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# THE HINDU

## Scientists notice new virus on brinjal crop



**WITHERING CROPS:**The brinjal plant that has been infected by a virus at Kosur village in Krishnarayapuram block of 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. The new leaves would be greatly 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 and other officials concerned so as to take steps to control the disease.

### **Private forecaster predicts 'above average' monsoon**

India's monsoon rainfall is expected to be 'above average', said the New Delhi-based weather forecaster Skymet, a private agency.

According to the company, India will get 5% more rain than the normal 887 mm that it gets in the monsoon months of June, July, August and September. There was only a 15% chance of the monsoon being 'below normal,' defined as monsoon rains being less than 95% of the normal.

The India Meteorological Department (IMD), the official weather forecasting agency, is expected to announce its forecast on Tuesday.

Skymet said in a statement that central India and the western coast would see 'fairly good rains' and the latter half of the monsoon was likely to see better rainfall than the first half. Rainfall in June is likely to be 10% deficient with a pickup expected in July and August, the most important months as far as cropping is concerned.

Parts of Maharashtra are reeling under drought-like conditions with key Indian reservoirs at a decadal low. A good monsoon this year is critical to boost agricultural productivity as well as farm incomes, especially on the back of successive monsoon failures in 2014 and 2015.

“We have more confidence in our weather forecasting models this time than last year,” said Jatin Singh, CEO, Skymet. The company underestimated the monsoon deficit last year.

Several agencies from around the world, including the IMD, have hinted that the monsoon could be better than previous years. The key reason being a waning El Nino: a meteorological phenomenon associated with the heating up of the Central Pacific and frequently responsible for drying up monsoon rains in India.

Skymet further said that it expected the monsoon to set in on time over Kerala in the week around June 1.

### **Relief for farmers**

A Division Bench of the Hyderabad High Court comprising Acting Chief Justice Dilip B. Bhosale and Justice P. Naveen Rao on Monday expressed shock in the manner in which hundreds of assignments made in favour of small farmers in Gattu mandal, Mahbubnagar district decades back were cancelled and land allegedly resumed in a mechanical manner.

The Bench called for a report from the district Collector on this issue and said the Tahsildar who passed these en masse, cancellation orders shall not be entrusted with similar duties till the case is settled in the court. The Bench was coming to the rescue of the hundreds of farmers while dealing with PIL filed by B. Konda Reddy, a native of the area and also a practicing advocate in the city.

Senior advocate Satyam Reddy, appearing for the petitioners, said the innocent farmers were issued notices bereft of details, dates and then issued cancellation orders. The Bench was told that the land so resumed will be given to industry. The court was told that 600 notices were given. The Bench was aghast when it saw the photographs of farmers next to the agricultural fields while the Tahsildar alleged that the lands are not cultivated.

## Organic agricultural fair a huge draw

*Aims at creating awareness among people of the need to undertake cultivation in their backyards*



FARM FRESH:Organically-grown vegetables on display at the Ernakulam Town Hall as part of the three-day Organic Kerala Agricultural Fair.—  
Photo: H. Vibhu

The exhibition that got under way at the Ernakulam Town Hall on Monday as part of the 11th Organic Kerala Agricultural Fair has turned out to be a big draw. Hundreds of Kochiites are visiting the exhibition to get a whiff of the movement towards organic farming in the State.

The three-day programme, comprising an exhibition, interaction with experts on organic agriculture and honouring of farmers, was inaugurated on Monday morning at a brief function.

The aim of the annual show was to create awareness among people in the Kochi urban area and its surroundings of the need to undertake their own cultivation of fruits and vegetables in their own land or backyards, said the general secretary of Organic Kerala Charitable Trust M.M. Abbas.



The show and other programmes are being organised jointly by the Charitable Trust, Rajagiri Outreach programme, Kalamassery, and Sacred Heart College, Thevara.

The sections on organically-grown mangoes and tuber crops are particularly attractive as a large array of the fruits and vegetables are on show.

Organically-grown rice, specially the varieties grown in Kerala; safe-to-eat vegetables; derivatives like neera and neera honey tapped from coconut trees and organic inputs are also available at the exhibition. A section of the exhibition is dedicated to effective and practical disposal of waste at the household level.

Mr. Abbas said protection of bio-diversity and healthy food were the two key focus areas of the programme that is into its eleventh year now.

Beyond the exhibition and sale of organically grown produce, the organisers of the programme have conducted a day-long training programme on organic agriculture with the help of Vegetable and Fruit Promotion Council Keralam and the Palliakkal Service Cooperative Bank, near Paravoor.

### **200 farmers to be educated on Fasal Bima Yojana**

About 200 progressive farmers will be enlightened about Pradhan Mantri Fasal Bima Yojana at the Krishi Vignana Kendra here on Wednesday under the auspices of Karnataka Veterinary, Animal and Fisheries Sciences University (KVAFSU). The yojana will come into effect this June.

Addressing presspersons here on Monday, Shivakumar Magada, senior scientist and head, KVK, Mangaluru, said that commercial crops, horticultural crops, cereals, pulses and all food crops have been covered under this insurance scheme being implemented for the first time covering all agricultural crops.

Agriculture Insurance Company of India Ltd. would be the nodal agency for implementing the yojana through lead bank and other government agencies.

Opting for the yojana would be mandatory for those farmers who availed of crop loan and it would be optional for other farmers.

The yojana will provide insurance cover to farmers in case of natural calamities and attack on their crops by wild animals.

He said that the progressive farmers enlightened about the yojana at the programme later could inform others about it.

Giving an example of the premium amount, he said that a coconut grower would have to pay an annual premium of Rs. 1,250 per acre if the production cost was estimated at Rs. 25,000. The grower would have to have more than five palms in his field if he would have to avail of the benefits of the scheme.

Farmers can call toll free number, 18004250505, for details. They can also call KVK on Ph: 09448297154.

### **Call to create awareness on modern agricultural practices**



Taking stock:K.S. Puttannaiah, MLA, conducting a meeting of officials to review the drought situation in Mandya on Monday.

With water scarcity expected to be a serious problem in the coming years owing to modernisation of canals and possibility of drought, K.S. Puttannaiah, MLA for Melkote, has suggested the officials concerned to advise farmers to adopt modern agricultural practices to earn a decent income.

Chairing a taluk level officials' meeting convened to review the drought at the Mandya Taluk Panchayat auditorium here on Monday, Mr. Puttannaiah said that implementation of drip irrigation system and sprinklers in the drought-prone Mandya district will help the cultivators.

Mr. Puttannaiah , who is also a senior Karnataka Rajya Raitha Sangha (KRRS) leader, has asked the officials to guide farmers to judiciously use water for agricultural activities.

Expressing concerns over the continuous drought in the region, he said that the chances of farmers facing difficult days are high for the next five years.

Therefore, the officials have a greater responsibility in educating farmers against wasting water during agriculture and using chemicals during farming.

### **Groundwater table**

The officials should chalk-out plans to face the situation by implementing emergency measures, he said.

He also wanted special measures from the departments concerned to increase the groundwater level in Mandya district.

Mandya Tahsildar Maruti Prasanna, Panchayat Executive Officer Basavaraju, Agriculture Officer Sushma and Panchayat Development Officers were present at the meeting.

***Implementation of drip irrigation and sprinklers will***

***help farmers,***

***says the MLA***

## Maharashtra farmers resort to distress sale of cattle



Thousands of cattle are for sale at market in Pachod village of Aurangabad district.

*'It is becoming increasingly difficult to arrange even water and fodder for them'*

The Sunday markets in the villages bordering Beed and Aurangabad in Maharashtra are witnessing distress sale of cattle, with farmers resorting to desperate measures to cope with the acute shortage of fodder and water.

For some, the sale of cattle is important to wipe off debt, and others need money to perform marriages at home.

Most farmers arriving at the markets on Sunday had already lost some of their cattle to the searing drought, while others had run out of fodder and water.

For Bablu Pawar, 17, the sale of a pair of bullocks was crucial as he wanted funds for his sister's wedding later this month. A cow and two calves, out of a total of 11 cattle in the family, had already been sold, along with three acres of land, for the ceremony. The bullocks would have fetched him about Rs. 1 lakh before the drought in Marathwada and the beef ban announced by the State government earlier in the year. But, now, the prices have fallen by half.

“It is the question of my sister’s wedding and I am willing to sell the cattle for less than Rs. 35,000 but there are no takers even at this price. It is becoming increasingly difficult to arrange even water and fodder for the cattle,” Mr. Pawar said, as he walked back without completing the sale in Pachod village.

Wasi Zaidi, who has taken a contract for the cattle market from the local gram panchayat, said the sale of cattle had fallen by 40 per cent on account of the beef ban. Of the 600 cattle put out for sale, only 150 deals were sealed on Sunday.

“Many of these farmers have requested me to facilitate sale even at half prices to fund their daughters’ marriage. Some do not have money even to feed the cattle. There is nothing anyone can do with beef export firms refusing to pick up cattle from these markets,” said Mr. Zaidi.

He added that the decision to extend the ban on cow slaughter to bullocks had hit the abattoirs and affected traders in general.

As many as 2,60,925 head of cattle are housed in the 262 camps of Beed district, but areas such as Paithan taluka in Aurangabad do not have a single cattle camp.

Hanif Bhai, who tried to unsuccessfully sell his pair of Khilari bullocks on Sunday, said: “It is painful to sell what we have raised with so much care, but now it is impossible to arrange fodder and water for them.”

### **Agriculture Minister Radhamohan Singh calls Modi ‘God’s gift to India’**

*Urban Development Minister M. Venkaiah Naidu had made an identical remark during the BJP’s national executive meeting.*

Agriculture Minister Radhamohan Singh has hailed Prime Minister Modi and his government as “God’s gift to India.” This is the second instance of a Union Minister using this phrase.

Urban Development Minister M. Venkaiah Naidu had made an identical remark during the BJP’s national executive last month.



Mr. Singh was addressing a farmers' conclave organised by the BJP.

“After Independence, no government has come to power that worries so much about the future of the country. In a way, to the people of the country, the Modi government and the Prime Minister are God's gift,” the Minister said.

In his 70 minute-long speech, Mr. Singh elaborated on the various initiatives being undertaken by the Modi government.

### **‘Halt of production by tobacco firms hurting farmers’**

The Federation of All India Farmer Associations (FAIFA) said on Monday that the production halt by tobacco companies since April 1 was hurting farmers, already in distress, and would affect their livelihoods.

FAIFA president B.V. Javare Gowda said in a statement that Indian farmers were facing severe challenges from water shortage, slower demand and expensive credit, and the production halt would add to their problems.

### **Haryana uses drones for assessment of crop loss**

To make accurate assessment of crop loss due to inclement weather, Haryana has started using drones on a pilot basis.

“Drone technology will bring transparency and accuracy in assessment of crop loss. Moreover, it will also put an end to complaints lodged by farmers who accuse revenue officials of not making correct loss assessment,” Haryana Space Applications Centre, Department of Science and Technology, Haryana) Chief Scientist, R S Hooda said on Monday.

“Haryana is the first State which is using drone technology for crop loss assessment,” he said.

Crop loss assessment through drones was conducted on pilot basis in few villages of Hisar and Gurgaon, he said.

“We used drone to assess wheat and mustard crop loss because of hailstorm and untimely rains,” Mr Hooda said.

“We are expecting more than 90 per cent accuracy in results and if this pilot project comes out successful then in future we can use it on operational basis,” he informed.

Pune’s Science and Technology Park, which is promoted by Centre’s Science and Technology Department has deployed German manufactured imaging drones in Haryana for crop damage assessment, he informed.

“Drone, which is called Unmanned Aerial Vehicle (UAV), is fitted with scanning sensors and it can capture the image of affected area with a resolution of 3-5 cm with detailed imaging from the height of about 200 metres,” Mr Hooda said adding that it would help in assessing accurate percentage of crop damage whether the loss is 25 per cent or 75 per cent.

Notably, last year when Haryana government disbursed financial compensation of Rs 1,092 crore for wheat damage due to untimely rains and hailstorm, many farmers complained of inaccurate crop loss assessment, leading to disbursement of lesser compensation. Haryana had even tried to assess crop loss assessment through US Satellite. But Mr Hooda said it was difficult to get accurate percentage of crop damage through Satellite. He said in Adampur tehsil of Hisar district, crop loss assessment was done through drone as well as by revenue officials.

“Our main objective is to match the result of loss assessment worked out by Patwaris with that of drones to know actual crop loss,” Mr Hooda said. - PTI

***Loss assessment through drones was conducted on a pilot basis in few villages of Hisar and Gurgaon***

## **Soaring mercury pushes up price of water, muskmelons**

*People blame excess use of pesticides and fertilizers by farmers for sorry state of affairs*

Compared to last year, there is a considerable jump in the prices of watermelon and muskmelon this summer, which is yet show its severity. Right from March first week, the price of these summer fruits is making the

common men shiver, leaving him no option but to return home empty-handed.

This summer, these fruit have struck the markets, outskirts of various towns and shandies much early, while the horticulture and marketing department personnel say that farmers and traders are going to reap gold in the coming months.

At present, the price of watermelon and muskmelon is put at Rs. 15 and Rs. 20 per kg respectively, compared to Rs. 12 for both fruit last year. Minimum weight of a watermelon reaching the market remains at 5 kgs, and those below the weight are considered unripe and tasteless; this forcing many either to buy or quit.

In Chittoor district, these fruit varieties are grown in about 2,000 hectares, mostly in the semi-arid Mulakalacheruvu and Tamballapalle mandals in the western mandals, and partially in Satyavedu at the eastern side, projecting yields up to 50,000 tonnes with multi-crore business. The traders also depend on imports from Kadapa and Anantapur districts. With less demand for big sized fruit in rural areas, the petty seasonal traders are concentrating on urban areas of Tirupati, Srikalahasti, Chittoor and Madanapalle.

Compared to the previous years, the pushcart business of cut-melons has picked up by leaps and bounds, targeting the pilgrims with parched throats.

The price is expected to skyrocket further from mid April till June.

### **Metabolic system**

A sour development in melons' trade is that many people are complaining that they are afraid of eating the fruit when they are in outings. The general observation is that in order to get high production with bulgy melons, high quantum of pesticides and fertilizers were used, which in turn has an immediate effect on people relishing them, upsetting their metabolic system and creating embarrassing situation to working people, when they really want to beat the summer heat.

Deputy Director (Horticulture - Chittoor district) V.S. Dharmaja told *The Hindu* that the melons' crop pattern starts in November and ends by mid June, allowing high yields from March till June. "Expecting quick and high productions, the farmers sometimes use high dose of chemicals. The

residuals in the fruits lead to such effects on human metabolism. Use of high doses of chemicals should be avoided,” the official said, adding that the official machinery has absolutely no control on the melons’ growing and marketing.

*Expecting quick and high productions, farmers sometimes use high dose of chemicals*

*V.S. Dharmaja*

*Deputy Director, Horticulture*

### **Demand up for ‘agathi keerai’ in Salem**



Brisk business: ‘Agathi keerai’ is in good demand in Salem market.- Photo: E. Lakshmi Narayanan

Almost every day farmers bring ‘agathi keerai’ (*Sesbania Grandiflora*) to farmers’ shandies, and also sell them near the Thammampatti bus stand and spread out bundles on roadsides in the morning and evening hours.

The ‘keerai’ has been in good demand in the city and Thammampatti town and surrounding areas for the past couple of months.

The ‘agathi keerai’ stalls could be seen doing brisk business even in the late evening hours. It is one of the main feeds for cattle as it increases the milk yield and the leaves are said to have medicinal value and reported to cure many diseases that affect the cattle during summer. Following good demand,

the price of a bundle of ‘agathi keerai’ has gone up from Rs. 10 to Rs. 20 in the recent past in Thammampatti, the farmers say.

### **Farmers evince interest in tapioca cultivation**

Farmers of Gangavalli and Thammampatti have evinced keen interest in raising tapioca crop, following severe drought conditions prevailing across the district.

Gangavalli and Thammampatti towns and the surrounding villages of Sentharapatti, Nagiampatti, Ulipuram, Koneripatti, Vazhakombai, Seradi, Pillaiyarmathi, Manmalai, Kondayampalli, Thagaraputhur, Moolaputhur, Koodamalai, Veeraganu, and Thedavur are reeling under severe drought conditions for the past two months. The ground water level in these areas has gone down alarmingly.

The farmers of the area who had raised paddy are struggling to water the crop. With summer expected to continue for a few more months, the farmers have evinced interest in raising the drought resistant tapioca in their fields across these villages.

Farmers say that tapioca was highly drought resistant and except for the first few weeks following planting, the crop does not require additional irrigation. If the crop gets adequate moisture for a month or two after planting, it will manage on its own and it can tide over long dry seasons without much damage. Hence, their priority was for tapioca.

### **Bargur farmers eye rosemary cultivation**

Farmers on Bargur hills are gradually warming up to the idea of cultivating Rosemary herb, which, besides ensuring profitable returns, also keep wild animals at bay.

The farmers in 33 hamlets surrounded by reserve forest find the altitude of about 1,000 metres above sea level suitable for cultivation of the aromatic herb. The crop was promoted a few years ago by MYRADA Krishi Vigyan Kendra based in Gobichettipalayam.



Farmers on the hills have traditionally been cultivating ragi, onion, and beans, and have been suffering losses due to damage caused to the fields by wild boars, deer and elephants. The KVK introduced Rosemary as an alternative crop to reverse the trend of migration of the people towards urban areas.

There is good market worldwide for the oil extracted from the herb that grows as a perennial evergreen shrub to a height of up to one metre, according to a documentation by MYRADA KVK.

The oil is used as component in pharmaceutical and cosmetic products. According to Horticulture Department officials, though gradual, Rosemary is gaining attention of farmers as a dependable crop.

*‘There is good market worldwide for the oil  
extracted from  
the aromatic herb’*

### **Call centre, mobile lab for aqua farmers**

Hyderabad based Envoyzyme Technologies has come with unique initiative toll-free call centre and mobile testing laboratory to help aqua farmers overcome issues relating to aquaculture.

Dr. R. Jagadeesh Babu, Chairperson of the company announced launch of the services in a press conference in city on Monday.

Speaking on the occasion Jagadeesh Babu said aqua farmers can call them up through the service and get their doubts clarified over phone round the clock.

Technical problems too will be addressed by the executives at the centre. Also, a mobile testing lab will be made available for aqua farmers and technicians would also test the water at the pond, Jagadeesh said. This will help farmers avoid diseases to fish and shrimp and increase productivity. Dr Jagadeesh is also chairperson of Biophore Pharma LLC, USA.

## **Maharashtra govt slept on drought report: Yogendra Yadav**

“We wasted no time in alerting the Maharashtra chief minister in October about the steps needed to be taken for tackling drought on a priority basis. Six months later, we find that the situation has only worsened instead of easing,” he said.

Yogendra Yadav, member of the working committee of Swaraj Abhiyan accused the Maharashtra government on Monday of doing little despite being aware of the drought situation in Marathwada six months back. “In October last year, we had written a letter to Maharashtra Chief Minister Devendra Fadnavis informing him about the worsening situation in Marathwada, but the government did little at the moment,” Yadav said at the JS Karandikar memorial lecture organised by Pune Union of Working Journalists on Monday.

Yadav said that he and his team had visited Nanded, Parbhani, Latur, Osmanabad, Beed, Aurangabad, Jalna, Solapur and Jalgaon districts as part of their Samvedna Yatra in October 2015 and came face to face with the frightening scenario as a result of lack of rains for the last two to three years. “We wasted no time in alerting the Maharashtra chief minister in October about the steps needed to be taken for tackling drought on a priority basis. Six months later, we find that the situation has only worsened instead of easing,” he said.

Yadav said that extreme weather conditions will take place more frequently due to climate change, but the government must frame a policy vis-a-vis changing cropping pattern, water conservation, reducing wastage of water and implementing insurance scheme for farmers. Citing the MNREGA report of Maharashtra for 2015-16 where no work was done in 6,352 of the 19,516 drought-affected gram panchayats, Yadav said that in Maharashtra, sugarcane cultivation is allowed in scarcity zones which also have water bottling plants. On restructuring of loans, Yadav alleged that only Rs 5,000 crore was done for farmers. “But over Rs 3.5 lakh crore loan was restructured for corporates, though the sector did not face any difficult time,” he said.

## Met's pre-monsoon outlook predicts abnormally hot summer this year



A man pours water on his face during a hot summer day in Hyderabad. (AP file Photo)

The Met's pre-monsoon weather outlook predicts an abnormally hot summer across India with longer and more severe heat waves than usual. A first of its kind, the Met study says the greater heat of the April-June season could be linked to greenhouse gases.

The analysis is grim, and matches lay suspicions. "Recent research analysis suggests that the frequency and duration of heat waves over the country are showing an increasing trend," says the Met. "Warmer than normal temperatures are expected in all meteorological sub-divisions of the country."

India is divided into 36 sub-divisions for weather administration. "Above-normal heat wave conditions are very likely over central and northwest India," the report says.

Seasonal (April-June) average temperatures over northwest India are likely to be "above normal by more than 1°C." This means that average temperatures in the northern plains could be higher by a full degree, putting them in the range of 39-42°C, while in the hotter central states, the mercury could shoot up to 44-45°C in some parts.

An increase of 1 degree in average temperature over three months is far more significant than it sounds. “It means that the duration of a heat wave (when the temperature is 4 degrees above normal for a week) could be longer, intensity significantly higher and area affected larger. This summer will certainly be very hot,” said IMD director BP Yadav. In everyday terms, maximum temperatures could break records this year.

The signs were there before the Met released its pre-monsoon outlook. The capital’s Palam observatory recorded a maximum of 43°C on April 3, the highest ever in the first half of April. In Telangana, a hundred people have been killed by the heat in the past month. Bhubaneswar had a scorcher of a day on Monday, the maximum touching 45.8°C which is the highest ever temperature recorded in the Orissa capital during April.

It’s not all bad news though. Respite should come in June with the monsoon which is likely to be normal this year, agriculture secretary SK Pattanayak said at a farm conference.

The Met department has usually made only monsoon forecasts during the summer but the 2,500 heat wave deaths last year prompted scientists to take note of changing climate patterns this time around. The Met has examined the pre-monsoon months for warning signs that could translate into public alerts and action. India had its third warmest summer last year, consistent with the global pattern.

The effects of a harsh summer are already rippling across the land: power plants are sputtering, the Ganges is drying up at vulnerable spots and reports of heat wave deaths are already pouring in.

Evidence around the prolonged heat spells in many Indian cities points to greenhouse-linked changes. “A part of the increasing trend is attributed to increasing greenhouse gases due to anthropogenic activity,” the Met report says.

A second reason is the El Nino, likely to come to an end this June. An El Nino is a weather glitch marked by higher sea temperatures that roils global weather. It usually causes the monsoon to fail, as it did last year. When an El Nino winds down, a heat wave follows in its wake, the Met says.

The continuing drought has worsened. On March 13, the Ganges ran so low on water in the Farraka region of West Bengal that it caused the 2,100 MW Farraka power plant to break down, leading to a 1,500 MW shortage and a blackout in parts of eastern India.

Large parts of Maharashtra, Telangana and the Bundelkhand region of UP are currently in the throes of a severe drought. Water levels are significantly lower than their 10-year average in 91 nationally monitored water reservoirs, with total water storage of 39.65 BCU (billion cubic metres) against a capacity of 157.80 BCU.

### **India's 2016 monsoon rains seen above average: Skymet**



Shimla was one of the areas which enjoyed heavy rainfall in 2015. (HT File Photo)

India's annual monsoon rains are likely to be above average, the country's only private weather forecaster said on Monday, snapping two straight years of drought that cut farm output and farmers' income.

The July to September monsoon delivers nearly 70% of annual rains and waters half of India's farmlands that lack irrigation facilities.

Monsoon rains are expected to be 105% above a long-term average, with a 35% probability of above average rainfall, Skymet said in a statement.



The El Nino effect is likely to wane after monsoon hits the southern Kerala coast by the end of May, the statement said.

El Nino, or warming of sea-surface temperatures in the Pacific, can lead to scorching weather conditions across Asia and east Africa, but heavy rains and floods in South America.

India's west coast and central parts will get good rains, Skymet said, bringing in relief for farmers and policy makers, who are struggling with droughts and severe water scarcity in some regions.

Above average monsoon rains play a key role in boosting demand for an array of consumer goods, as 70% of India's 1.3 billion people live in villages.

Agriculture accounts for about 14% of India's \$2 trillion economy, Asia's third-biggest, but it supports two-thirds of Indian's population.

State-run India Meteorological Department is expected to issue its forecast for this year's monsoon rains soon.

Separately, farm secretary Shobhana K Pattanayak said current climatic conditions indicate that El Nino is gradually fading and giving way to La Nina, indicating bountiful rains this year.

### **Agriculture experts press for limited use of chemicals in farming**



Scientists say farmers are in the habit of using chemicals indiscriminately, not knowing that the practice is not good for the crop as well as human health. (HT File )

Concerned over the rampant use of chemicals and fertilisers, the agriculture department will make efforts to sensitise farmers about the ill-effects on the ecology and the human health.

“Besides changing the soil composition, indiscriminate use of chemicals affects the grain. The chemicals also percolate into the soil and pollute the groundwater,” said Satwant Singh Brar, joint director (agriculture).

During his recent visit to Amritsar, Brar said farmers jump the gun seeing insects in the paddy fields and start spraying insecticides, without realising that most of them are serving their cause.

“A variety of insects feed on the larvae of harmful kinds. The department will educate farmers on this aspect,” Brar said, showing a video clip of a ladybird feeding on the larvae of another insect on a paddy plant.

The experts will advise the farmers against using DAP (Dia Ammonia Phosphate) fertiliser without consulting scientists. “If a farmer has used dia ammonia phosphate for the wheat season, he need not use it for paddy. This will cut down the cost,” he said.

The other aspect that the department will stress on is the direct sowing of rice (DSR) technique. “This technique saves a great deal of water,” Brar said.

### **PUSA 1509 basmati variety**

Pointing to the bad experience that the farmers had selling PUSA-1509 basmati variety, Brar said the acreage under this variety will fall drastically. The rice millers refused to purchase this variety on the ground that the breakage of the grain was higher than the permissible limit.

The government had to come to the rescue of the farmers by purchasing the crop. Brar said the acreage under the PUSA-1121 variety will increase this year.

## El Nino impact: Drought may hit exporters' rice stocks, says analyst



Crippling drought brought on by the El Nino weather pattern could cut rice stocks among the world's top exporters. (Reuters Photo)

Crippling drought brought on by the El Nino weather pattern could cut rice stocks among the world's top exporters to levels not seen since 2008, potentially fuelling a price crisis similar to one seen that year, an industry expert warned.

Total stocks in top shippers of the grain India, Thailand, Vietnam, Pakistan and the United States are likely to fall to 19 million tonnes by the second half of the year, from a peak of nearly 41 million tonnes in 2013, said Samarendu Mohanty, head of the social sciences division at the Philippines-based International Rice Research Institute.

"If we have a bad monsoon, with drought still persisting in many parts of Asia, the risk significantly increases in terms of price response," Mohanty told Reuters in a telephone interview.

Dwindling stockpiles could crimp volumes exporters are willing to ship abroad.

Although a severe El Nino is now fading, it has brought drought to swathes of Asia, drying irrigation channels and destroying crops. It has also stoked concerns on the strength of the south Asian monsoon due to start around June.

Export restrictions by major rice producers, including India, fed panic in the market in 2008, forcing big purchases by countries such as the Philippines that caused Asian benchmark prices to nearly triple to around \$1,000 a tonne.

After that, consumers and exporters, mainly in Asia, rebuilt rice inventories to avoid another crisis but Mohanty said stocks have been declining since 2013.

“Last year, nobody was panicking because they were sure that there’s plenty of rice in the market if there’s any shortfall. I think we don’t have that luxury anymore this year,” he said.

The price of Thai 5% broken rice touched an eight-month high of \$378.50 a tonne in March, while Vietnam’s own 5% broken rice last month rose to a 2-1/2-month peak of \$385 a tonne.

Mohanty said India and Thailand, the world’s top two exporters, would have combined stocks of around 16 million tonnes by the third quarter, around 70% lower than levels in 2013.

That buffer will be much smaller than recent stock levels of 16.2 million tonnes for India and about 12 million tonnes for Thailand.

India will be “very cautious in exporting” if its rice output is hit by a weak monsoon, said Mohanty.

That could push big buyers such as the Philippines and Indonesia to accumulate the grain, a staple food for nearly half of the world’s population, similar to what happened in 2008.

“We might see the same thing as we move forward and countries get scared about the weather situation around them,” Mohanty said.

The Philippines is considering importing another 500,000 tonnes of rice this year to boost state reserve stocks.

## **Drought could cut rice stocks at exporters, fuel price crisis**



A puddle of water is surrounded by cracked soil at a dried up swamp in Ayutthaya, Thailand, April 9, 2016. Photo: Reuters

Crippling drought brought on by the El Nino weather pattern could cut rice stocks among the world's top exporters to levels not seen since 2008, potentially fueling a price crisis similar to one seen that year, an industry expert warned.

Total stocks in top shippers of the grain India, Thailand, Vietnam, Pakistan and the United States are likely to fall to 19 million tonnes by the second half of the year, from a peak of nearly 41 million tonnes in 2013, said Samarendu Mohanty, head of the social sciences division at the Philippines-based International Rice Research Institute.

“If we have a bad monsoon, with drought still persisting in many parts of Asia, the risk significantly increases in terms of price response,” Mohanty told Reuters in a telephone interview. Dwindling stockpiles could crimp volumes exporters are willing to ship abroad.

Although a severe El Nino is now fading, it has brought drought to swathes of Asia, drying irrigation channels and destroying crops. It has also stoked



concerns on the strength of the South Asian monsoon due to start around June.

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## Government expects good Southwest monsoon this year



Met Department's predictions will be out later this month. File Photo

Less than normal rainfall in the last two years has left farmers and resources at stress.

After two years of deficient rainfall, Government today said monsoon this year is expected to be normal and directed states to chalk out plans to boost crop acreage and production in kharif season starting June.

“El nino condition is declining. It is expected that La Nina condition will takeover, and will perhaps favour a good monsoon this year,” Agriculture Secretary Shobhana K Patnaik said addressing a national conference to launch kharif campaign for 2016-17.

Met Department's predictions will be out later this month, giving a clear picture of monsoon, 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 due to 14 per cent less rains. Two consecutive bad monsoons have led to farm distress and water scarcity in the country.

The Secretary asked the state governments to make advance preparation for sowing of kharif (summer) crops like rice and pulses by making adequate availability of seeds, fertilisers, and other agri-inputs.

Less than normal rainfall in the last two years has left farmers and resources at stress. There is high moisture stress in soil, he added.

Even the Economic Survey in February had said El Nino, which is held responsible for extreme weather events across the country last year, is unlikely to repeat this year.

However, it had suggested that the government should still be ready with the contingency plan to deal with any eventuality besides announcing in advance the MSP for crops like pulses.

### **Skymet predicts above normal rainfall**



Private forecaster Skymet Weather has predicted an above normal monsoon this year — the second such forecast by a private agency this month.

“Monsoon 2016 is likely to be above normal at 105 per cent (+/-4 per cent) of the long period average (LPA) from June to September with a 35 per cent probability of above average rainfall,” it said.

A normal monsoon, after two years of drought, will bring much-needed relief to farmers, who have been suffering from low crop production and income losses.

On April 1, private climate management company Weather Risk Management Services had predicted that monsoon 2016 would be about 5 per cent to 10 per cent above normal.

The India Meteorological Department (IMD), which generates its own statistics to predict the monsoon, unlike the private companies, which use the dynamic climate model of international agencies, is expected to come up with its forecast later in the month.

### **El Nino weakening**

Earlier this year, IMD experts had predicted chances of a normal monsoon in 2016 because of a weakening El Nino (which hamper rains in Asia) and chances of development of La Nina conditions that favour the monsoon.

According to Skymet, India's West Coast and Central parts will receive good rainfall.

### **Long-range forecasts**

The rainfall projections made this month are long-range weather forecasts (more than seven days into the future) and may not be as reliable or as detailed as medium-range or short-range forecasts (which are much closer to the start of the monsoons and during the monsoon).

But, a long-range forecast helps in setting the mood for farmers and industry, enabling industry to take inventory decisions and the government to do contingency planning, if required.

### **Centre firm on capping cottonseed prices**

The Centre's reassertion of its right to control seed prices sends out a clear message to seed firms that it will not yield to industry pressure.

Union Agriculture Minister Radha Mohan Singh sent out an unambiguous message, just as farmers are gearing up for the kharif season, that the government would not allow multinationals like Monsanto "to exploit farmers".

This sets the stage a uniform price for cottonseed across the States.



### **Curbing monopoly**

Some leading agrarian States too have stepped up pressure and have written to the Commerce Ministry demanding that it restrain Monsanto from resorting to “monopolistic practices”.

Recently, the governments in Andhra Pradesh and Telangana wrote to the Ministry, seeking its intervention.

Last year, the government had issued a Price Control Order and set up a committee to recommend a price after consulting stakeholders.

The seed sector is deeply divided on the issue, with a few companies backing Monsanto, while the majority of the seed-producing firms welcoming the government move.

### **Uniform pricing**

The issue, however, has not been resolved yet, although the marketing season for cottonseed for the kharif has begun.

Armed with the Central Order, seed-producing firms have reportedly begun to print the MSP (Maximum Sale Price) of ₹800 as prescribed in the order.

“The season has begun and we are going ahead with the uniform pricing mandated by the government. The seed is an essential commodity and you can’t violate the government order,” a top seed firm executive said.

The Centre's assertion of its authority comes at a time when the seed industry is engaged in legal battles with Monsanto, Mahyco Monsanto and the Association of Biotech Led Enterprises (ABLE-AG) in various courts.

The industry is, therefore, flaunting the order to prove its point. Monsanto is understandably upset; the government's move could hit its revenues very hard as the royalty component has been cut to just ₹49 per packet of 450 gm as against over ₹180.

### **Bilateral pacts**

The St Louis-based firm and others in the ABLE-AG have decided to fight it out.

Monsanto argues that the firms are bound by the bilateral agreements that they signed when they secured a sub-licence from Mahyco Monsanto Biotech Limited. It asserts that the firms are required to pay the royalty component as agreed upon.

The Centre's decision to step in to resolve the issue will help to clear the air. A uniform price, if gets the go-ahead from the courts, will solve the problems of the farmers and of the seed-producing firms too.

Farmers can then get the seed at a lower price. The absence of a uniform price in the different cotton-growing States often incentivises smuggling. This is also leading to marketing of spurious seeds.

For the seed firms, it will solve two major problems: it will help do away with what it calls "stifling trade pacts", and it will solve the issue of producing seed packs with different prices for different States.

### **Higher inflow holds cardamom steady**

Cardamom markets, after moving up by about ₹100 a kg week before last, remained nearly steady last week at auctions held in Kerala and Tamil Nadu.

The individual auction average improved and vacillated between ₹600 and ₹650 a kg, market sources said.



Activities in the open market were limited but the prices remained by and large unchanged after moving up by ₹100 a kg in the open market, Ranganathan, a dealer in Bodinayakannur, told *BusinessLine*.

Prompted by the upward trend in the prices, growers started releasing the material and, as a result, the total arrivals increased to 745 tonnes last week from 11 auctions as against 12 from 565 tonnes the previous week.

Main cardamom growing tract stretching from Kumily to Vandanmedu in Kerala's Idukki district received good rains from Friday to Sunday last and this phenomenon coupled with the spurt in arrivals have in turn changed the market sentiment to bearish, PC Punnoose, General Manager, CPMC, told *BusinessLine*. Consequently, there was a decline of ₹50 a kg at some of the auctions last week, he said.

North Indian buyers were buying but not aggressively, trade sources said. The exporters were not active in the market citing good stocks in the overseas markets bought earlier from India at higher prices and from Guatemala. Decline in Indian prices has affected the sales there, export sources said.

The individual auction average improved and was vacillating between ₹599 and ₹650 a kg last week.

Total arrivals during the season up to April 9 were at around 25,901.60 tonnes and sales were at 24,978.30 tonnes. The individual auction average as on April 9 stood at ₹598.68 a kg.

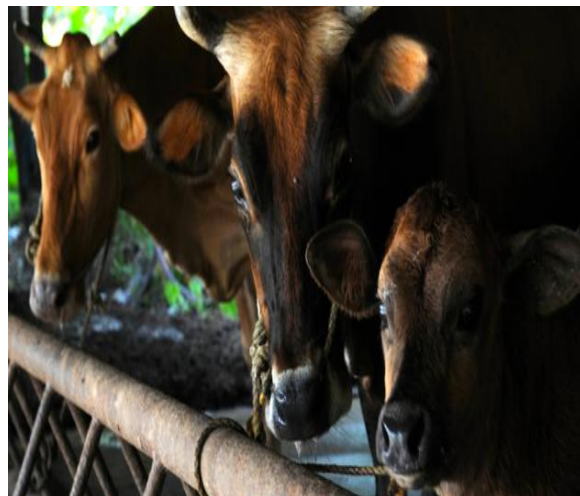
Prices of graded varieties (₹/kg): 8mm bold good colour 960-980; 7-8 mm 700-720; 6-7 mm 600-620; below 6 mm: 550. Good bulk was fetching ₹625-650 a kg,

### **Russia says cheese, eases norms for India imports**

After more than a year of negotiations, Russia has finally agreed to do away with a condition requiring Indian dairy companies to own captive cattle farms to export cheese to the country, making it easier for small companies and cooperatives, such as Amul, to qualify as exporters.



Drops captive cattle condition; govt vetting draft



“The Russians have, however, stuck to their second condition, mandating dairy product exporters to collect milk directly from the farms and not from collection centres,” a government official told *BusinessLine*.

This means that all dairy companies, big and small, can now export hard cheese to Russia, even if they don't own cattle, provided they send their own trucks to collect milk from the farms.

### **Technical issue**

The Commerce Ministry has sought inputs from the Department of Animal Husbandry on the technical aspects of the proposed protocol drafted by Russia. “There are a lot of technical issues involved, such as certification on

vaccination programmes and disease profile surveys, which are part of the protocol. We want the Animal Husbandry Department to confirm that such certificates can be issued by the government, following which we will sign it,” the official said.

India has been trying to get a share of Russia’s annual imports of food items, worth an estimated \$40 billion, from Western countries after it banned import of most food products from the West in retaliation for sanctions over the Ukraine crisis.

Last year, Moscow agreed to start importing dairy products from India, but put in place the tough condition that only dairies owning 1,000 or more cattle would be allowed to export. The Russian government wanted the dairies to have a certificate from an authorised veterinarian for the industry specifying that the cattle had been properly vaccinated and free of foot-and-mouth disease, tuberculosis, brucellosis and leukaemia.

India argued that this would lead to the qualification of only two companies, as most others did not own farms.

“After several rounds of discussions, we finally managed to convince the Russians that veterinary certification was possible even if dairy item producers did not own cattle,” the official said.

On whether it would be possible for all companies to source directly from farms, the official said milk used to produce items for the Russian market could be sourced directly while the rest could be sourced from collection centres.

### **Spices export loses flavour; drop 6% in April-Dec**

Decline in export of spice seeds have made a dent on India’s spices exports in terms of volume during April-December 2015.

There was a six per cent drop in export volume of spices and spice products, as the figure stood at 603,885 tonnes compared to 6,44,269 tonnes in the corresponding period of the previous year.

However, exports in value terms registered an eight per cent rise touching ₹11,453.99 crore (\$1,770.86 million) and a two per cent growth in dollar terms.

The increase was mainly due to large shipments of pepper, cardamom and chilli, a press release said.

Thus the country could achieve only 82 per cent of its full year export target of ₹14,014 crore (₹2,260 million) set for the first nine months of the fiscal 2015-16.

## **Business Standard**

### **Surinder Sud: A neglected area in agri-development**

Dryland agriculture needs location-specific research to evolve new production systems or revamp old ones

Even if all available sources of irrigation water are optimally harnessed, nearly 40 per cent of cropped acreage will still remain critically rain-dependent. A sizable part of the production of foodgrains, notably coarse cereals, pulses and oilseeds, comes from rainfed areas.

These lands are also home to about 40 per cent of the rural population and support two-thirds of livestock. Predominance of small and marginal farmers and highly unstable farm production owing to erratic rainfall are the two distinct features of rainfed areas. Little wonder, therefore, that rural poverty and farmers' distress — as manifested in the number of suicides — abound in these belts.

Yet, sadly, dryland farming has largely been neglected in the process of agricultural development. A major part of resources and efforts have been directed to shore up production and productivity of irrigated farming.

Such an approach was understandable in the past when the need for achieving self-sufficiency in foodgrains was paramount and irrigated areas offered scope for quick breakthrough in yields with the use of water and fertiliser-based green revolution technology.

But the continued disregard of dryland agriculture vis-à-vis irrigated farming, even after turning surplus in most crops, is inexplicable and wholly unwarranted.

Rainfed farming has to contend with several formidable constraints which the development planners need to bear in mind. These include fragile ecosystems, rampant land degradation due to wind and water erosion, unreliable rainfall, heavy population pressure, poor infrastructure and inadequate policy support.

Besides, landholdings in rainfed areas are usually small and fragmented with a large proportion of them being economically unviable. These factors are intensifying poverty and increasing indebtedness, resulting in farmers' distress and suicides.

A formidable weakness that makes it harder for dryland tillers to improve their economic condition is the limited scope for changing cropping pattern. The choice of crops has traditionally been determined by local agro-ecological features, notably the number of rainy days in a year and the amount of total rainfall.

As long as the farmers stuck to the time-tested crops, the risk of crop failures was low. Most farmers, moreover, grew more than one crop, even in the same field (mixed farming), so that at least one of them would survive regardless of whether rainfall turned out to be excessive, normal or below average. Livestock rearing further helped them to hedge their economic risks.

The situation has, however, changed for the worse in the past few decades with the farmers being wrongly counselled, largely by input suppliers with vested interests, to take up high-value crops many of which are not ideally suited for cultivation on unirrigated lands.

These crops require costly inputs, such as hybrid seeds, fertilisers and pesticides, which the resource-poor farmers in risk-prone rainfed areas can ill-afford without borrowed money. Introduction of Bt-cotton in the drought-prone Vidarbha region of Maharashtra is a typical case in point. Limited rainfall, low water holding capacity of soil and high credit needs to buy costly Bt seeds and other inputs have proved disastrous for the resource-deprived farmers of this region.

Fortunately, all rainfed lands do not fall in the highly water-stressed arid regions. A sizable part of them lie in the semi-arid and some even in high rainfall zones where available water, if managed well, is not too insufficient for crop growth. What is needed, truly, is on-farm conservation and management of rainwater.

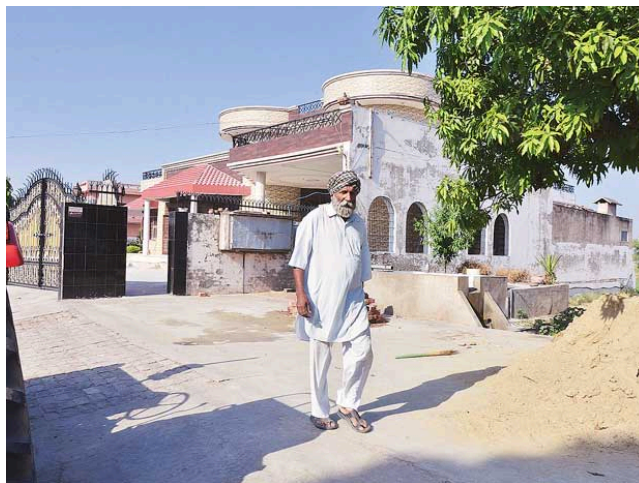
However, the water management approaches being promoted on a large scale in the rainfed areas — such as rainwater conservation on watershed basis — are essentially cost-intensive and require community participation. Such cooperation is, often, found wanting without the involvement of official agencies and government funding.

Wherever farmers have been incentivised to take up individually-owned and operated water conservation works, such as on-farm ponds, these have produced better results with lower investment.

Dryland agriculture, thus, needs location-specific research to evolve new production systems or revamp the old ones by integrating modern technology with, importantly, traditional knowledge and wisdom. Efficient market support, in addition to effective means of risk mitigation, is absolutely essential to make rainfed farming economically viable.

### **Making a case for taxing farm incomes**

If income from agriculture was taxed on a par with other incomes, it could have fetched an additional revenue of Rs 50,000 crore in 2007-08 alone





Politically, it is difficult terrain, but the revenue gained by taxing agricultural income could provide a significant boost to the finances of the states. (Agriculture is a subject on which the state legislates; hence taxation of agricultural income falls within the ambit of the states.)

In 2007-08 alone, taxing agricultural income on a par with other incomes would have yielded revenue of around Rs 50,000 crore, according to Kavita Rao and D P Sengupta, economists at the National Institute of Public Finance and Policy. To put this figure in perspective, this amount, which was equivalent to 1.2 per cent of the country's gross domestic product, would have boosted state revenues by roughly 19 per cent.

Farmers are a huge vote bank. Bowing to this political compulsion, governments don't dare touch this contentious subject for fear of being seen as anti-farmer. Instances of farmer suicides only weaken their resolve. But there are reasonable arguments to be made for taxing agricultural income.

For one, agricultural incomes can be taxed without hurting farmers who have borne the brunt of agrarian distress. This is because even if agricultural income is subject to income tax, a substantial section of the farmers - the small and marginal ones - will remain outside the tax net simply because their incomes are likely to be below the basic exemption limit of Rs 250,000 per annum that is extended to all taxpayers in India.

### **Widening the net**

But just how many large farmers could potentially be brought under the tax net? Data from the India Human Development survey 2011-12, which is jointly carried out by the National Council of Applied Economic Research and the University of Maryland, shows that roughly 10.5 per cent of households own land in excess of 5 hectares.

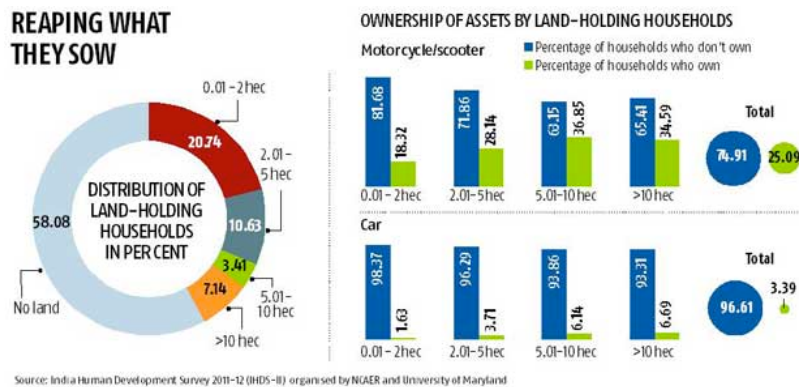
Of these households, roughly a third own a motorcycle or a scooter, 7 per cent own a washing machine, while another 6 per cent own a car. The logic of exempting them from taxes is difficult to rationalise. Bringing these households into the tax ambit would help significantly to widen the tax base.

Two, under the current system, even companies investing in the agricultural sector are exempt from paying taxes. In their study, Rao and Sengupta had estimated that over 50 companies reported agricultural incomes of over Rs

100 crore in 2009-10, with their total agricultural income amounting to Rs 31,313 crore.

This figure, while significant, may well be an underestimate. As many companies are likely to have integrated operations, their actual agricultural income may either be undisclosed or underestimated. For example, any company that produces cotton and uses it to produce yarn or fabric, is not likely to report the same as income from cotton. Thus by taxing agriculture, the corporate sector that has been heavily investing in agriculture would also be brought under the tax ambit, significantly boosting state revenues.

Three, as tax exemptions to the sector provide an easy avenue for evading and avoiding taxes, taxing agricultural incomes would plug this loophole. The scope through this route is immense. According to news reports, the total amount of agricultural income declared by taxpayers in returns filed up to November for exemption in the assessment year 2014-15 stood at a staggering Rs 9,338 crore.



As many have speculated, it is possible that many of these individuals have used this route to mask some of their income accruing from other sources. Perhaps that is why Finance Minister Arun Jaitley is reported to have said that tax officials are investigating people who may have tried to evade income tax by misusing the tax exempt status of agricultural income. But the problem is likely to persist unless this loophole is plugged. People will continue to take advantage of the system to pay no taxes unless they are taxed.

Four, the same logic of exempting agricultural income has been extended to income from transfer of land. This deprives the state of a lucrative revenue stream from land sales. According to a circular issued by the department of

land resources in the Union ministry of rural development, there is no tax liability on the transfer of agricultural rural lands. Urban agricultural land is also exempt from taxation if the land was used for agricultural purposes during two years immediately preceding the date of transfer. Thus under the current system, despite a sharp increase in land prices where even single land deals can turn individuals crorepatis overnight, the state cannot levy taxes on them.

### **Crorepatis in the making**

Consider this: in 2014-15, the National Highway Authority of India (NHAI) is reported to have acquired 6,733 hectares of land at an average compensation of Rs 1.35 crore per hectares; thus, NHAI alone would have ended up creating up to 6,733 crorepatis (the actual number of crorepatis is likely to be lower as some farmers and other landowners may have sold more than 1 hectare). In 2015-16 NHAI had planned to acquire 10,000 hectares.

And this is just one arm of the government. The total land acquired across the country is likely to have been of a much higher magnitude. Land transfers alone would have created thousands of crorepatis overnight. Yet, most of them would not have been taxed.

If all these transactions were brought under the tax net, the number of crorepati households in the country would have shot up sharply, as opposed to the mere 10,000 increase from 53,017 in 2013 to 63,589 in 2014, according to Kotak Institutional Equities.

The case for taxing agricultural incomes, as economists point out, is based on the principle of fairness. Individuals earning above a particular threshold should be taxed, irrespective of their source of income. In fact, various committees, such as the one on agriculture taxation headed by K N Raj in 1975 and more recently the Parthasarathi Shome-led Tax Administration Reform Commission, have recommended taxing large farmers.

By bringing the sector within the tax ambit, not only will the tax base be widened, but the route used by individuals to evade taxes would also be closed.

## **Agriculture credit diversion fuelled a string of farm suicides: Agri Secretary**

Govt has raised the agriculture credit target for this fiscal by Rs 50,000 crore to Rs 9 lakh crore



A record number of farmer suicides last year are a result of agriculture credit not reaching intended beneficiaries and loans with high interest rates from local money lenders, the Agriculture Secretary said Monday.

Addressing a national kharif conference, Agriculture Secretary Shobhana K Patnaik asked states to take steps to ensure agriculture credit reaches small and marginal farmers.

The government has earmarked Rs 9 lakh crore for short-term agriculture loans for small and marginal farmers with an interest subvention scheme.

"In spite of so much money given for small and marginal farmers, credit is not flowing to this sector. As a result, this small and marginal farmers are knocking on the door of money lenders. As a result, we have seen the maximum number of suicides during the last year," Patnaik said.

"That shows the institutional credit mechanism is not working the way it should be working. This is something that we all should ponder and take measures so that agri credit is made use of by the vulnerable section."

With country facing two consecutive bad monsoons in the last two years, farmers are under stress and a number of suicide cases have been reported in various states.

As many as 3,228 farmers committed suicide in Maharashtra last year, highest in the last 14 years, Union Agriculture Minister Radha Mohan Singh had said last month in a written reply to the Rajya Sabha.

The government has raised the agriculture credit target for this fiscal by Rs 50,000 crore to Rs 9 lakh crore.

"Special focus has been given to ensure adequate and timely flow of credit to farmers. Against the target of Rs 8.5 lakh crore in 2015-16, the target for agricultural credit in 2016-17 will be an all-time high of Rs 9 lakh crore," Finance Minister Arun Jaitley had said in his Budget speech.

"To reduce the burden of loan repayment on farmers, a provision of Rs 15,000 crore has been made in the BE 2016-17 towards interest subvention," he had said.

### **Govt expects good Southwest monsoon this year**

Met Department's predictions will be out later this month, giving a clear picture of monsoon



After two years of deficient rainfall, the government on Monday said that the monsoon this year is expected to be normal and directed states to chalk out plans to boost crop acreage and production in kharif season starting June.

"El nino condition is declining. It is expected that La Nina condition will takeover, and will perhaps favour a good monsoon this year," Agriculture Secretary Shobhana K Patnaik said addressing a national conference to launch kharif campaign for 2016-17.

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Even the Economic Survey in February had said El Nino, which is held responsible for extreme weather events across the country last year, is unlikely to repeat this year.

However, it had suggested that the government should still be ready with the contingency plan to deal with any eventuality besides announcing in advance the minimum support price for crops like pulses.





# THE TIMES OF INDIA

## **Farmers need bail out package of Rs 3 lakh crore: Agri expert**

Bengaluru, Apr 11 () Food and Agricultural policy analyst Devinder Sharma today pitched for an immediate bail out package of Rs 3 lakh crore to farmers as an emergent step in view of the aggravating agrarian crisis.

Sharma, a noted agricultural expert, also said the government should put on hold implementation of the seventh pay commission for Central employees till an Income Commission is announced to help the distressed farmers.

"Giving income to the hands of farmers is the best way to boost growth," he told reporters here, adding, it would have a cascading effect giving fillip to job creation and growth in industrial and other sectors.

Sharma said implementation of the seventh pay commission is expected to boost GDP by 1.9 per cent but if the same amount of Rs 3 lakh crore is funneled into the farming community, it would boost GDP growth up to 15 per cent.

According to him, the bail out should give direct income support to farmers with the money transferred into their "Jan Dhan" accounts.

He said government employees were getting 108 types of allowances, whereas just four of them including DA, HRA, education and medical allowances to farmers would bring in changes in their lives.

"Why do we need to pay Rs 3 lakh crore to a class which doesn't need it. Why not spend it on farmers," Sharma asked, pressing for putting the seventh pay commission on hold.

He also dismissed as "a hoax" the Modi government's pronouncement about its target to double the farmers' income by 2022.

Farmers were now getting a measly income and doubling it would not mean anything to them, he added. RA ROH RC MKJ

## **Drones to assess crop loss in Haryana**



chandigarh: To make accurate assessment of crop loss due to inclement weather, Haryana has started using drone technology on a pilot basis.

"Drone technology will bring transparency and accuracy in assessment of crop loss. Moreover, it will also put an end to complaints lodged by farmers who accuse revenue officials of not making correct loss assessment," Haryana Space Applications Centre (HARSAC) chief scientist R S Hooda told PTI on Monday.

"Haryana is the first state which is using drone technology for crop loss assessment," he said.

Crop loss assessment through drone technology was conducted on a pilot basis in few villages of Hisar and Gurgaon, he said. "We used drone to assess wheat and mustard crop loss because of hailstorm and untimely rains," Hooda said.

"We are expecting more than 90% accuracy in results and if this pilot project comes out successful, we can use it on operational basis in the future," HARSAC chief scientist informed.

Pune's Science and Technology Park, which is promoted by the Centre's science and technology department has deployed German manufactured imaging drone in Haryana for crop damage assessment, he informed. "Drone, called unmanned aerial vehicle (UAV), is fitted with scanning sensors and it can capture the image of affected area with a resolution of 3-5

cm with a detailed imaging from the height of about 200 metres," Hooda said adding that it would help in assessing accurate percentage of crop damage whether the loss is 25% or 75%.

Notably, last year when Haryana government disbursed financial compensation of Rs 1,092 crore for wheat damage due to untimely rains and hailstorm, many farmers complained of inaccurate crop loss assessment, leading to disbursement of lesser compensation.

Haryana had even tried to assess crop loss assessment through US satellite. But Hooda said it was difficult to get accurate percentage of crop damage through satellite.

## THE ECONOMIC TIMES

### **Basmati prices likely to firm up in near term despite tepid demand**



The industry is expected to witness weak sales growth or degrowth and decline in profitability in 2015-16, Majumdar said.

KOLKATA: The Basmati price have gone up 11.7% in the past one month, promising some respite to traders even as excess supply and weak demand are expected to continue in the near term, according to credit rating agency ICRA and some experts.

Most of the companies are expected to report a decline in profitability in 2015-16, which will weaken the leverage profile of these companies. Listed companies such as KRBL, LT Foods and Kohinoor Foods with established

brands such as India Gate, Dawat and Kohinoor armed with strong distribution networks are likely to be better placed to deal with the situation, the agency said. "The scenario of excess supply and weak international demand is expected to linger in the near term, impacting the financial profile of basmati rice players," Sabyasachi Majumdar, co-head of corporate rating at ICRA, said.

The industry is expected to witness weak sales growth or degrowth and decline in profitability in 2015-16, Majumdar said. "Inability to liquidate stocks and recover funds from debtors are likely to increase the funding requirements and hence leverage. Nevertheless, players with established brands and strong distribution network are likely to be better placed to cope with the challenges," he said. Majumdar said that the situation is likely to improve only from the next basmati paddy harvest season in the second half of FY17.

Prerana Desai, vice president, Edelweiss Agri Research, said that the prices of basmati paddy had bottomed out in February 2016 when it touched Rs 4,600 per quintal. "Though it has gone up to Rs 5,250 per quintal, the prices will keep on languishing for some time," she said.

While basmati price is consumed across the globe, West Asian countries account for most of the imports. Within West Asia, Iran and Saudi Arabia are the two largest buyers, together accounting for over 50% of basmati rice exports from India.

However, even as Iran emerged as one of the largest importers of basmati rice in recent years, the country imposed a ban on basmati rice imports from India in 2014-15, citing its own healthy rice crop and large basmati inventory. The ban led to a decline in Iran's proportion of total exports from India from 37% in 2013-14 to 24% in 2014-15.

## **Poor back-to-back monsoons, coupled with depleting reservoirs and a heatwave have hit rural India hard**



This year's monsoon is expected to be good, but officials say it may take up to three months for water scarcity to ease as soil moisture has dropped sharply.

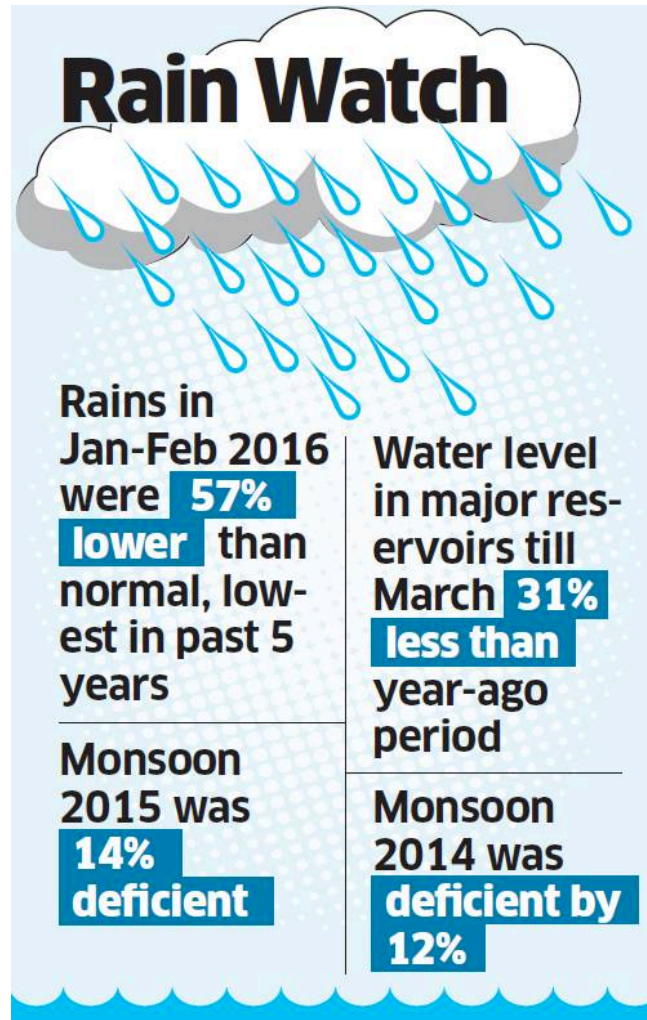
PUNE | NEW DELHI | KOCHI | KOLKATA: Farmers in Kasegaon, a village in south Maharashtra, have been spending Rs 20 crore every month to make sure their grape orchards get enough water — without irrigation, the crop would shrivel up and die. But they're luckier than some of their counterparts elsewhere in the country — at least there's water to be had, albeit at a stiff price.

Two back-to-back monsoon failures, 2015 being the hottest year on record, poor post-monsoon rain, an alarming depletion of reservoirs and a heat wave that's forecast to continue and even intensify — all this has changed the country's water economics drastically for farmers, households, businesses and hydropower.

This year's monsoon is expected to be good, but officials say it may take up to three months for water scarcity to ease as soil moisture has dropped sharply.

Depleted reservoirs will take time to fill up to normal levels after rainfall gathers pace in June and July.

Water is so scarce that prices are rising across the board despite the arrival of the new harvest. Chana has risen 25% in 20 days, mustard 15% in a month. Traders expect maize and wheat to become costlier when the harvest season ends. Chilies are racing toward a new high of Rs 125 per kg while sugar prices have risen 33% in nine months and dal is up 80% since last year; it's likely to remain pricey even if the monsoon is bountiful.



The India Meteorological Department may announce its forecast for the June-September rainy season on Tuesday.

The price increases, however, have not led to a corresponding rise in rural incomes because output has dropped and the cost of inputs is up due to greater spending on pesticides, water etc. Where production is normal, prices



haven't risen, adding to rural distress and forcing thousands of villagers to migrate to urban areas for jobs.

The scenario is no better for homes and companies. People are paying thousands of rupees to buy water or are trekking long distances in the heat as taps have run dry in places like Latur in Maharashtra. The dry, cracked earth speaks for itself. Latur is waiting for the 'water train'—10 wagons of water being ferried by the Indian Railways from Miraj.

Dal millers like Nitin Kalantry are spending Rs 10,000 a day for water. A tanker, or 6,000 litres of water, costs Rs 1,200, up from Rs 350 in November, in parts of Maharashtra. Santosh Mulay of Udgir in Maharashtra said he spends Rs 2,500 a month to buy water for drinking and other domestic uses for his family of four.

Commercial activity that depends on water is grinding to a halt. Prithviraj Gore, a building contractor in Latur, has stopped work since the last four months because there's no water.

Across the state border in Hassan district of Karnataka, former aviation entrepreneur GR Gopinath said the perennial stream near his farm has dried up while 30 borewells drilled to more than 600 feet produce just a trickle.

Water in the country's major dams is well short of the 10-year average, which doesn't bode well for the planting of crops and electricity production, especially in the southern, central and western states.

"The biggest challenge a state like Maharashtra will face is in providing irrigation water to water-intensive crops like sugarcane, grapes and banana," said GS Jha, chairman, Central Water Commission (CWC). "Drinking water can be provided by tankers and cattle fodder from other states.

A team of central government officials has toured the parched regions of Maharashtra to assess the situation. Its report is expected shortly.

The CWC chairman said the most deficient river basin is the Krishna, which caters to Karnataka, Maharashtra and Andhra Pradesh, where water levels are 63% below the 10-year average. Reserves in the Tapi river basin originating in Madhya Pradesh and flowing to Maharashtra and Gujarat are

42% below the average while those in the Mahi and Godavari basins are 40% and 35% below normal, respectively.

Nagarjuna Sagar dam has not become full perhaps for the first time in the last 20-25 years, said Sahadeva Reddy, principal scientist of Acharya NG Ranga Agricultural University, Hyderabad.

"In Kurnool district (Andhra Pradesh), the rains are deficient by 30% and over one lakh hectares of rice cultivation have been affected," he said. Prakasham, Krishna and Guntur districts too have been hit by drought.

Most of these districts are in the grip of a drinking water crisis too as the ground water level has sunk ever lower because of successive droughts. As a temporary measure, the Andhra Pradesh government has decided to release two thousand million cubic feet (tmc) of water from Srisailem dam, Reddy said.

Prolonged dry weather without summer rain is threatening to hit the pepper and cardamom crop in Kerala. Black pepper output, which is already down by 25% to 40,000 tonnes from the targeted production, is expected to fall further next year. Parts of Tamil Nadu had the opposite problem — bearing the brunt of surplus rain in November-December.

The untimely rains and the dry weather that followed have played havoc with crops like rice and cotton. "In Tamil Nadu, excess rains and drought may drag the cotton output down by 40% from 5-6 lakh bales last year," said MRamaswamy, chief executive at Indian Cotton Federation.

In north India, there isn't much water scarcity but the heatwave is a concern. But big farm producers in Punjab and Haryana are not too worried though.

"There is enough water in Punjab dams and being an election year the government will ensure availability of water. Even the high temperature will not make a dent in planting operations as requirement of water in May-June will be negligible," said Ajay Vir Jakhar, chairman of New Delhi-based farmers' association Bharat Krishak Samaj.

Farmers in Punjab and Haryana will start nursery preparation of paddy in May-end and transplanting to fields will begin by mid-June. Starting from

the first week of May, planting of cotton will also begin across Punjab, Haryana and Rajasthan.

In Uttar Pradesh, farmers said they will start planting sugarcane and paddy by June. "Water is not a challenge as we get water at a depth of 200-300 feet, but yes cost of production will increase if rains are not on time and the heatwave is strong," said Ramkumar Tyagi, a farmer from Mandola village in Ghaziabad district.

Meanwhile, commodity prices are likely to stay high. According to government data, the retail price of tur dal in Mumbai in March this year was 82.5% more than a year earlier. Even if the monsoon is normal, prices of pulses are unlikely to decline. The best-case scenario will be prices remaining unchanged.

Incomes have suffered due to lower yields and certain commodities becoming cheaper. The average wholesale onion price has remained at Rs 7 per kg for the last three months while pomegranate prices are much lower than last year.

A large number of sugarcane farmers are still waiting to get full payment. Despite a 20% hike in wages in 2016, the money earned by harvest workers from the biggest sugar producer, Maharashtra, was lower by about Rs 100 crore as the quantity of cane crushed declined by 18%.

How to save long-duration crops such as sugarcane and fruit is a challenge facing farmers in Maharashtra.

### **Govt to continue regulating seed, pharma prices: Radha Mohan Singh**

The trait value has been reduced by over 70 per cent for the season 2016-17 starting next month despite Monsanto's threat to quit the country.

NEW DELHI: Agriculture minister Radha Mohan Singh has said that the government will not allow companies such as Monsanto to exploit farmers and it will continue to regulate the prices of seeds and pharmaceuticals.

"Monsanto is a good company. It has knowledge, but it doesn't mean you loot farmers and charge any price," Singh said on Monday while addressing a two-day conference in Delhi on kharif sowing season.



The minister asked government officials to keep a check on the prices of seeds and any monopolistic activity which impacts farmers' lives. "We will have to ensure that whether it is price of seed or pharmaceuticals, no one fixes prices as they want it. We will continue to regulate prices, whenever required," he said.

There should be competition between companies to sell products, Singh said. The spokesperson of American company Monsanto declined to comment on the matter.

In December, the government had issued an order to control cotton seed prices, including trait or royalty value, effective from 2016-17 crop year (July-June).

### **Maize prices become stable on arrivals: USGC**

MUMBAI: As the arrivals picks up, maize prices in Bihar and other centres, including Maharashtra, have become stable during last week with good availability, according to the US Grains Council (USGC).

It is the beginning of the season and as there was no unseasonal rainfall, the quality of maize being delivered is expected to be good, according to USGC Representative for India, Bangladesh and Sri Lanka Amit Sachdev.

Price of corn in Bihar is about Rs 11,750 per tonne and delivered in Gujarat at Rs 14,300 per tonne.

In Maharashtra, maize is priced at about the same level as Gujarat.

However, the prices have been down in the spot markets.



Price of corn in Bihar is about Rs 11,750 per tonne and delivered in Gujarat at Rs 14,300 per tonne.

In Nizamabad, corn prices were down 0.55 per cent to Rs 14,340 per tonne, in Davangere down 0.34 per cent at Rs 14,700 tonne, in Karimnagar it was stable at Rs 14,600 per tonne, in Gulabghat down 13.19 per cent at Rs 12,077 per tonne.

In the US though, after the drop in maize prices on Chicago Board of Trade (CBOT) as the planting intentions report came out, the market has realised that it may not be possible to plant so much corn, Sachdev said.

"There could be swings due to weather and also in areas where the crop season is relatively short," he added.

This realisation made the market move up and become stable.

## 2016 monsoon to be above average: Skymet



Good monsoon rains play a key role in boosting demand for an array of consumer goods. Agriculture accounts for about 14 percent of India's \$2 trillion economy, Asia's third-biggest, but supports two-thirds of India's 1.25 billion population.

NEW DELHI: India's annual monsoon rains are likely to be 105 percent above a long-term average, the country's only private weather forecaster said on Monday, snapping two straight years of drought that cut farm output and hit farmers' income.

The July-September monsoon delivers nearly 70 percent of annual rains and waters half of India's farmlands that lack irrigation facilities.

There is a 35 percent probability of above average rainfall, Skymet said in a statement.

Good monsoon rains play a key role in boosting demand for an array of consumer goods. Agriculture accounts for about 14 percent of India's \$2 trillion economy, Asia's third-biggest, but supports two-thirds of India's 1.25 billion population.

State-run India Meteorological Department is soon expected to issue its forecast for this year's monsoon rains.



## Won't allow firms such as Monsanto to exploit farmers: Radha Mohan Singh, Agriculture Minister



NEW DELHI: Agriculture minister Radha Mohan Singh has said that the government will not allow companies such as MonsantoBSE 4.68 % to exploit farmers and it will continue to regulate prices of seeds and pharmaceuticals.

"Monsanto is a good company. It has knowledge, but it doesn't mean you loot farmer and charge any price," Singh said on April 11 while addressing a two-day conference in Delhi on kharif sowing season. Knowledge has no value, he said.

The minister asked government officials to keep a check on prices of seeds and any monopolistic activity which impacts farmers' lives. "We will have to ensure that whether it is price of seed or pharmaceutical, no one fixes prices as they want it. We will continue to regulate prices, whenever required," he said.

There should be competition between companies to sell products, Singh said.

The spokesperson of American company Monsanto declined to comment on the matter.

In December last year the government had issued an order to control cotton seed prices, including trait or royalty value, effective from 2016-17 crop year (July-June). Following this, the government has capped the price of Bt cotton seeds, rebuffing Monsanto, which had threatened to review business plans and withhold new technology if controls were imposed on the technology fee it charges.

As per the new recommendation Bt cotton seeds packets of 450 gram are to be sold at a maximum price of Rs 635 for Bollgard I version and Rs 800 for Bollgard II. The trait value (or technology fee) including taxes has been cut to Rs 49 from Rs 183.46 per packet. The packet of seeds was earlier being sold at prices such as Rs 1,000 in Punjab and Haryana, Rs 830 in Maharashtra and Rs 930 in Telangana.

The next hearing for Mayhco Monsanto Biotech Ltd (MMBL), a joint venture firm of Monsanto, which had challenged the government's seed control order in the Delhi High Court in December, has been scheduled for May 12.