict what would happen. "If we say that the monsoon is below normal and it turns out to be deficient, then what that means is that we got the tendency correct though the magnitude may not be right," he said.

And are there reasons to believe that these forecasts will get better?

D.S. Pai, Director, Long Range Forecast at IMD in Pune, told *The Hindu* that five predictors were used for creating models for monsoon forecast, the methodology known as ensemble statistical forecasting system. By way of multiple regressions, the five predictors - Sea Surface

Temperature (SST) Gradient between North Atlantic and North Pacific, Equatorial South Indian Ocean SST, East Asia Mean Sea Level Pressure, Northwest Europe Land Surface Air Temperature and Equatorial Pacific Warm Water Volume - were projected to create 62 models using various permutations and combinations of these, and the average of the forecast emerging from the best of these models were taken to arrive at the final figure. Mr. Pai said that this method was introduced in 2007, and since then there have been considerable improvements in predicting the drift of the weather pattern. Even if that was the case in 2009, the Long Range Forecast in June predicted 93% rainfall (below normal) but only 77% rainfall was actually received across India by the end of the year- a huge margin of difference.

Meteorologists agree that with a statistical model, accuracy of predictions is hard to come by. Mr. Rathore admitted that the agency's skill in the statistical domain was rather poor and more refinement is desirable. He pointed to steps being taken in this direction with efforts to switch to a dynamic model of prediction, in which the ocean and atmospheric temperature levels were coupled to create a single model. The supercomputer Aditya was being tested for this dynamic model of forecasting in the IMD's Pune centre and "we would be able to switch to this method of forecasting in a few years from now," Mr. Rathore said.



PM Modi launches e-platform for farmers to sell produce

The e-NAM trading mechanism proposes to integrate 585 regulated wholesale markets or agriculture produce market committees (APMCs) under one electronic platform within a couple of years.



Prime Minister Narendra Modi addresses a public meeting during the launch of the ‘Gramoday se Bharat Uday Abhiyan’ in Mhow, Madhya Pradesh on Thursday. (Source: PTI)

Prime Minister Narendra Modi on Thursday launched an electronic trading platform, the national agriculture market — eNAM for farmers to sell their products.

PM Modi launched the new scheme on the occasion of 125th anniversary of B R Ambedkar in Mhow, MP.

The e-NAM trading mechanism proposes to integrate 585 regulated wholesale markets or agriculture produce market committees (APMCs) under one electronic platform within a couple of years.

The new platform will allow farmers to sell their produce to the highest bidders.

It will initially aim at integrating 21 *mandis* in eight states — Uttar Pradesh (6), Gujarat (3), Telangana (5), Rajasthan (1), Madhya Pradesh (1), Haryana (2), Jharkhand (1) and Himachal Pradesh (2).

Launched with a budget allocation of Rs.200 crore, as many as 25 key commodities, including wheat, paddy, maize, onion, *jowar*, *bajra*, groundnut, potato, soyabean and mustard seed, have been selected for e-trading, Agriculture Minister Radha Mohan Singh had said on Wednesday.

Fruits and vegetables normally known for price fluctuations, however, have not yet included in the platform, officials said.

(With inputs from IANS)

Why doubling farmers' income by 2022 is possible

There are several measures, such as crop diversification, that can help India achieve this goal

Prime Minister Narendra Modi's desire to double the income of farmers by the year 2022, that he expressed while addressing a farmers' rally in Bareilly, Uttar Pradesh, on February 28, 2016, has evoked strong responses from various analysts, experts and the media.

The goal has been dubbed as impossible and unrealistic. On the very next day, the finance minister repeated what the PM had said, in his budget speech. This invited an even stronger reaction and criticism.

Some commentators have produced calculations that agriculture will require an annual growth of 14.86 per cent per year for the next five years to double the income of farmers, and pointed out that this growth level hasn't been achieved even for a single year in Indian agriculture.

Most commentators ridiculed the possibility of doubling farmers' income. It seems that critics and sceptics focused more on five years and ignored substantive aspects of the desire expressed by the PM and the intention of the FM.

The substantive points involve the following questions. Which is the targeted year for doubling farmer income? What is to be doubled — is it output, value added or income earned by farmers from agricultural activities? Is it nominal income or real income that has to be doubled? Does the targeted income include only income derived from agricultural activities or would it also include income from other sources? Clarity on all these points is important to assess the possibility of doubling the income of farmers as envisioned by the PM.

While talking about the income of farmers, the PM stated that it is his dream to see farmers double their income by 2022, when the country completes 75

years of independence. The time horizon to reach his dream is very clear in his statement.

It is obvious that he is referring to a doubling of farmer income of the agricultural year 2015-16 by the agricultural year 2022-23. The budget speech creates slight confusion about the period for doubling farmers' income. T

he FM's speech first mentions the "focus on doubling farmers' income in five years" and then, while elaborating on this, he says, "Government will, therefore, reorient its interventions in the farm and non-farm sectors to double the income of the farmers by 2022."

It is evident that both the PM as well as the FM are setting the target of doubling farmers' income by the year 2022, which is seven years away from the current year. And, if anything is to be doubled by the year 2022-23, it will require annual growth of 10.4 per cent, and not 14.8 per cent, as reported in the media.

Again, it is important to point out that what is sought to be doubled is the income of farmers, not output or value added or the GDP of the agriculture sector. If technology, input prices, wages and labour use could result in per-unit cost savings, then farmers' incomes would rise at a much higher rate than the rate of increase in output.

Another very important source of an increase in farmers' income is the relative increase in prices of farm products compared to non-agricultural commodities. Past estimates of farm incomes show a significant difference between growth in output and growth in farmers' income.

Between 2004-05 and 2011-12, agricultural output at constant prices increased by 34 per cent while real farm income per farmer increased by 63 per cent. In nominal terms, the output became 2.65 times while farmers' income tripled in the eight-year period. Therefore, a doubling of farmers' income should not be viewed as the same as a doubling of farm output.

It is obvious that if inflation in agricultural prices is high, in nominal terms, farmers' income will double in a much shorter period. Twice over the last 30 years, farmers' income at nominal prices almost doubled in six years — once between 1987-88 and 1992-93 and then between 2004-05 and

2009-10. Inflation in agricultural prices also leads to an increase in real farm income if agricultural prices received by farmers increase at a faster rate relative to the prices paid by farmers; that is, when terms of trade for agriculture improve.

In a situation where non-agricultural prices do not rise, or rise at a very low rate, the growth in farmers' income in real terms tends to be almost the same as in nominal terms. This is what is being experienced currently.

The wholesale price index or WPI-based inflation for non-agricultural prices is declining, whereas the WPI-based inflation for agricultural prices has increased by about 5 per cent in the year 2015-16. This implies that price movements are resulting in a 5 per cent growth in real farm income.

Thus, if similar price trends continue, there will not be much difference between nominal and real farm income. Anyway, the government's intention seems to be to double the income of farmers from farming in real terms.

It is important to look at the possible drivers of income growth for farmers. The first source is diversification of farm activities towards high-value crops and enterprises. National-level data reveals that shifting to high-value crops can more than quadruple income from the same piece of land.

The second source is irrigation, which can double productivity. The third source is better price realisation for farmers through competitive markets, value chains and improved linkage between field and fork.

The fourth source is an improvement in the terms of trade for agriculture. The fifth source is technology upgradation. Another important source is the shift of cultivators from farming to non-farm occupations.

State-level data shows that agricultural income in real terms, including the effect of improvement in terms of trade, doubled between 2006-07 and 2013-14 in Gujarat, Jharkhand, Madhya Pradesh, Rajasthan and Telangana.

Few states, namely Bihar, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Rajasthan and Telangana, are experiencing a transition towards doubling farmers' income in seven years while Uttar Pradesh and Maharashtra are showing the potential to do so. In conclusion, if the above-

mentioned six measures are implemented sincerely at the state-level, then farmers' income can be doubled by 2022-23 in most of the states.

In Fact: Why sugarcane can't be blamed for Marathwada drought woes

It is a convenient whipping boy, even though it consumes less water on a per-day basis than other crops, and even less for every unit weight of biomass produced.



Every crisis produces its fall guy. This time, it is sugarcane that's bearing the brunt of the blame for drought, especially in Maharashtra's worst-affected Marathwada region.

Sugarcane, no doubt, requires 2,100-2,200 mm of water, more than the 1,400 mm or so for paddy, 900 mm for cotton, 600 mm for jowar (sorghum) and arhar (pigeon-pea), 550 mm for wheat, and under 500 mm for soyabean and chana (chickpea).

But then, sugarcane typically grows over 365 days, as against the 180 days of cotton and arhar, 130 days of paddy and wheat, 110 days of jowar and chana, and 100 days of soyabean.

Besides, even the best Punjab farmer can harvest only six tonnes of wheat and nine tonnes of paddy per hectare, whereas cane yields rarely go below 40 tonnes, while averaging 80 tonnes for Maharashtra.

Simply put, sugarcane consumes less water on a per-day basis, and even less for every unit weight of biomass produced.

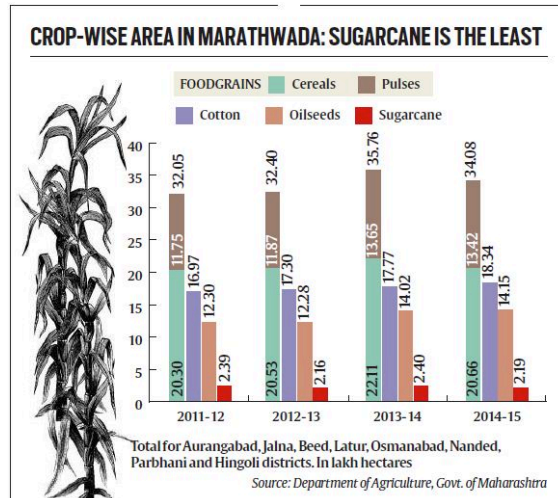
Moreover, the sugarcane farmer doesn't merely grow cane stalks. For every 80 tonnes of cane produced from a hectare, an additional 15-16 tonnes of green 'tops' also get harvested.

These green top leaves — roughly 20 per cent over and above the millable cane weight — meet much of the fodder needs of his buffaloes and cattle during the crushing season from November to April. The water being used for cultivating sugarcane, thus, also goes towards production of fodder, which the farmer would otherwise have had to grow separately.

But water used for sugarcane cultivation is only one part. Equally important is the fact that the end-product, or the crop itself, is some 70% water. This water — 700 litres in one tonne — is what mills actually use for production of sugar and much more.

Out of the 700 litres, about 250 litres is utilised in boilers for generating steam and power, while an equal quantity gets consumed in the sugar manufacturing process. It still leaves a balance of 200 litres, which, after cooling in spray ponds and primary treatment, can be re-used for irrigation and other purposes. That makes sugar a unique industry, which doesn't require water from outside, and even generates its own energy from bagasse — the fibrous residue remaining after extraction of juice from the cane.

The high-pressure boilers in most mills today use water from the cane and burn the bagasse to produce electricity. Around 130 kilowatt-hours can be generated from every tonne of cane, of which the mills' own in-process and auxiliary consumption requirement is only 35-36 units, with the remaining 94-95 units being exportable to the grid.



Bashers of sugarcane will tell us how it takes 2,000-odd litres of water to produce one kg of sugar. But they won't say that this water is consumed over 12 months, or that it goes towards production of fodder, electricity and alcohol as well.

And if one were to also add that the mills themselves consume no additional water or electricity — they are surplus in both — it would virtually give a lie to the perception of sugarcane being a water-guzzler. Incidentally, even the sugar accumulation in the cane takes place only in last 90-100 days of ripening and maturation.

The crop's 365-day duration also covers germination (40-45 days), tillering (springing of stems from the parent shoot: 90-100 days) and grand growth (development of millable canes from tillers: 110-120 days).

Much of the water consumption happens in the tillering and grand growth phases that precede sucrose accumulation. This only reinforces the fact that this is primarily a biomass-cum-energy crop, with sugar only one of its constituents.

But for all this nuanced understanding of a much-maligned yet misunderstood crop, one could still ask whether a region like Marathwada, receiving an average annual rainfall of slightly over 820 mm, should be growing cane at all. The answer, on the face of it, might be no, given that a water requirement of 2,000 mm-plus is too much for any crop in a traditionally drought-prone belt.

However, even the above statement needs qualification in the light of the fact that the total area under sugarcane in the eight districts of Marathwada has ranged between 2.2 and 2.4 lakh hectares (lh) annually; in 2015-16, it fell to less than 1.9 lh.

The accompanying table shows this to be way below the corresponding acreages under cereals (mainly jowar, maize and bajra), cotton, pulses (arhar, urad, moong) or oilseeds (soyabean).

It is difficult to see how a crop accounting for just over 2 lh out of Marathwada's estimated 70 lh gross cropped area be the cause for drought, as many NGOs and drawing room experts are claiming.

The drought and the accompanying rural distress in the region is the result of the monsoon's failure in three out of the last four years. Period. All this is, of course, not to argue against efforts to promote water use efficiency in sugarcane.

Replacement of flood irrigation methods with drip irrigation has been shown to bring about water savings of 40-50 per cent, while simultaneously boosting yields by up to a third. The latter is on account of the water being delivered directly to the plant's root zone (where it is really required) and the remaining soil area getting enough air to maintain an optimum air-water-nutrient balance.

With drip irrigation and judicious use of canal water, it should be possible for even Marathwada's farmers to realise the enormous food, energy, and fodder potential offered by a most versatile crop.

What's in National Agriculture Market?

The current state-level APMC laws permit the first sale of crops — after harvesting by farmers — to take place only in regulated market yards or mandis.

Can the National Agriculture Market (NAM) — the online trading portal for farm produce being launched by Prime Minister Narendra Modi today — make a difference to farmers? On the face of it, yes.

The current state-level APMC laws permit the first sale of crops — after harvesting by farmers — to take place only in regulated market yards or mandis.

It, thus, restricts the farmer's universe of buyers to just the traders licensed to operate in the mandi under the concerned APMC's jurisdiction. Even traders have to procure separate licences to operate in different mandis within the same state.

NAM would essentially be a common electronic platform allowing farmers to sell their crops to buyers anywhere in the country and vice versa. The benefits to buyers — be it large retailers, processors or exporters — are obvious, as they can log into the platform and source from any mandi in India connected to it. They don't need to be physically present or depend on intermediaries with trading licenses in those mandis.

But with farmers, it may not be as simple. Most farmers do not take their crop to the mandis; they sell off to the local arhatiya or produce aggregator even before that.

Even the ones who take would offer a trolley load or two at most — hardly enough to excite distant buyers bidding online. To that extent, the possibilities for better price discovery through a widened universe of buyers, both local and online, are quite limited for them.

Farmers can, however, still benefit if they were to find ways for aggregating produce on their own, bypassing the arhatiya and even the local mandi in the process. This is where farmer producer organisations and cooperatives can play a role, by facilitating aggregation and creation of volumes that is intrinsic to the success of any ambitious virtual marketplace experiment.

Agricultural marketing: For the Kisan, it's the Bania who still calls the shots

The bulk of Indian farmers continue to sell their crop to village-level dealers and produce aggregators.



Farmers at Punjab's Khanna grain mandi. (Express Photo: Kamleshwar Singh)

A majority of farmers in India offload their produce to local private traders and input dealers. They do not even bring their crop to the mandis, leave alone sell to government agencies/cooperatives or processors who may offer better prices.

The National Sample Survey Office's (NSSO) recently released 'Some Aspects of Farming in India' report shows almost 85 per cent of coconut growers selling their produce to retailers and dealers in their immediate neighbourhood. These ratios are well above 50 per cent in most crops.

In some crops, though, a significant section of farmers do also sell in mandis, with their proportions ranging from 35 per cent in wheat to 45-48 per cent in rapeseed/mustard, soyabean, bajra, chana and arhar. These farmers probably have greater bargaining power, relative to those left with little option other than disposing of their whole crop to the local arhatiya or produce aggregator, who may, then, sell in the mandis.

The NSSO data on crop sales by farmers is based on the results of its latest 70th survey round, covering two halves of the agricultural year from July 2012 to June 2013.

The survey data also provides a possible reason why most farmers lack the flexibility to even take their crop to the mandis, where the presence of more buyers could arguably lead to better price discovery.

87.3 per cent farmers reported having sourced their fertilisers from local traders and input dealers during July-December 2012. This was higher, at 89.5 per cent, for January-June 2013.

Similar levels of dependence on village-level retailers were reported by farmers with regard to purchase of plant protection chemicals (94.5-96.5 per cent) and animal feed concentrates (82.5-83.9 per cent). As against this, a mere 11 per cent of farmers bought their fertilisers from government or cooperative agencies in July-December 2012, while being still lower, at 9.8 per cent, for January-June 2013.

The corresponding proportions were, likewise, low at 4.1 per cent and 2.4 per cent respectively for plant protection chemicals and 4 per cent and 4.4 per cent in the case of concentrates.

% DISTRIBUTION OF FARMERS SELLING TO VARIOUS AGENCIES				
CROP	Local private trader@	Mandis	Government agency/Coop	Processor
PADDY*	65.94	19.46	9.49	1.70
WHEAT**	58.42	34.78	6.79	0.27
MAIZE*	69.21	29.66	0.56	0.28
MUSTARD**	54.61	45.83	0.44	0.22
BAJRA*	51.85	46.91	0.41	0.00
COTTON*	68.02	25.08	6.10	2.03
CHANA**	52.82	46.80	0.38	0.00
SOYABEAN*	52.15	46.72	1.36	0.11
JOWAR*	69.46	23.49	1.01	0.00
POTATO**	77.72	23.60	0.19	0.19
SUGARCANE*	23.41	6.70	42.73	23.75
URAD*	73.96	25.45	0.80	0.00
ARHAR*	50.78	47.88	0.22	0.00
GROUNDNUT*	65.75	27.83	3.82	0.00
COCONUT**	84.73	10.39	3.05	0.00

**Sold in Jul 2012-Dec 2012; **Sold in Jan 2013-Jun 2013; @Includes input dealers.*

The NSSO report does not provide similar source-wise breakup vis-à-vis farm credit. But it is quite likely that the local traders are also the main suppliers of credit for seasonal agricultural operations to a majority of farmers.

Such loans — a result of the abysmal penetration of formal credit, be it from commercial banks or cooperatives — are typically conditional upon the farmers entrusting their harvested produce to the lenders, who are also input suppliers and traders.

This control over the farmer's produce sale as well as input purchase decisions, linked to supply of credit, is what makes the village bania such an enduringly powerful institution.

It naturally follows from all this that not many farmers sell their produce to government agencies/cooperatives, who would assure payment of a minimum support price (MSP).

The NSSO survey, in fact, reveals that even in paddy and wheat — where the MSP mechanism is supposed to work best — hardly a tenth of farmers reported selling to state/cooperative institutions.

Almost a third of paddy farmers actually offloaded their crop to local traders and input dealers, who may well have received the MSP. According to the survey, 32.2 per cent of paddy farmers and 39.2 per cent of wheat growers were “aware of MSP” — the percentages were way lower in other crops — but that alone obviously would be of little help. Interestingly, even in Punjab — where farmers are considered to be a strong “lobby” — only 27 per cent of paddy and 39 per cent of wheat growers reported sale to cooperative and government agencies.

The highest percentage of farmers (57 in paddy and 50.5 in wheat) disposed of their crop to mandi-level traders. The latter are largely commission agents or intermediaries between the farmers and the buyers, predominantly comprising state agencies.

The one exception, however, is sugarcane, where over two-thirds of farmers supply directly to government agencies/cooperatives (cane societies) or millers. That, in turn, has to do with the perishable nature of the crop. Cane, once harvested, has to be processed within 24 hours or so, failing which it suffers rapid depletion in sucrose content.

It is in the interest of mills, hence, to contract directly with growers rather than via intermediaries. The government, too, is in a better position to enforce MSP in cane, unlike in other crops where there is no guarantee that the farmer is even the ultimate seller.

Worse, the agriculture produce market committee or APMC laws enacted by various states make it impossible for processors to procure directly from farmers — even if they were to get a better price than from selling to

intermediaries. What is national Agriculture Market? Can the National Agriculture Market (NAM) — the online trading portal for farm produce being launched by Prime Minister Narendra Modi today — make a difference to farmers? On the face of it, yes.

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To that extent, the possibilities for better price discovery through a widened universe of buyers, both local and online, are quite limited for them. Farmers can, however, still benefit if they were to find ways for aggregating produce on their own, bypassing the arhatiya and even the local mandi in the process.

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Canal irrigation: When water comes to the fields

The Narmada has been a life-saver for parched Saurashtra, but there is scope for more judicious use by farmers.

FOR ALMOST a decade now, farmers of Surendranagar, Morbi, Botad and Bhavnagar districts in Gujarat's Saurashtra region have been getting Narmada river water for irrigating their crops. That has been a game-changer for agriculture in this otherwise parched plateau. But the abundant supply of canal water has also meant that not many seem bothered about its judicious use.

Balvantsinh Zala's field is about one km from the Maliya Branch Canal (MBC), into which the Narmada waters started flowing since 2005. "Until then, I had only 25 hectares and my annual income was just Rs 1.5 lakh. But today, I earn Rs 25 lakh and have also increased my holding to 50 hectares," says this 57-year-old, Class VII pass farmer from Moti Malvan village in Surendranagar's Dhrangadhra taluka.

In the pre-Narmada era, Zala — who has installed a diesel engine next to the canal to lift and bring the water through a pipe to his field — grew only a single crop of 'Waged', a traditional 230-day rainfed cotton variety yielding six quintals of raw un-ginned kapas per hectare, along with fodder every year. But now he cultivates Bt cotton hybrids in the post-monsoon kharif season, yielding an average 25 quintals kapas over just 170-180 days.

This is followed by seed spices — jeera (cumin), variyali (fennel) and dhaniya (coriander) — in the rabi winter season. Occasionally, he also raises a third crop of tal (sesame) during the summer, for harvesting before the monsoon. But it isn't canal water alone.

Groundwater levels in the area have also gone up, with the Narmada water being released into local ponds as well. Earlier, Zala couldn't pump out water from even 300-foot depths, whereas currently he has 10 submersible tube-well pumps; these draw water from only 150 feet. "The Narmada water can be a little too cold for crop. So, I mix it with the water from tube-wells for irrigation," he adds.

While the availability of Narmada water has enabled farmers like Zala to cultivate relatively water-intensive crops such as Bt hybrid cotton, they don't

seem all that concerned, however, about its judicious use. “I know drip irrigation system can save lot of water, but it is not useful when multiple crops have to be taken in a short period. Also, laying and rewinding the pipes is a cumbersome affair,” he points out.



One reason for this may be the Sardar Sarovar Narmada Nigam Ltd (SSNNL), the Gujarat government undertaking implementing the mega water resources project, not charging farmers anything for using the water.

Since the distributaries and minor/sub-minor canals are still under construction, the water is technically not being released into the fields. Farmers are able to lift the water by engines.

Zala, however, contends that drawing water from the canal doesn't come free: “For me, it means burning diesel worth Rs1,000 daily. This isn't cheap, when my total annual electricity bill for ten agricultural power connections is Rs1.20 lakh.

Also, the canal water is only to supplement groundwater, on which I cannot depend entirely because electricity is available for hardly eight hours”. This logic makes apparent sense in the case of somebody who cultivates 50 hectares and engages 80 labourers.

But significantly, even smaller farmers in Moti Malvan — almost the entire 1,000 hectares farmland of this village has been brought under irrigation — haven't adopted micro-irrigation systems.

“When there's enough water, what is the need for all this? Even if I install drip system, the nilgai (blue bull), ghudkhar (wild ass) and jangli suar (wild boar) will destroy it in one raid,” remarks Nanji Jetpariya, who farms four

hectares. Farmers here report regular damage to crops from wild animals. Malvan is, in fact, close to the Wild Ass Sanctuary bordering the Little Rann of Kutch. Things are somewhat different in Mansar, a village in Halvad taluka of Morbi district.

Hari Gohil grows sugarcane on five out of his 33-hectare holding that is entirely covered by drip irrigation. “The drip system ensures timely supply: the crop gets water when needed.

Besides, it saves fertiliser and also increases productivity,” explains this farmer, whose field is near Dhrangadhra Branch Canal (DBC) of Narmada. SSNNL started releasing Narmada water into the DBC only last year. But farmers in Mansar — which is the sugarcane belt of northern Saurashtra — had switched to micro-irrigation over the last decade.

This area already had some groundwater, which farmers were drawing from tube-wells and using prudently to irrigate their crops. The DBC has only made life better. Farmers of Khirai in Morbi’s Maliya taluka weren’t as well placed.

Being closer to the sea, the groundwater in this village — it is in the tail-end of the 136-km-long MBC — is salty and not suitable for irrigation. The Narmada water, in that sense, has been a godsend. But unlike Mansar, out of the 400-odd farmers in this village with a total landholding of 930 hectares, only two have gone in for drip irrigation.

“There’s enough water in the canal. Why bother about drip irrigation?” asks Shailesh Sanghani, whose two-hectare field was wholly rain-fed before 2005. But Hareesh Sanghani, a commerce graduate who has adopted drip irrigation in half of his two-hectare holding, disagrees with this:

“Water is abundant here, but I believe drip irrigation will prevent salinity in the soil that may come from flood irrigation. I also chose drip because I grew papaya last year and am now thinking of planting pomegranate”.

The Narmada project has a proposed irrigation command area of 18 lakh hectares (lh) in Gujarat, of which around 5.2 lh is covered by the Saurashtra Branch Canal (SBC) system.

The Maliya, Dhrangadhra, Morbi, Vallabhipur, Limbdi and Botad branch canals take water from the SBC, which, in turn, offtakes from the Narmada Main Canal near Kadi in Mehsana district of north Gujarat (the main Sardar Sarovar dam is in Navagam in south Gujarat).

SSNNL admits that of the SBC's 5.2 lh culturable command area, only about 2 lh is being irrigated, as work on minor and sub-minor canals is incomplete. While farmers are now getting water free, SSNNL itself is spending close to Rs 1 crore a day towards electricity for lifting and conveying Narmada water through the SBC network before it reaches the Dholi Dhaja dam in Surendranagar.

SSNNL is supplying to Saurashtra's farmers from September to March. Last summer, it released water in the DBC and Morbi canals for "testing". This year, scores of farmers in Halvad have grown summer crops, expecting water to be released beyond March as well.

"I sowed urad (black gram) in two hectares a couple of weeks ago and have also planted moong (green gram) in another one hectare, thinking the Narmada water will keep flowing. But it has run dry and I cannot irrigate with eight hours of electricity using a single tube-well. I may have to abandon half of my crop," complains Manu Gadhvi, a farmer of Kavadiya village in Halvad through which the DBC passes. But Vadan Gohil, executive engineer of Morbi Branch Canal, claims that farmers were warned in advance:

"Our irrigation season is from September to March. This time, we stopped releasing water from March 15 because there isn't enough water in Sardar Sarovar. Even last summer, we released water only for testing". Incidentally, water is still flowing in the MBC and VBC, though it is supposedly reserved for drinking purposes.

SSNNL has all through prohibited its use for irrigation during summers. But even there, it has refrained from taking coercive measures. Since 2005, only 54 FIRs have been lodged against farmers for water theft — all from the MBC. Out of those, 46 were registered in 2011-12, a year of exceptionally bad monsoon.

74,000ha agri land in Uttarakhand hills drought-hit

More than 74,000 hectares of agricultural land in the nine hill districts of Uttarakhand, which produces half of state's crop yield, is estimated to be drought-hit, a recent study by the government has revealed.

The drought assessment report by the state agriculture department has found that more than 50% of farmland in the nine hill districts of the state is drought-hit.

The report has been sent to the government to work out a compensation plan for farmers, said Ranbir Singh, additional chief secretary of agriculture.

“According to the drought assessment report almost 50% of farmland in the hills is drought-hit. Most of the assessed drought-hit locations fall in hill districts,” he said.

“The report has been sent to the state government and the state disaster management department for further action.”

Officials said the drought is the result of 71% deficit post winter rainfall in 2015, 46% deficit winter rain in the months of January and February this year and almost 20% rain deficit in the pre-monsoon months of March, April and May.

Besides the nine hill districts, Dehradun, Haridwar and Udham Singh Nagar constitute more than two-thirds of total 7.8 lakh hectares of agricultural land in the state.

Chief secretary Shatrughna Singh said that work is on to prepare a compensation package plan for farmers in the drought-hit areas. “The drought assessment report has been readied and efforts are on to work out a compensation package plan,” he said.

“Once the compensation plan is ready it will be sent to the governor for his approval,” the chief secretary said, adding that farmers in drought-hit areas will be duly compensated for their crop loss.

For easy trading, govt breaks farm market barrier with online platform



Government economists believe that a common farm market will make the commodities trade more transparent, less volatile and offer protection from inflation. (File photo/Reuters)

In a historic step, India is moving towards bringing down the equivalent of a Berlin wall running through its food markets.

As Prime Minister Narendra Modi kicks off the National Agricultural Market platform on Thursday evening, an internal farm trade barrier invoked decades ago will be replaced by an online countrywide trading platform that will link wholesale markets. The barrier in question is a virtual firewall of archaic rules that prevents farmers of one state from selling goods in another, and stokes episodes of high food inflation.

India may be trading globally as an open economy, but when it comes to farm produce, separate markets mean the country behaves like a million independent economies within one.

Food items from one state to another can be traded only when they are channelled through these markets, which are tough to negotiate due to intermediaries.

What does this mean for both farmers and consumers? Under a decades-old system, each state has scores of tight market zones to serve as exclusive buyer-seller platforms for an area. This system of 'mandis' or markets is both a physical and – at times – fiscal barrier preventing the seamless movement of goods.

These closed mandis have been found to drive inflation and food shortages by preventing quick movement of commodities from surplus states to deficit ones. Such bottlenecks caused onion prices to shoot up to a five-year high of about Rs 90 a kg last summer.

If farmers in Maharashtra can quickly sell their produce to traders in Assam, they stand to gain from instant and unhindered access to markets. Shortages can be promptly compensated, lowering prices for consumers. The reform will result in three major reforms – electronic trading, a single licence valid for all states and a single-entry point market fee.

Eight states – Gujarat, Telangana, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Haryana, and Himachal Pradesh – have agreed to knock down their trade barricades to form the first leg of what will be a common national electronic agricultural market. The new initiative will link 21 mandis from these states. As many as 365 mandis from 12 states have been granted approval for the next phase.

The online trading system had tasked the state-run Small Farmers' Agribusiness Consortium to oversee the installation of the system. Simply put, a bulk trader in Meerut can now buy goods from a local farmer and sell it to a businessman in Varanasi by interacting on an online platform.

Government economists believe that a common farm market will make the commodities trade more transparent, less volatile and offer protection from inflation. "These will make commodity-trading seamless," Arvind Subramaniam, the country's chief economic adviser, had earlier told HT.

Online trading platform for farm goods launched



Prime Minister Narendra Modi and Agriculture and Farmers Welfare Minister Radha Mohan Singh at the launch of the National Agriculture Market, an e-market platform, in New Delhi on Thursday. - Photo: SANDEEP SAXENA

Farmer will decide whom to sell to and at what price: PM

National Agriculture Market

What it is
The National Agriculture Market is an e-platform on which farmers and traders can sell and buy farm produce. It promises to liberate farmers from the current constraints on agriculture marketing — and from their dependence on commission agents, who also serve as their financiers in some cases.

How it works

-  Puts farmers on an e-market grid
-  Brings transparency into the bidding process
-  Enables price discovery, higher earnings for farmers
-  Eliminates middlemen

 Will integrate 585 regulated markets with the e-market by March 2018



Prime Minister Narendra Modi on Thursday sowed the seeds for a farming revolution, with the launch of e-NAM, an online portal for trading in agriculture produce, which promises to liberate farmers from the clutches of middle-men and realise fair market value for their yields.

“Farmers in India will now call the shots,” Modi said as he launched the National Agriculture Market portal (e-NAM). Terming it a ‘turning point’ for the country’s agriculture, Modi called upon all the States to come on board to help farmers reap the benefits of the trading platform.

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

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

“Using this portal, a farmer can decide where his produce will be sold, when it will be sold, and at what price. At the same time, consumers and traders, too, won’t suffer,” Modi said at the launch. The number of wholesale *mandis* to which farmers will have access through e-NAM would soon increase to 200, said Modi. “Many States have changed their laws. Incorporation of technology is not difficult,” he said.

So far, 14 States have amended their Agriculture Produce Market Committee (APMC) Act to allow e-trading. Among them are Andhra Pradesh, Chhattisgarh, Karnataka, Sikkim, Goa and Mizoram.

Transparency in prices

The idea behind the online market is to provide transparency in pricing by removing the information asymmetry between sellers and buyers and enable farmers to benefit from price discovery.

It will also reduce transaction cost, provide a single licence valid across all markets, help farmers identify the best buyers, enable single-point levy of market fees, and set quality standards.

Additionally, the online market also liberates farmers from dependence on commission agents, who are the traditional link between them and consumers. In some cases, commission agents also double as financiers to farmers, who thus feel obligated to sell their produce through the agent to whom they are indebted.

On the e-platform, farmers can list the items they want to sell on the portal. Local traders, as well as traders in other States, can then bid for the produce. The farmer will be free to choose to accept the offer made locally or by traders in other States. The transaction will be recorded on the books of the local *mandi*, which will continue to earn the transaction fee.

“Earlier, the farmer never had any choice. Once he took his produce to the *mandi*, he was completely at the mercy of traders. If the traders decided to drop the price for a particular commodity, the farmer would be forced to sell as he didn’t want to take his produce back to his farm. With online trading, the farmer would have conducted the entire transaction before loading his produce on his tractor or cart,” Modi said.

Traders, too, stand to benefit as they can tap any number of sellers if for some reason they don’t get what they want from their traditional sellers.

The Agriculture Ministry has targeted integrating all 585 regulated markets on the e-NAM platform by March 2018; of these, 200 will be on board by September 2016, 200 more by March 2017, and the other 185 markets by the end date.

Criticising some States, without naming them, for not having laws to protect their farmers, Modi said that farmers were susceptible to exploitation there. Even in States that have laws, they need to make amendments to provide for the new technology that has come in. “I hope States will amend their laws so that they can benefit from online trading. I ask States to give it primacy,” he said.

On a positive note, the Prime Minister added that as soon as news of the benefits enjoyed by farmers in the 21 selected *mandis* start to come in, the other States would want to become part of the online system so that their farmers, too, could benefit.

The laboratories to be set up at the *mandis* would scientifically classify the quality of the product being sold and the transparency would help farmers, traders as well as consumers, he added.

Mustard oil slips; seeds gain



Favourable monsoon forecast by the weather department this year and decline in buying interest at higher rate have halted rally in mustard oil. Mustard seeds gained higher on weak arrival.

Amid sluggish and subdued demand, mustard oil prices were at ₹740 for 10 kg, while it was ₹730 in Neemuch and ₹750 in Morena. In Rajasthan, mustard oil ruled flat at ₹755 in Jaipur, while in Gujarat it was at ₹735.

Mustard seeds and raida ruled higher on weak arrivals with mustard seeds prices rising to ₹4,350 a quintal (up ₹400 from last week) Similarly, raida traded higher at ₹4,150 (up ₹200). Plant deliveries stood at ₹4,430-35 a quintal.

Business Standard

E-portal launched to link wholesale agri markets



An electronic national agriculture market, Prime Minister Narendra Modi said after launching a portal to get this going, would enable farmers to get a good price for their produce and get middlemen and consumers a transparent system of price discovery.

Launching the portal for an electronic national agricultural market (NAM), he said the Agricultural Produce Marketing Committees (APMCs) under existing law had till now acted as barriers to free movement of produce. This, the electronic market will seek to remove.

He urged states where the APMC Act is in force to amend their respective laws in line with the requirement for a national market. By the new guidelines, those mandis (wholesale markets) which want to participate in the electronic platform and avail of the central grant of Rs 30 lakh for this need to fulfill three criteria. These are to put in place an e-auction platform for price discovery of produce, provide a single licence that is valid across the state and a single-point levy of market fee.

"The electronic market will enable the farmer to get good price for his produce and also empower him to decide what to sell and whom to sell," said Modi. Adding, when I talk about doubling farmers' income, I have a clear road map in mind which will be unveiled as we go forward.

Officials said 21 mandis in eight major states would be integrated in the first phase, scaled up to cover 585 mandis or APMCs in the next three years. India has 2,477 principal mandis and 4,843 sub-markets created by the APMCs. There is a corpus of Rs 200 crore to be spent over three years for the first phase of linking.

The 21 which would come under NAM are in Madhya Pradesh, Gujarat, Telangana, Rajasthan, Uttar Pradesh, Jharkhand, Haryana and Himachal Pradesh. The largest number which would joined in the first phase are in UP.

The Karnataka government has already set up its own online agri-market platform, integrating 13 mandis. Maharashtra has begun doing so. After roll-out in 21 mandis, implementation would be handed over by the Small Farmers Agri-Business Consortium, an arm of the department of agriculture, to another agency or body.

This latter body would ensure the process of online trading is smoothly conducted and the process of digitisation carries on, a senior DoA official said.

A major objective of the common market is to iron out the price differentials that exist across the country, by curbing the tendency to hoard, which could lead to oderation of food inflation. The integration is hoped to address the problematic APMC law, through which state governments exercise control over wholesale markets.

APMCs were first established to provide an organised marketplace to farmers and to ensure against exploitation by unscrupulous buyers. However, they're held to have played a role which is opposite to their stated objective, with their operations invariably hidden from scrutiny. The management of most is in the hands of political parties, which have a cosy relationship with commission agents to form cartels.

National Agricultural Market can cover only 10% of commodities: Experts



Quality variations will ensure barely 10 per cent of commodities are traded on the National Agricultural Market (NAM), an electronic link among various mandis in the country, according to experts.

The government switched on the NAM on Thursday, linking Agriculture Produce Market Committee (APMC) markets. There are 6,500 APMCs in the country, of which 585 large district-level mandis will be being linked by the NAM.

A farmer in north India can sell his produce on the NAM to a trader in the west or south based on price. This will make a significant difference because there is no state or national price. Futures exchanges poll to arrive at prices but it is not an efficient mechanism.

However, wide quality variations in farm produce within a state, and even wider variations across states, pose a challenge for the new market. Commodities with similar standards nationally are few. Wheat in Punjab and Haryana is of medium quality while that in Madhya Pradesh and Gujarat is superior.

An electronic platform can only trade standardised commodities. For the rest, the NAM might not be the right platform.

A state agricultural market model, launched in 2009 by the NCDEX, provides some lessons in market integration. The Karnataka model, a joint initiative of the government of Karnataka and NCDEX e-Markets, was the first such initiative. “It took us two years to get the first mandi, Gulbarga, off the ground. Now we have linked 130 markets in three states,” said Rajesh Sinha, chief executive officer of NCDEX e-Markets.

Other states where linkages of the mandis have begun are Andhra Pradesh and Telangana. Gujarat has awarded a contract to launching a project.

The NAM allows states to have their own electronic platforms and they can decide on linking these to the national exchange.

Farmers can sell their produce on the e-platform after having its quality graded by recognised assayers. As the trade is executed, farmers are paid money financed by network banks. When after settlement money is paid by the buyer, the bank money is settled.

Sinha said his platform had linked the Aadhar card and other details of farmers in Andhra Pradesh. Any farmer can use these to sell his produce.

Several banks finance farmers who choose to sell later and want to store their produce. This can be done when the produce is hedged — sold in the futures market to be delivered at a later date.

Maharashtra has saved a significant amount by procuring sugar for on the NCDEX e-markets platform. Karnataka last year saved Rs 900 crore, according to the estimates of a mandi official, as falling copra prices resulted in a private trade on the electronic platform.

Nabard credit support to Chhattisgarh touches Rs 2,816 cr

Financial assistance for agriculture and rural development in 2015-16 had been significantly less



The credit support by the National Bank for Agriculture and Rural Development (Nabard) to Chhattisgarh touched Rs 2816.80 crore during the year 2015-16.

The financial assistance of the bank for the agriculture and rural development in 2015-16 had been significantly less as compared to the credit support extended by the Nabard in 2014-15. In the previous year, the bank provided a credit support of over Rs 4,700 crore to Chhattisgarh.

"In 2015-16, Nabard provided Rs 500 crore to the Marketing Federation (MarkFed) under the credit facility for federations (CFF) for paddy procurement for the Kharif Marketing Scheme (KMS) 2015-16 as against Rs 2,000 crore provided in 2014-15," P J Ranjith, Chief General Manager of Nabard's Chhattisgarh region said.

Since the assistance to MarkFed was reduced, the credit support also came down, he added. Ranjith said sanctions to state government under rural infrastructure development fund (RIDF) amounted to Rs 817.39 crore during 2015-16 while Rs 631.72 crore was released for various RIDF projects during the year.

"The implementation of these projects will ensure better connectivity for 846 villages with total road length of 685.61 km covering population of 544,000 besides generating 142,830 man days of non-recurring employment," he added.

During the year 2015-16, Nabard Consultancy Services (NABCONS) recorded an increase of over five folds in its business in Chhattisgarh. Ranjith said NABCONS, which is a wholly owned subsidiary of Nabard contracted business of Rs 5.96 crore in 2015-16 as against Rs 1.17 crore last year.

Nabard provided Rs 1,329.28 crore as refinance to banks during 2015-16, of which Rs 1115.00 crore and Rs 214.28 crore was disbursed for production and investment credit respectively.

The bank launched Women SHG programme in Left Wing Extremism (LWE) affected districts in 2012-13. The move was aimed to promote and nurture WSHGs in 14 LWE affected districts. As on March 31, 2016, Nabard had sanctioned projects to 29 NGOs for promotion and nurturing of 11,685 WSHGs with a grant support of Rs 11.685 crore.

China to 'facilitate' new GM crops after years of waiting

GM soya, corn, cotton and rape can be imported as raw materials and as ingredients in processed products

China will "facilitate" the planting of genetically modified corn and other plants on an industrial scale in the next five years, officials said, after not authorising any new commercial GM crops for a decade.

The controversial science is a key trade issue with the US, whose biotechnology giant Monsanto is a global leader in the field, while its rival Syngenta has agreed a USD 43 billion takeover offer by Chinese state-owned firm ChemChina.

Only two GM crops are currently commercially cultivated in the country -- a type of cotton approved in 1996, and a virus resistant papaya authorised in 2006.

GM soya, corn, cotton and rape can be imported as raw materials and as ingredients in processed products. Processed sugar beet imports are also allowed.

Beijing is pro-biotechnology as it has long been concerned over the world's

most populous country's ability to feed itself -- a fear that factored into the introduction of its controversial one-child policy.

But large-scale cultivation of GM crops remains sensitive as environmentalists and some scientists warn against the technology's as-yet-unknown long-term consequences for biodiversity and human health.

"During the 13th five-year plan, we will... Push forward the industrialisation of major products including new types of insect-resistant cotton and corn," Liao Xiyuan, a senior official with the Chinese agriculture ministry, told reporters.

Corn is the top grain in China by both production and sown area -- much of it used for animal feed -- with rice only in second place, followed by wheat, official data shows.

The government will continue research on GM rice and wheat over the next five years, Liao said at a press conference Wednesday.

GM crops are sometimes found being grown illegally in the country and Liao said had authorities "rooted out" GM rice in the central province of Hubei. Last year they also destroyed a total of 73 hectares of GM corn in several areas.

"Sporadic illegal planting of (GM crops) does exist in some areas and we will crack down harshly on it," Liao said.

Growth of GM crops slows for first time in 20 years: Study

Five developing countries - Brazil, Argentina, India, China and South Africa - grew almost half of all GM crops in 2015



The growth of genetically-modified (GM) crops has dipped for the first time following two decades of steady increases, according to a study released on Thursday.

Twenty years after the first genetically-modified plant was marketed, the worldwide acreage of GM crops reached 181.5 million hectares in 2014.

But after 19 years of annual increases, the area planted with biotech seeds fell by 1% last year, according to the pro-GM International Service for the Acquisition of Agri-biotech Applications (ISAAA).

The group blamed the slowdown on the collapse of commodity prices, including corn and cotton.

"ISAAA anticipates that total crop hectareage will increase when crop prices improve," the organisation said in a press release.

The United States, the world's leader in GM foods, saw a 2.2 million hectare decline in farmland given over to genetically modified crops in 2015.

In South Africa, severe drought reduced acreage of GM corn from three million hectares to 2.3 million hectares last year.

And last week Burkina Faso abandoned its genetically modified cotton crop altogether, saying the project was not profitable.

The ISAAA said that despite challenges, the area devoted to GM crops has "increased 100 times" in the past 20 years and now involves 18 million farmers in 28 countries.

From 1996 to 2014, biotech crops have successfully been grown on a cumulative area of 1.8 billion hectares.

Five developing countries – Brazil, Argentina, India, China and South Africa – grew almost half of all GM crops in 2015.

GM remains hugely controversial in many countries, stirring sharp debate over the crops' use and impact.

The ISAAA said opponents of GM were "opposed to science/evidence-based regulation" and that demands for "onerous" regulation would hurt poor farmers in developing countries.



THE TIMES OF INDIA

Jharkhand's agriculture market goes digital

trade of agricultural produce in Jharkhand went digital on Thursday after Prime Minister Narendra Modi introduced a digital trading platform - National Agriculture Market - for farmers of eight states including Jharkhand. On this national platform, now farmers can enlist their produce to attract wholesale buyers and increase their income.

Ajit Kumar, director marketing, Jharkhand state agriculture marketing board, Ranchi said the digital platform is aimed at transforming the life and income of farmers.

Modi inaugurated the national agriculture market (e-platform) at a function in Madhya Pradesh's Mhow, B R Ambedkar's birthplace on Thursday to which Krishi Bazaar Samiti, Pandra (Ranchi) was also connected.

Two crops 'mahua' and 'tamarind' from Jharkhand have been listed in the e-mandi among 25 crops including wheat, maize, pulses, oilseeds, potatoes, onions and spices from eight states. "In April the production of 'mahua' and 'tamarind' are abound in the state," Kumar said.

Radha Kant Tiwari, vice chairman of Krishi Bazaar Samiti, Pandra said the farmers connected to the wholesale marketing exercise will benefit from it. "Now farm produce will have a huge network of buyers and farmers will sell to the highest bidder and benefit more," he said.

In the absence of the e-mandi, farmers had no option but to sell their produce to middlemen and traders who suppressed prices of commodity through a consensus among traders. "The unseen cartel formed by groups of traders purchased the farmers produce at a low rate and sold them at high rate to get maximum advantage. The benefit however did not reach the farmers," an

official of the wholesale agriculture market said on the condition of anonymity.

Agriculture activists find fodder camps too few

Farmer activists want a raise in the existing number of fodder camps in Beed, Latur and Osmanabad, the three worst drought-hit districts of the perennially parched Marathwada.

At present, the three districts have around 355 fodder camps for the benefit of a livestock population of over 3.7 lakh. Statistics available with the revenue department reveal that Beed has the highest number of fodder camps among the three districts. Altogether 285 fodder camps are functional in Beed, where nearly 2.60 lakh large cattle and 20,392 calves have taken shelter.

In Osmanabad, the district administration has set up 88 fodder camps according to the guidelines issued by the state government. A livestock population of nearly 89,195, including 79,587 large cattle owned by farmers and villagers, is benefiting from these camps.

Latur, where water is supplied by Railways to tide over an unprecedented scarcity, has three fodder camps for shelter to 1,695 cattle and calves.

Shetkari Sanghatana spokesperson Shrikant Umrikar on Thursday told TOI that the government should first declare its criteria for allowing setting up of the fodder camps. "While livestock from several parts of the region have been affected by the crisis, the government is offering relief measures only in a few parts. Its attempts to save money has been proving costly for farmers. The number of fodder camps should be increased in Marathwada at least by the end of this month," he said.

Aurangabad divisional commissioner Umakant Dangat could not be reached for comments. Senior government officials said the reports submitted by respective district administrations on the availability of fodder for the livestock after the Rabi season of crops (till May) was the basis for setting up of the fodder camps. "Any genuine demand for fodder camps will, however, be considered in days to come till monsoon arrives," an official said.

The Maharashtra government had in February ordered a temporary shutdown of fodder camps that were operating in the three Marathwada districts. In his directives issued to the district administrations, deputy secretary (revenue department) Ashok Atram had also sought submission of fresh proposals for starting camps in May if there's a dearth of fodder.

This had triggered protests both from the opposition and the farmers' groups, following which the government rolled back its decision.

Modi government is creating Amazon-like marketplace for farmers

government will integrate 21 regulated wholesale markets, or mandis, in eight states under an online platform on Thursday as part of the proposed National Agriculture Market (NAM).

"On April 14, on the 125 birth anniversary of BR Ambedkar, Prime Minister Narendra Modi will launch the e-trading platform — NAM — which proposes to integrate 585 regulated wholesale market or agriculture produce market committees (APMCs) under one electronic platform," said agriculture minister Radha Mohan Singh said on Wednesday.

This will ensure farmers get competitive returns and consumers get stable prices and steady availability, he said.

NAM is envisaged as a pan-India electronic trading portal that seeks to network the existing Agriculture Produce Marketing Committee (APMC) and other market yards to create a unified national market for farm commodities.

"The national e-market platform will allow transparent sale transaction and price discovery of commodities," Singh said.

Currently, there are more than 7,000 wholesale markets in the country. States selected for the pilot project include Gujarat, Telangana, Rajasthan, Madhya Pradesh, Uttar Pradesh, Haryana, Jharkhand and Himachal Pradesh.

"Initially 12 commodities, including chana (black gram), castor seed, paddy, wheat, maize, turmeric, onion, mustard, mahua flower, tamarind and shelling pea, will be traded on e-platform and not in the physical market," Singh said.

Spreading The Net

It is part of govt's plan to launch a national agriculture market (NAM)

Currently, there are over **7,000** wholesale markets

NAM seeks to network Agriculture Produce Marketing Committee & other market yards to create a unified national mkt for agri commodities

Initially, **12 commodities** will be traded on the e-platform & not in physical mkt

Online mkt to reduce transaction cost, provide single license for a trader valid across all markets, maintain quality standard & single-point levy of mkt fees

Government officials said while sale of agri produce shall continue through mandis, an online market would reduce transaction cost, provide single license valid across all markets, and maintain quality standard with provision of quality testing and single point levy of market fees.

The agriculture minister also said that food grain production in the country in 2016-17 will be better than the previous year. In 2015-16 (July-June), food grain production is expected to be 253.2 million tonnes from 252 million tonnes in the previous year, which was also a deficit monsoon year.

A bumper production will keep a check on inflation, ensure steady supplies of commodities and remunerative price to farmers.

Asked if he expected food grain production to touch the 2013 record of 263 million tonnes, Singh said, "that was a record food production the country had and we will make a comparison of production with the previous year."

Govt to disburse Rs6,000 crore cooperative loans for farmers

The state government has set a target to disburse cooperative loans to the tune of Rs 6,000 crore among farmers during kharif season this year. The target for each district too has been fixed.

In a letter to district collectors, cooperation secretary Manoj Ahuja on Tuesday suggested several steps for success of the kharif programme.

"The government is very keen that the cooperatives, which give around 65% of the crop loan disbursement in the state, extend their outreach by providing timely, adequate and hassle-free credit to the farmer members of primary agriculture credit cooperative societies (PACS) during kharif 2016," the letter said.

Ahuja said commercial and regional rural banks would be given targets separately by the state-level banker committee and communicated about it shortly.

The secretary said a new crop insurance scheme, Pradhan Mantri Fasal Bima Yojana, would be implemented in accordance with the operational modalities approved by the centre and the state government and communicated to all concerned separately, he added.

Farmers rue steep decline in onion prices

Farmers and traders, who until last year were reaping benefits from the elevated onion prices due to the scarcity in the market, are now suffering huge losses because of the prevailing glut of the commodity.

The price reversal of the crop from an all-time high of Rs 5,700 per quintal (average wholesale) on August 15, 2015 to a meagre Rs 775 on Wednesday at the Lasalgaon Agriculture Produce Market Committee (APMC) has hit the farmers hard. They are finding it difficult to recover even the production cost of the crop, which is around Rs 1,000 per quintal.

On March 16, the average wholesale onion prices recorded a two-year low of Rs 600 per quintal.

Reversal of onion prices from a The average wholesale onion prices which had touched the all-time high of Rs 5,700 per quintal on August 22 last year (2015) at the country's largest wholesale onion market at Lasalgaon Agriculture Produce Market Committee (APMC) in the district due to onion scarcity, has now reversed to Rs 775 per quintal.

The retail onion prices had touched Rs 100 per kg in Mumbai and Delhi in

the last week of August last year due to onion scarcity. In Nashik too, the retail prices were a steep Rs 80 per kg. But the arrival of onions in large quantities in the market in the past few months has turned the prices in favour of consumers.

The average wholesale onion prices have declined from the all-time high of Rs 5,700 per quintal in August 2015 to Rs 775 per quintal today due to rise in supply as compared to demand, brining tears to the eyes of the farmers as they are unable even to recover their production cost, which is around Rs 1,000 per quintal.

Speaking to TOI, Govind Pagar, Nashik district president of Swabhimani Shetkari Sanghatana, said, "Onion prices have declined massively in the district APMCs due to rise in arrival. In December 2015, the Union government had reduced the Minimum Export Price (MEP) of onions to zero to curb the trend. But prices have declined despite that. The cost of growing onions is around Rs 1.10 lakh per acre and the yield is around 20-25 quintals per acre," adding that the production cost, including transporting, is around Rs 1,200 per quintal, irrespective of the quality of onion and the farmers suffer if they get price below Rs 1,200 per quintal.

Pagar further said, "Although the average wholesale prices are around Rs 775 per quintal, there are only a handful of tractors getting anything above Rs 70 for their produce. Around 80% of the total arrivals in the market are being sold in the range of Rs 400 and Rs 550 per quintal. It means the farmers are suffering losses to the tune of Rs 600. Hence, we want the government to give a guarantee rate of Rs 2,000 per quintal on the commodity."

Nanasaheb Patil, director, National Agricultural Co-operative Marketing Federation of India Ltd (NAFED) and outgoing chairman, Lasalgaon APM said, "After the average wholesale onion prices had skyrocketed to Rs 5,700 per quintal on August 24 last year due scarcity of onions. But the scenario has changed now and the average wholesale onion prices have declined to Rs 775 per quintal and the farmers are suffering losses. As per the government agency National Horticulture Research Development Foundation (NHRDF), the cost of onion production is Rs 1,000 per quintal. The farmers suffer losses if the prices go below this." We have also urged the union government to allow NAFED to procure and export onions

directly on its own. This will increase the demand in the market and help to increase in onion prices."

An official from the Lasalgaon APMC said, "Arrival of the kharif crop has almost exhausted and is around 500 to 1,000 quintals of the total arrival of 10,000-12,000 quintals at Lasalgaon. The arrival of the fresh summer crop has commenced. Kharif onions are highly perishable and farmers have no option but to sell them at prevailing market rates. On the contrary, the summer crop has a longer shelf life, but most farmers cannot store the commodity for a long period due to financial constraints and lack of storage facility."

The official further said, "At present, the average wholesale onion prices are in the range of Rs 700-775 per quintal at Lasalgaon. The demand from Lasalgaon has declined as harvest has begun in all onion-growing states."

On Wednesday the average wholesale prices at the Lasalgaon APMC were recorded at Rs 775 per quintal. The minimum and maximum prices were recorded at Rs 400 and Rs 899 per quintal and around 11,000 quintal were auctioned off.

Massive drop in prices hurts traders

The total area under cultivation of onions in the district (including all three crops - kharif, late kharif and summer) is around 70,000 hectares, including 40,000 hectares under the summer crop and the remaining under kharif and late kharif crops. The yield of the kharif crop is 15 tonnes a hectare, while it is 18 tonnes a hectare for the summer onions.

Haryana starts e-market for farmers

Haryana farmers will now be able to sell their produce to the traders sitting in far away cities of the country as the state on Thursday started implementing the concept of E-mandis on the pattern of Karnataka. The agriculture department officials said the farmers, who grow basmati, Bengal gram and bajra (pearl millet) would benefit the most with the launch of the new agri-marketing initiative.

The Haryana government on Thursday introduced online trading of agricultural commodities from Karnal, and Ellenabad in Sirsa. Haryana

agriculture minister Om Prakash Dhankar told TOI that 52 markets of the state would be developed as E-mandis and linked with the national agriculture market on the pattern of Karnataka to enable the farmers to get good price for their harvest anywhere. In this system, middlemen will have no role to play and the registered traders from any part of the country will be able to quote prices for the crops.

"Any agency accredited by the government would upload all details of the produce brought by the farmers in the mandis online for open bidding. Then, the registered agents from any part of the country would be able to see the quality of the produce before bidding for the same," said Dhankar. Karnataka has already connected all its major 55 markets and has set up a web-enabled portal that records all the lots of products available for sale.

THE ECONOMIC TIMES

Grain vanishes from Punjab godowns; may burn Rs 12,000-crore hole in bank books



At least four people familiar with the matter said RBI's directive has alarmed banks who now have to provide at least 15% of the loans.

MUMBAI: The splotch of red ink on bank balance sheets is set to become bigger as a new scandal in the form of disappearing food stocks in Punjab godowns threatens to burn a Rs 12,000-crore hole in their books and embarrass the Parkash Singh Badal administration.

The Reserve Bank of India (RBI) has ordered all banks with exposure to the Punjab government's food borrowing programme to provide for potential losses after discovering that food grain supposed to have been bought with bank funds has vanished from godowns.

At least four people familiar with the matter said RBI's directive has alarmed banks who now have to provide at least 15% of the loans, or a total of Rs 2,250 crore, in March and June quarters.

State Bank of India, one of the lenders, has called a meeting on April 18 to discuss the issue amidst fears that the amount involved would be far higher, about Rs 20,000 crore. SBI Chairman Arundhati Bhattacharya declined comment on the issue. The RBI stance is unusual from one aspect.

Normally, all state government borrowings are sovereign and banks have been telling the regulator that there is no need to provide for potential losses. But the regulator has insisted on this move, underlining once again RBI Governor Raghuram Rajan's take-no-prisoners approach when it comes to treating bad loans.

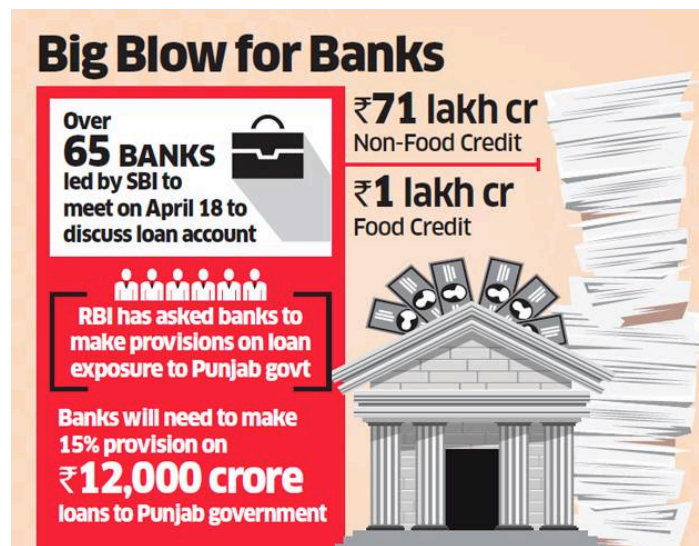
"RBI does not agree," one banker said. "It is not (convinced) about the recoverability of the receivables. Hence, it has asked banks to make provisions."

The development, a bolt from the blue for the banking system, is also a huge embarrassment for the Badal government whose popularity is under pressure from a resurgent Aam Aadmi Party (AAP) and Congress. The state goes to polls in 2017.

The Akali Dal, a partner in the ruling NDA at the Centre, runs the state in alliance with BJP. The state government is believed to have told banks and RBI that there is no deficit and it would be able to repay the loans. An anguished banker told ET that his bank's entire profit may be wiped out by the provisioning. "All the parties involved, state government, Centre and RBI, were aware of the deficiency — the stock versus the loan amount, but it is always the banks which have to pay the price. Why can't the government set up an enquiry about the missing stock?"

Although the issue of 'deficient stocks' in Punjab's granaries have been discussed for months, bankers did not think of provisioning as the loans were considered 'zero-risk' since they went into the state government's books.

"There has been an issue of reconciliation between the Food Corporation of India (FCI) and Punjab state government, and till the matter gets resolved, RBI has told us to make 15% provision on the food credit given to Punjab government," said a banker who preferred anonymity.



A mail sent to the Reserve Bank of India on Wednesday evening did not elicit response. The central bank and commercial banks are shut for a national holiday on Thursday. When contacted over phone, FCI Chairman Yogendra Tripathi declined comment saying the Punjab government officials 'will give a better clarity'.

The issue is being looked at, said an official at the state food, civil supplies and consumer affairs department who did not want to be identified. "There has been no siphoning off of grain stock. The money being stated is the compound interest of the past few years," the official said.

Loans in the Indian banking system are divided into two broad categories — food credit and non-food credit. Food credit is mostly through FCI which is a canalising agent for the states in buying grain from the market. While non-

food credit is at Rs 71lakh crore, food credit is at Rs 1lakh crore, RBI data shows.

For food purchases, banks lend to FCI and foodgrain are stored in godowns in each state. The monitoring of the godowns and the payment of interest on the loans are done by the state government.

(With inputs from Madhvi Sally)

FCI to raise Rs 20,000-crore short-term loan



State-run Food Corporation of India (FCI) has invited bids from the scheduled banks for raising short-term loan of Rs 20,000 crore for one month period.

NEW DELHI: State-run Food Corporation of India (FCI) has invited bids from the scheduled banks for raising short-term loan of Rs 20,000 crore for one month period.

To meet out its short term fund requirement for procurement and distribution of food grains, the Corporation is considering raising short term loans from the scheduled Banks only for one month tenure, the FCI said in the tender document.

The FCI is raising short term loan because its subsidy arrears have touched Rs 58,650 crore, as on March 31, a source said.

"FCI intends to raise short-term loan of Rs 20,000 crore with greenshoe option (the borrowing through STL will not exceed Rs 30,000 crore at any point of time) from scheduled banks for one month maturity," the tender document added.

The tender was floated on April 13 and the last date for of submission of offer is April 26.

Further, to bring down the subsidy arrear in this fiscal, the government had earlier said it may consider additional food subsidy over and above the budgetary provision, if required, towards the end of the current financial year.

The bulk of the subsidy is paid to FCI for buying foodgrains at support price and running the public distribution system (PDS).

The PDS operation cost has risen sharply in the past few years due to increase in the minimum support prices (MSP) of grains as well as high storage costs.

The FCI also has a cash credit limit of Rs 54,495 crore with a consortium of 67 banks.

The government has earmarked Rs 1,34,834.61 crore as food subsidy for the financial year 2016-17, out of which about Rs 1.03 lakh crore is for FCI.

While, in the 2015-16 period, the government had initially allocated Rs 97,000 crore to FCI, which was later increased to Rs 1,12,000 crore at the revised estimate stage.

In the current fiscal, the Centre has released Rs 25,834 crore as food subsidy to the corporation and another Rs 10,000 crore as a wage and means advance.

FCI was established under the Food Corporation Act 1964, to implement the food policies of the Government of India. FCI is fully owned by GOI having paid up capital of Rs 2,830.49 crore.

Modi government to integrate 21 mandis in 8 states under online platform



Govt will integrate 21 regulated wholesale market, or mandis, in eight states under an online platform on Thursday as part of the proposed National Agriculture Market.

NEW DELHI: The government will integrate 21 regulated wholesale markets, or mandis, in eight states under an online platform on Thursday as part of the proposed National Agriculture Market (NAM). "On April 14, on the 125 birth anniversary of BR Ambedkar, Prime Minister Narendra Modi will launch the e-trading platform — NAM — which proposes to integrate 585 regulated wholesale market or agriculture produce market committees (APMCs) under one electronic platform," said agriculture minister Radh ..

This will ensure farmers get competitive returns and consumers get stable prices and steady availability, he said.

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"The national e-market platform will allow transparent sale transaction and price discovery of commodities," Singh said.

Currently, there are more than 7,000 wholesale markets in the country. States selected for the pilot project include Gujarat, Telangana, Rajasthan, Madhya Pradesh, Uttar Pradesh, Haryana, Jharkhand and Himachal Pradesh.

"Initially 12 commodities, including chana (black gram), castor seed, paddy, wheat, maize, turmeric, onion, mustard, mahua flower, tamarind and shelling pea, will be traded on e-platform and not in the physical market," Singh said.

Government officials said while sale of agri produce shall continue through mandis, an online market would reduce transaction cost, provide single license valid across all markets, and maintain quality standard with provision of quality testing and single point levy of market fees.

The agriculture minister also said that food grain production in the country in 2016-17 will be better than the previous year. In 2015-16 (July-June), food grain production is expected to be 253.2 million tonnes from 252 million tonnes in the previous year, which was also a deficit monsoon year.

A bumper production will keep a check on inflation, ensure steady supplies of commodities and remunerative price to farmers.

Asked if he expected food grain production to touch the 2013 record of 263 million tonnes, Singh said, "that was a record food production the country had and we will make a comparison of production with the previous year."

Now, Punjab farmers can hire tractors, farm implements using mobiles

CHANDIGARH: Punjab farmers will now be able to hire tractors and farm implements using their mobiles just the way city dwellers hail radio taxi services like Uber and Ola.

A pilot project is being launched in the agrarian state to allow companies and individuals rent out their tractors and equipment to a registered user who can expect the services at rates cheaper than those offered by traditional companies.

Fazilka-based Zamindara Farming Solutions hopes tractors lying idle with individuals can be put into use by networking the users and owners on a larger virtual platform.

"We are trying to evolve a model wherein we provide technology, business and implements to farmers," says Zamindara Founder Vikram Ahuja whose company already caters to 3,000 farmers through a call centre. A mobile app is the next stop. The Zamindara's business model was a case study at business schools like IIM-Ahmedabad and XLRI, Jamshedpur.

Tractors apart, equipments like harrow, spike, chisel plow, cultivator, rotator, roller and strip till are also on the offer.

The company feels its online rental model will help farmers escape debt, a prime reason behind farmers' suicides in the country. Ahuja says proper training in usage of machines ensures that work is done properly. Right depth, proper distance between plants and rows are crucial as they finally affects the yield.

The pilot project has received an initial funding of Rs 25 lakh by National Bank for Agriculture and Rural Development or Nabard.

" This is a pilot project limited to Fazilka, and if all goes well, we may implement it in other districts of Punjab," Nabard's Chief General Manager for Punjab Region PM Ghole said.

The agri bank has recently launched "Chalak Baney Malik" scheme, under which farmers will be given loan at low rates for buying equipment and the EMI will be deducted from the business generated.

Gurugram (formerly Gurgaon) based Agroman claims to be the first company to come up with an integrated agriculture marketplace providing agri-services to farmers.

Agroman's online sales model is trying to generate demand from farmers in the unorganised agriculture sector and bring services to the rural doorsteps. "Due to small landholdings and lack of capital, most farmers use age-old practices and are dependent on government subsidies. There is a huge information asymmetry among stakeholders which results in low efficiency and low productivity. That is where we come in," says Agroman Founder Vikas Goyal. Launched as a price discovery platform in November, Agroman caters to both buy and sell sides of the agriculture business.

Andhra Pradesh targets to produce 172 lakh tonnes foodgrains in FY17



"The state has set a target to produce 172.08 lakh tonnes of foodgrains in 2016-17 as against 136.73 lakh tonnes in 2015-16," Agriculture Minister Prattipati said.

VIJAYAWADA: Andhra Pradesh government today said it has set a target to produce 172.08 lakh tonnes of foodgrains in 2016-17.

"The state has set a target to produce 172.08 lakh tonnes of foodgrains in 2016-17 as against 136.73 lakh tonnes in 2015-16," Agriculture Minister Prattipati Pulla Rao said.

The oil seeds production target in 2016-17 has been set at 9.21 lakh tonnes, he said.

Rao also announced the State Agricultural Plan for the current financial year.

In view of good demand for seeds, various government agencies have already procured 8.84 lakh tonnes of seeds which would be distributed among the farmers at 50 per cent subsidy, an official release quoted the Minister as saying.

Rao appealed to the farmers to enrol for the Pradhan Mantri Fasal Bima

Yojana, which would come into force from the coming kharif season, so as to cut their losses in event of natural calamities.

Government sees better agricultural output this year on hopes of good monsoon



NEW DELHI: The country's farm production is likely to be better in 2016-17 with forecast of above normal monsoon after two consecutive years of drought, Agriculture Minister Radha Mohan Singh said today.

The Met office today predicted that there will be 'above normal' monsoon this year, easing fears over farm and economic growth.

"As per IMD forecast, definitely agriculture production will be better in 2016-17," Agriculture Minister Radha Mohan Singh said on the sidelines of a national kharif conference here.

"We had deficient monsoon last two years. There was 12 per cent deficient rains in 2014-15. And the following year, there was 14 per cent deficiency. But we were better prepared. State governments also cooperated and results were there all to see," he added.

India's foodgrain production declined to 252.02 million tonnes in 2014-15 crop year (July-June) from the record 265.04 million tonnes in the previous year, due to poor monsoon.

The output is estimated to rise slightly to 253.16 in the ongoing 2015-16 crop year as the country received 14 per cent less rains.

Two consecutive bad monsoons have led to farm distress and water scarcity in the country.

Stating that possibility of above normal monsoon would bring big relief to farmers, Agriculture Secretary Shobhana K Patnaik said, "Agriculture is still monsoon dependent. Good rainfall means good production. The coming Kharif season will be good."

There is high stress due to two consecutive years of drought and timely onset of monsoon will encourage timely sowing of kharif (summer) crops from June, Patnaik said.

"We hope agriculture production to be better than this year. We are fully geared for the kharif sowing. States have been asked to make advance preparation to ensure sufficient supply of all inputs like seeds," Patnaik told PTI on the sidelines of the conference.

Sharing that the government has chalked out a strategy to boost pulses and oilseeds output in the kharif season, the secretary said, "Two-thirds of pulses production comes from the rabi (winter) season and one-third from kharif season. The states are fully prepared to take up pulses in a big way."

Similarly, state governments have been asked to increase area under oilseeds and ensure sufficient supply of seeds and support system to farmers, he added.

The country is making efforts to become self-sufficient in pulses and oilseeds production, and reduce import dependency.