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### THEMMEHINDU

#### IMD predicts excess rainfall

#### 'Southwest monsoon will set in over Kerala in next 3 or 4 days'

Even while maintaining that the torrential rain in Kerala was pre-monsoon showers, the India Meteorological Department (IMD) on Thursday said in an update to its April monsoon forecast that rainfall would be 6% above the 50-year average of 89 cm.

Rains over north-west India would be 8% more; over Central and South India 13% more and over north-east India 6% less than what these regions historically got.

Monsoon during the months of July and August — the most critical for agriculture — are also expected to be munificent with the agency predicting rainfall monsoon to be 7% and 4% more than what the country usually gets during these months.

As *The Hindu* reported earlier, the IMD was increasingly confident about the probability of copious monsoon rains due to the receding of the dreaded El Nino — the anomalous heating of surface waters in the equatorial Pacific and six in ten times responsible for a drought — and several international weather agencies predicting that the converse La Nina conditions are likely to set in the latter part of the July-September monsoon season.

Floods likely

In fact, the country may have to brace for floods and the possibility of the monsoon spilling over into October. "There is a possibility of rains after September," said Laxman Rathore, IMD Director-General.

"October is definitely going to see significant rain," said Jatin Singh, CEO, Skymet, a private weather forecasting agency.

The IMD maintained that the monsoon was yet to arrive in over Kerala and would do so "in the next three or four days".

#### Does it have a pulse?



Horse gram, moth bean, kabuli chana... SHONALI MUTHALALY makes a case for nutritious local pulses

Quick. Name ten local pulses. Floundering? Okay, let's make this easier. Name five? Turning to Google while you sip on a turmeric latte fresh off Pinterest? Stand in a corner with your finger on your lips. Actually, don't. We are all equally to blame for this gap in culinary memory.

In two generations, urban India has forgotten how to grow, cook and eat a wealth of indigenous foods. With the UNFAO (United Nations Food and Agriculture Organization) declaring 2016 as the International Year of Pulses, this is a good time as any to reflect on the challenge of reviving them.

But first, what exactly are pulses? These are a sub-group of legumes that produce edible seeds. The term is used for crops that are harvested for dry grains, such as lentils, beans and chickpeas.

As for the answer to my first question? Kulith (horse gram), tamarind seeds, chow-dhari (winged beans), matki (moth bean), sutari (rice bean), urad (split

black gram), tuvar (pigeon peas), masoor (red lentils), kala vatana (black peas), chole (kabuli chana). If you did not recognise 50 per cent of those names, you are not alone. I confess I got help. Fortunately, celebrity nutritionist and bestselling author, Rujuta Diwekar, who recently released a book on Indian Superfoods, is just a phone call away. She has spent the last couple of months working on a list of marginalised local pulses, along with her inspiring group of "senior interns".

Rujuta's focus over the past few years has been on recording and interpreting oral wisdom, which she says is our collective heritage. "In about 25 years, the people who have this wisdom won't be alive — and we will lose it all," she says, explaining why she recently hired four senior interns, all aged above 65. They included Shaila Nimbkar (a doctor), Rekha Rohra (a school principal), Sanjay Bhinde (a farmer) and Rujuta's mother, Rekha Diwekar (a professor of organic chemistry).

Pooling all their resources, the team started research on pulses. "Pulses are a miracle food. They're cheap, nutritious, climate resilient and easy to store. But our farmers have been ignoring them, and switching to more profitable cash crops," says Rujuta, adding that as a result, over the past few decades, people have forgotten how to use them.

The senior interns, in fact, needed guidance from their elders. Dr. Shaila, who is 67 years old, went to her 94-year-old mother-in-law. Sanjay, the farmer, took his questions to his village in Sangli (Maharashtra). Women there, in their 80s and 90s, told him about kulith, used for kollu rasam in the South, pithla in Maharashtra and kichadi in Himachal. "You know a food belongs to a culture when you have diverse methods of using it," says Rujuta.

Kulith became the star of this campaign. It grows across the country, has an impressive nutrient profile and is packed with antioxidants. More importantly, it's cheap. One serving of 25 grams, which contains 6.25 grams of protein, costs Rs. 1.50. Compare that to a Rs. 5 egg, with 6.6 grams of protein. "In the villages, they mix it with sugarcane juice and boil it for an easy, quick and nutritious snack for new mothers," says Rujuta.

Traditionally, farmers would grow a grain, then follow it with pulses, which fixed nitrogen into the soil. Then they would grow vegetables in that enriched soil. "It meant we had a good sustainable cycle in place for generations," says

Rujuta. But these crops stopped bringing in money. So farmers abandoned them." She adds, "There's been a systematic brainwashing — we have been taught to look at everything native to us as suspicious or fattening, and everything we can eat out of a box as healthy."

There's hope though. With the Western world celebrating Indian super foods such as ghee, coconut oil and turmeric, Indians are finally appreciating their culinary inheritance. Rujuta's not overly impressed by the shift. "Instead of listening to our grandparents, we follow American food blogs," she says, adding dryly, "It's like learning to love my child only after a DNA test proves it's mine!"

If we want to eat better, we must become demanding consumers. "Start asking for food that is grown responsibly. For food that is traditional, and nutritious. The market will respond," she says. In the meantime, go through your grandmother's old recipe books. "Everyday, our senior interns would bring in food – kadhis and kichadis their grandmothers had taught them," she says. Then adds delightedly, "Today's our final day, and they gave each of us a bhajani pulse mix as a farewell gift. It has 19 types of pulses and grains, and can be rolled into a chappati." Admit it. There is nothing in a box that can beat that.

#### Rain brings respite from heat

Temperature comes down by three to four degree Celsius



CAUGHT UNAWARES: A motorist gets drenched in rain at Koilkuntla in Kurnool district on Thursday.— PHOTO: U. SUBRAMANYAM

Incessant rain across Prakasam district brought great relief for the denizens from the sweltering summer heat on Thursday.

The low-lying areas in the city were covered in a sheet of water in the wake of the downpour which brought down the maximum temperature by three to four degree Celsius.

It was welcome showers also to the farmers who have been eagerly waiting for the onset of southwest monsoon breaking the El Nino effect after drought in two consecutive years.

The district, on average received 22.5 mm rainfall in the last 24 hours providing impetus to farm operations.

Agriculture Joint Director J. Muralikrishna advised farmers to go for pre-khariff crops like green gram, black gram, red gram and sesame taking advantage of the wet spell. Weather officials predicted a generally cloudy sky with possibility of rain or thunderstorm or dust storm in the next 48 hours.

Hanumanthunipadu received a maximum rainfall of 68.6 mm followed by Voletivaripalem 55.0 mm, Kanigiri 49.8 mm, Veligandla 46.8 mm, Chandrasekarapuram 45.6 mm, Podili 45.2 mm, Lingasamudram 32 mm, Singarayakonda 28.2 mm, Chinnaganjam 25.4 mm and Kodepi 23.4 mm.

#### Traffic comes to halt

Kurnool special Correspondent adds: Traffic movement from Halaharvi in Kurnool district to Bellary in Karnataka was stalled by the overflowing of Peddavanka in Halaharvi mandal due to heavy rain on Thursday. Vehicles were stranded on either side as water flowed over the road.

Kairavadi, Gunegandla and Puttapasam areas were water-logged in Gonegandla mandal due to heavy rain. The Mallela vanka at Ganjahalli and Mathamvagu in Halwala were in spate in Gonegandla mandal disrupting traffic movement for over two hours. Kurnool, Koilkuntla, Nandyal and other places received good rainfall. Kadapa mandal received 49.2 mm rainfall, followed by 43 mm in Jammalamadugu, 39.2 mm in Proddatur, 37.2 mm in Duvvur, 36.6 mm in Mydukur, 33.6 in Nandalur, 26.4 mm in Brahmamgari Matham, 26 mm in Mylavaram and 24.4 mm in Chintakommadinne in Kadapa district.

The Upper Sileru project at Diguva Thamballapalli in Kalasapadu mandal in Kadapa district received inflows owing to rainfall in the forest area at Giddalur in Prakasam district.

#### State government to procure copra

It will be procured from farmers in 29 districts for six months starting June 15

: The State government has decided to procure copra from farmers in 29 districts for six months starting June 15, as the price of copra has fallen below Rs. 50 a kg.

"Copra would be procured through direct procurement centres with a procurement price of Rs. 59.50 for a kg of milling copra and Rs. 62.40 for a kg of edible copra," Chief Minister Jayalalithaa said in a statement.

Recalling her electoral promise to support farmers when the prices of copra fell, she said a meeting to review the contemplated action was held at the Secretariat on Thursday.

The government would open procurement centres through Tamil Nadu Cooperative Marketing Federation Ltd (TANFED), Primary Agricultural Cooperative Credit Societies (PACCS) and Agricultural Producers Cooperative Marketing Societies (APCMS).

#### **Payment method**

"Based on their choice, the price for the procurement would be deposited in the bank accounts through ECS system or through account payee cheques. The Marketing Committee Cess payable by farmers to direct procurement centres would be suspended," she said.

Despite standing third in the country in terms of the extent of land used to cultivate coconut, Tamil Nadu stands first in terms of produce, Ms. Jayalalithaa added.

#### **Applications invited**

As part of efforts to promote organic farming, applications for awards have been invited in various categories. For the best organic panchayat and municipality award, application has to be submitted to the Principal Agriculture Officer by August 15.

For corporations, it is to be submitted to the Agriculture Director.

District-level technical committee has to send in all the applications to the Director by August 31.



#### Farmers encouraged to test soil health

The Raitha Mitra Farmers' Producers Company helps farmers improve the soil health of their land holdings and aids them to get best returns from their lands.— Photo: M.A. Sriram

Farmers in Mysuru district are being encouraged to get the soil of their fields scientifically tested in a bid to strengthen its productiveness and prevent indiscriminate use of fertilizers to boost yield.

Following reports of the successive drop in the yield despite use of fertilizers, a company set by farmers in Mysuru has come forward to support them in improving the soil health of their land holdings and help them get best returns from their lands with minimal input cost.

"If the nutrients used by farmers don't match the nature of soil, the yield won't be encouraging. Moreover, farmers will end up spending more on the field with paltry returns. Soil plays a key role and its health needs to be taken care," explained Kurubur Shanthkumar, president, State Sugarcane Growers' Association, Mysuru.

Mr. Shanthkumar, who along with like-minded farmers set up Raitha Mitra Farmers' Producers Company in Mysuru with over 2,000 members, told *The Hindu* that the company has set a target to enrol at least 2,000 farmers to get their soil tested before the kharif season kicks off. The Department of Agriculture has supported the initiative and has come forward to test the soil, he added.

An interaction with farmers had been conducted at H.D. Kote, T. Narsipur, Nanjangud, and Kurubur.

Similar sessions have been planned at Ramdurga in Belagavi district and Haliyal in Uttara Kannada district next week. 400 farmers have already registered under the initiative, Mr. Shanthkumar said.

The JSS Vignana Kendra at Suttur is lending expert inputs under the initiative.

"We have prepared a questionnaire, which will be distributed among farmers.

The soil is collected and a report card will be issued explaining the soil's nature and other details," he said.

A comparative study will be conducted between last year's and this year's yield.

"This will give a picture of whether our interventions have worked or not," he said. Mr. Shanthkumar felt that the initiative will spread awareness among the farmers since the Centre had launched the Soil Health Card Scheme, which assesses the soil health of land holdings of farmers. Upon completing the tests, health cards are issued based on which the farmers can go for suitable cards and minimise excessive use of fertilizers.

"With only a few days left for the onset of monsoon, we thought of taking up our initiative on a war footing at least by roping in a few farmers so the message is spread far and wide and the soil health card scheme gets many takers," he said.

#### Fall in arrival of chillies

Leads to an increase in the price this season, say wholesale dealers



Dealers assessing the quality of chillies.— Photo: A.Muralitharan

Wholesale traders at Manapparai have been witnessing a sharp fall in the arrivals of chillies this year, following poor rain fall and consequent fall in yield in Manapparai and Marungapuri blocks.

Poor arrivals have led to an increase in the price of chillies this season, say the wholesale dealers.

The peak season for the arrivals consequent to harvest of the crop raised during 'Purattasi pattam' (October –November) every year, is April and May.

The crop is being raised in a cluster of villages such as Palaviduthi, Poolampatti, Ponnakoundanur, Thavalaiveeranpatti, Taragampatti, Ettiyapatti, Kovilpatti, Padharapatti and Pallipatti – all near Manapparai.

Farmers say that scanty rainfall has resulted in a sharp drop in yield this season.

Pazhaniappan (60), a farmer, who had raised the crop in one acre was hoping to harvest about 10 bags (of 15 kgs) of chillies, but was shocked to get just two bags.

Whole sale dealers said that the arrivals were at its fag-end now, indicating that the arrivals would come to an end within a fortnight or so.

It is on Wednesdays that small and medium farmers bring their produce to the wholesale market in Manapparai.

"Last Wednesday, against the usual 500 bags, I could get just 15 bags," says K. Muthusamy. The purchase price per kg stood at Rs.130 on Thursday and is sold with a profit margin of Rs.10, he adds.

Mr. Muthusamy, who has been in the trade for the past five decades, said the crop needed adequate irrigation or rain especially at the time of flowering.

#### Amul ups milk price in Capital

Prices of Amul milk are set to increase by Rs. 2 per litre in Delhi and the National Capital Region with dairy major Gujarat Co-operative Milk Marketing Federation (GCMMF), which sells its products under the brand name, saying the new rates will be effective from Friday.

Speaking to *The Hindu*, GCMMF managing director R.S. Sodhi said: "The prices will be effective from Friday.

We are raising milk prices in Delhi after 25 months. Since then, inflation has gone up by 14 per cent." The last hike was implemented in May 2014.

With the new rates kicking in, a 500-ml pouch of Amul Slim & Trim (double toned milk) will be available for Rs. 18. A 500-ml pouch of Amul Taza (toned milk) will be available for Rs. 20, while one litre will cost Rs. 39.

Amul Gold (full cream milk) will be available at Rs. 25 for a 500-ml pouch and Rs. 49 for one litre. Amul Diamond (full cream premium milk) will cost Rs. 26 for a half-litre pouch.

Mother Dairy, the largest milk supplier in Delhi-NCR with a sale of about 30 lakh litres per day, maintained that it has no plans to hike rates yet.

"As a leading milk supplier in Delhi-NCR, we are not increasing the prices of milk at present.

It is pertinent to note that the last increase was in May 2014, and we are striving to retain prices while giving competitive and remunerative prices to the farmer," said a spokesperson for Mother Dairy.

Amul, which sells over 26 lakh litres of milk in Delhi-NCR on a daily basis, also stated that the new rates will be implemented in Gujarat next.

#### Chitradurga sets kharif target at 3.50 lakh hectares

As some parts of Chitradurga district have received rainfall in the last few days, farmers in all six taluks have started preparations for sowing.

Meanwhile, onion growers who have cleaned and kept seeds and fertilizers ready have started sowing activities.

Farmers are hoping of a good crop as the district has already received some rainfall.

For the kharif season, the district has set a target of 3,50,500 hectares of land for sowing, and till the end of May last week, sowing had been taken up in 667 hectares of land.

Of the 667 hectares, cotton has been taken up in 12 hectares in Challakere, 20 hectares in Chitradurga, 540 hectares in Hiriyur and 95 hectares in Molkalmuru taluk. Of the target set for the season, 97,020 hectares are in Challakere taluk, 64,930 hectares in Chitradurga, 48,370 hectares in Hiriyur taluk, 53,490 hectares in Holalkere, 58,670 hectares in Hosadurga taluk and 28,020 hectares in Molkalmuru taluk.

#### **Applications invited for fish farming**

Applications have been invited from farmers for freshwater fish farming under the Matsya Samruthi Scheme-II being implemented by the Fisheries Department.

Applicants should have a pond on their own land or land taken on lease.

The application form is available at the Fisheries Department office at Kumily or from aqua-culture coordinators in various local bodies. Call 04869 222326 for details.

#### Dairy farming gains popularity

50 villages earn over Rs. 1 crore per annum from milk sale



A farmer using a milking machine at Idikidu village in Bantwal taluk on Thursday.— Photo: H.S. Manjunath

Dairy farming, not an attractive activity at one point in time is now picking up in Dakshina Kannada and Udupi.

More than 50 villages in the twin districts now earn a minimum of Rs. 1 crore per annum by selling milk.

"At least 50 milk producers' cooperative societies under the Dakshina Kannada Cooperative Milk Union Ltd (DKMUL) sell a minimum of 1,000 litres of milk a day. Their annual earning from the sale milk will be about Rs. 1.25 crore," said Raviraj Hegde, president, DKMUL.

The twin districts have 680 milk producers' cooperative societies under the union.

A case in point is Idkidu village in Bantwal taluk. The village has three societies which together collect about 2,500 litres of milk a day from its 270 member-

farmers. In that 2,200 litres are sold to the DKMUL while about 300 litres are sold locally in villages.

As farmers get Rs. 34 per litre the annual earning from the sale of milk from three societies in the village would be Rs. 3.10 crore. The earning might vary depending on the collection of milk.

K. Krishna Bhat, president, Soorya Milk Producers' Cooperative Society which is one among three societies in Idkidu village, said that the society alone collected about 650 litres of milk a day.

In 2015-16 it collected 2.18 lakh litres of milk from 96 farmers and thus the 96 farmers together got about Rs. 74 lakh in the year.

The society at Soorya has an allied activity, Mr. Bhat who is also a director in the Board of DKMUL, said.

It has a shredder which makes fodder from arecanut leaf sheath and another machine which makes arecanut bio plates.

The society sells fodder to farmers at Rs. 6 per kg. and sold the bio-plates in the market.

Mr. Bhat, who is also a veterinary doctor, said that fodder of arecanut leaf sheath is nutritious and highly recommended to cows than paddy fodder, a content which results in calcium deficiency among cows coming in the way of conceiving in cows.

He said that dairying has made about 160 farmer members in the village to go for bio-gas production.

#### 'Include crop loss owing to wild animals under insurance scheme'

A farmer leader from Mysuru has urged the Centre to include crops damaged by wild animals under the Pradhan Mantri Fasal Bhima Yojana.

Kurubur Shanthkumar, president, State Sugarcane Growers' Association, who is also president of Indian Sugarcane Farmers' Association, met Union Agriculture Minister Radha Mohan in New Delhi recently and urged him to take measures to include crops that had been left out under the insurance scheme in the interest of farmers from the State. He presented a memorandum to the Minister.

Mr. Shanthkumar also met Union Law Minister D.V. Sadananda Gowda and briefed him on the problems faced by farmers and how the scheme can benefit them if changes were done.

He said the scheme did not cover sericulture and sugarcane and urged the Centre to include these crops.

The State has over 30 per cent of farmers who practice farming on leased lands.

But the scheme covers only those who have land holdings. This should be corrected, he added.

He said Mysuru and Chamarajnagar districts had large areas of forests and crop damage due to straying of wild animals on the forest boundaries were common.

#### Breakthrough in DNA sequencing of groundnut

A team of 51 scientists from nine countries made a breakthrough in DNA sequencing of groundnut.

They feel that this promises the development of improved groundnut varieties with enhanced traits such as increased pod and oil yield, drought and heat tolerance and greater disease resistance.

Scientists from nine institutions in China, India, the USA and Australia, including the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), have decoded the complete DNA sequencing of the ancestor of the groundnut, the diploid A-genome (Arachis duranensis).

Other significant varieties this could help develop include aflatoxin-free, nutrition-rich and allergen-free. The breakthrough also provides insights into geocarpy – a unique reproductive process of the groundnut, oil biosynthesis and allergens.

The findings have been published in the prestigious journal 'Proceedings of theNationalAcademyofSciences'(PNAS),USA(http://www.pnas.org/content/early/2016/05/25/1600899113.full) on May 31.



#### Rejuvenate tea industry: GJM union to PM Modi

It has demanded that the Centre fix a minimum selling price for tea, and extend its irrigation and agricultural schemes to tea gardens



This year, the tea industry is expected to lose 30 to 35 per cent of its prime first flush and second flush production, which generally fetch better prices.

The Gorkha Janmukti Morcha's (GJM) trade union, Darjeeling Terai Dooars Plantation Labour Union (DTDPLU), has written to Prime Minister Narendra Modi, seeking the Centre's intervention in rejuvenating the tea industry.

Their demands include the scrapping of the mandatory system, in which 50 per cent of the total tea produced has to be sold through auctions.

Gobinda Pradhan, chief coordinator of DTDPLU, said the current situation in Dooars "can't be resolved" unless the Centre takes measures to rejuvenate "the industry, which is the largest employer" in the region, employing over three lakh workers.

According to DTDPLU, the opposition trade unions agree that the mandatory auctioning of tea has been made to "aid middlemen" and plantation workers, and planters are the ultimate losers.

The union has also demanded that the Centre fix a minimum selling price for tea, and extend its irrigation and agricultural schemes to tea gardens.

"The entire industry suffered without a minimum selling price, with tea being sold at distressed price... Fixing of minimum selling price is essential," Pradhan said.

Moreover, the tea industry comes within the purview of the Union Ministry for Commerce and Industry. Consequently, agricultural schemes such as the Sinhan Yojana Accelerated Irrigation Benefit Programme do not apply to the tea industry.

This year, the tea industry is expected to lose 30 to 35 per cent of its prime first flush and second flush production, which generally fetch better prices. Second flush accounts for 20 per cent of the total production of premium variety.

According to the Tea Association of India, Terai and Western Dooars witnessed especially scanty rainfall in April and early May.

Thus, leaf intake has been "affected badly" and pest attacks have "increased substantially", leading to an escalation in irrigation costs.

The association added that despite a lower crop scenario, price realisation so far has been "grim".

The average price realisation at the Kolkata auction has fallen from Rs 155.22 per kg in 2015 to Rs 151.20 per kg this year.

"Unless, there is a consistent increase in the tea prices proportionate to an increase in production cost, with steady demand throughout the year, the industry foresees a grim outlook in the ensuing months," an official said.

#### Change sweeps maize fields: Online auction, better prices

Today, maize farmers from Nabarangpur's Raighar and Umerkote blocks, like Sarkar from Hatibeda village, are eagerly waiting for the e-auction to resume in June when the Rabi harvest starts.



That month, Sarkar and a few other farmers took part, for the first time, in an online auction organised by NCDEX Spot Exchange Ltd (NSPOT), a leading exchange for daily electronic trading of agricultural commodities.

Till last year, Phalguni Kumar Sarkar, a 45-year-old maize farmer from Nabarangpur, had little option but to sell his produce at less than the minimum support price when trucks belonging to traders from Chhattisgarh's Raipur pulled up at his village.

But this January, change came in the way maize was sold in Nabarangpur, the southern Odisha district that is arguably India's poorest and the focus of a one-year assignment byThe Indian Express.

That month, Sarkar and a few other farmers took part, for the first time, in an online auction organised by NCDEX Spot Exchange Ltd (NSPOT), a leading exchange for daily electronic trading of agricultural commodities.

The auction was a result of an MoU signed between the state government and NCDEX last December under the World Bank-led Odisha Inclusive Growth Partnership (OIGP) programme.

Today, maize farmers from Nabarangpur's Raighar and Umerkote blocks, like Sarkar from Hatibeda village, are eagerly waiting for the e-auction to resume in June when the Rabi harvest starts.

The district, incidentally, contributes 28 per cent to the total maize production of Odisha — an estimated 6.54 lakh metric tonnes.

"I was apprehensive about taking part in the auction. But it turned out to be a nice experience. For the first time in my life, I sold maize at a price more than MSP.

The money was credited directly to my bank account within eight days of the auction. I could have sold more had I produced more," said Sarkar.

As he waited with about 100 quintals of shelled maize in the Raighar Regulated Market Committee (RMC) godown, Sarkar said, officials assigned him a login ID.

Then, despite "terrible" connectivity, he managed to sell his produce at Rs 1,426 per quintal to a bidder.

And, the moment his produce was sold online, Sarkar received a confirmation note via an SMS. At the same time, traders from Raipur had paid other farmers Rs 1,320 per quintal, said Sarkar.

And to think that just a year ago, such an option was beyond the reach of farmers from Nabarangpur. In the 2015 kharif season, farmers said they suffered a bitter experience as the RMCs did not procure the crop due to lack of storage space.

Last year, maize was cultivated over 38,000 hectares of land in the district compared to previous year's 60,000 hectares.

Farmers in the district spend between Rs 11,000-Rs 13,000 an acre for maize, but reap seven-to-ten times the cost "in a good year".

But apart from offering rates far below MSP, the traders from Raipur also deduct money for transportation costs, said Sarkar.

With over Rs 600-crore worth of maize being produced every year in the district, the traders were free to fix their own price, more so since they used to provide loans to farmers to buy expensive hybrid seeds and fertiliser like Urea, DAP and Potash.

"They bought all our produce, but their agents forced us to sell at least Rs 100 less than MSP.

But yes, they gave us hybrid seeds and fertiliser at a time when we needed," said Sarkar. Subarn Gond, a tribal from Lalpara village in Raighar, said he sold maize through the new exchange at Rs 1,370 per quintal when the prevailing local market price was Rs 1,300.

Another tribal from Chhatabeda village, Bhikhari Gond, sold 118 quintals at Rs 1,450 a quintal through NCDEX platform.

While 66 maize farmers registered themselves for the e-auction early this year, 12 auctioned over 1,600 quintals with prices ranging between Rs 1,370 and Rs 1,426 a quintal.

Under the OIGP programme, a marketing and infrastructure working group was formed in 2014 to work with agencies such as NCDEX to activate maize contacts in Odisha.

The same year, state government formed a maize and poultry task force to enable the formulation of suitable policies and regulations to facilitate private sector investments in maize and poultry sub-sectors.

"The online auction ensures that middlemen are kept out and better price is obtained for farmers.

In all the 10 bids in January, we allowed the lifting of the stock from the RMC godown only after the farmers had been paid," said Nabarangpur district collector Rashmita Panda.

However, maize farmers like Rajmohan Majhi from Chhatabeda village want the new initiative to put in place more quality checks. "The bidding companies insist on moisture content of 12-14 per cent in the corn and not more than that. I still have 232 quintals unsold.

I would be happy if they take the rest at a little less price," said Nandalal Majhi, a farmer from Raighar, who sold 143 quintals at Rs 1,426 per quintal.

"But yes, this month, we expect the process to be smoother with better connectivity.

And most of my fears over selling maize are over."

## hindustantimes

#### 'Drought to cost Indian economy \$100 bn'

NEW DELHI: The ongoing drought in 10 states of India is estimated to impact the economy by at least ` 6,50,000 crore, according to a recent study by the Columbia Water Center-India.

T he various cate gories of industries that have been affected include thermal power plants, iron and steel industry, agro-based industries, food products and beverages, textiles, and pulp and paper.

The report titled India's Deepening Water Crisis, Water Risks for Indian Industries says that the industrial sector in India is the second highest user of water after agriculture, but a lacks quantitative assessments and data, which can help gauge the actual magnitude of industrial water use and impacts.

In order to adapt to the water scarcity, many sectors are operating below their optimal production capacities, Dhruv M Sawhney, chairman, Confederation of Indian Industry-Triveni Water Institute (CII-TWI), told HT.

The resultant shortage, he added, could pull down the growth in the index of industrial production (IIP) by 40-50 basis points, while the manufacturing sector alone could take a hit of 50-75 basis points.

"This year, there have been instances where thermal power plants in West Bengal, Karnataka and Maharashtra had to shut down due to lack of water.

Another impact of drought is on groundwater, which accounts for around 55% of the water used by industries," said Kamal Vatta, director, and Romit Sen, deputy director, Centers for International Projects Trust, the India office of CWC.

The good news is that some Indian companies are already taking initiatives to tackle the scarcity. The CII-TWI has undertaken about 120 water audits, resulting in potential annual savings of about 85 billion litres of water, which is equivalent to supplying one day of fresh water to India's rural population.

Their research show that 15-20% water savings are possible by low-cost strategies with payback in four to five months, and 30-40% savings can be achieved by medium-high cost strategies with payback in 12 to 18 months.

In Bundi district of Rajasthan, ITC is assisting the local community to revive water harvesting and conserve soil. This has led to an increase in area under irrigation. These measures translate into better incomes and livelihoods for the community while saving water.

Industries also see merit and higher economic value in reusing waste water for purposes where water quality is not an important criterion such as horticulture, gardening and cleaning.

Sawhney feels water audits should be made compulsory and the industry should connect with municipalities to treat and use municipal sewage.

#### 'No drought in Maharashtra for next 4 years if monsoon is proper'

Maharashtra will not witness drought for next four years if there is "proper" monsoon this year, minister of state for finance, Deepak Kesarkar said on Thursday.

"If there is proper monsoons this time, for next four years there won't be drought. That much storage is created by the state government for farmers," Kesarkar said.



A shepard drinks water on the dry bed of Manjara Dam, which supplies water to Latur and nearby villages in Marathwada region in Maharashtra. Failed monsoons play havoc with millions of farmers in central India, leading to crippling poverty and soaring suicides. (AP)

He said the BJP-led NDA government has earmarked half of its annual budget for the agriculture sector this fiscal.

"For agriculture this year, we have not only given compensation to farmers but the insurance claims have also gone up. In addition, we have given them (farmers) a facility to reschedule loans which will give them a lot of relief," he said.

He said the results of state government's efforts will be seen "once we have good monsoon".

"We are taking utmost care to see that water is conserved is future. After proper monsoon there will be recharging of wells and borewells," Kesarkar added.

The minister said his government is also paying attention to the crop pattern.

"We are giving drip (irrigation) to sugarcane which need more water," he said, adding that some areas like Marathwada are always drought-prone due to scanty rainfall.

"This time, for four years, there were no rains (in Marathwada). This year, the forecast says there will be good rains in Marathwada," the minister added.

#### It's raining good news: Normal to excess rainfall this monsoon says IMD



A farmer removes dried grass from his rice field against the backdrop of premonsoon clouds on the outskirts of Ahmedabad. (Reuters File Photo)

In a parched country scorched by blistering temperatures, it's raining good news.

The India Meteorological Department (IMD) department on Thursday said in its updated forecast this year's monsoon will be "normal to excess", raising hopes in the country hit hard by back-to-back droughts.

It said the rains will be evenly spread, which is vital for good overall food output.

"There are zero per cent chances of the country receiving deficient rainfall while the possibility of normal to excess rainfall is 96 per cent," said IMD director general Laxman Singh Rathore.

Rathore said southwest monsoon is expected to hit Kerala in the next 4-5 days. That will mark the onset of the June-September rains vital for millions of farmers in the country where nearly 60% of the arable land doesn't have irrigation facilities.

Northern states, such as Delhi, are likely to get even more rains than the predicted all-India surplus.

In its second forecast, the IMD stuck to its April prediction that the June-September rainy season would be 106% of the long-period average (50 years).

According to the Met's classification, the monsoon is considered normal if it is 96-104% of the 50-year average of 89 cm. If rains are between 104-110%, it is considered above normal.

Although the initial forecast covers most aspects of the monsoon, the second one captures the spatial and temporal spread. Quite simply, this means the quality of rainfall region and month-wise.

The Met usually makes two monsoon forecasts, the second one being more robust of the two because it is predicted closer to the monsoon-onset date.

The IMD said rainfall would be good in the northwest region, the area that usually gets lower rains compared to other parts even when monsoon is normal because of natural climatic reasons.

Northern states, such as food bowl Punjab, Haryana, UP and Rajasthan and Delhi, will get above-normal rainfall of 108%.

In central India and peninsular India, a region that grows important crops, such as paddy, pulses and gram, the rains would be way above normal at 113%.

Heavy rainfall towards the tail-end of the monsoon season in September could be strong enough to cause floods or damage farms.

Two years of drought, triggered by a persistent El Nino weather pattern, have shriveled the rural economy. El Nino is a weather glitch marked by higher-thannormal sea surface temperatures and is known to affect the monsoon.

Last year, the monsoon was deficient by 14%, leading to a crippling drought in 302 of India's 640 districts. In 2014, the rains were short by 12%.

Monsoon failure apart, unseasonal rains and hail have battered farms too.

Poor farm incomes ultimately impact the country's overall GDP by damping down rural sales, necessary to keep the economy growing. Nearly half of all motorcycles, television sets and a host of consumer items are sold in rural areas.

#### Monsoon to arrive in 4-5 days, will be normal or excess: Met department



The monsoon delivers 70% of India's annual rainfall. It is critical for the country's 263 million farmers and their rice, cane, corn, cotton and soybean crops because nearly half of its farmland lacks irrigation. (Shakti Yadav/HT Photo)

The weather department said on Thursday crucial monsoon rains were expected to hit Kerala in four-five days, with 96% chances of the rainfall being normal to excess.

Releasing the second long-range forecast, India Meteorological Department director general Laxman Singh Rathore said northwest India will receive 108% rainfall of the Long Period Average while central India and southern peninsula will receive 113% of LPA.

The monsoon delivers 70% of India's annual rainfall.

It is critical for the country's 263 million farmers and their rice, cane, corn, cotton and soybean crops because nearly half of its farmland lacks irrigation.

Bumper rains can spur farm and economic growth and boost rural demand for gold, cars, motorcycles, refrigerators and fertiliser.

Two-thirds of India's population depends on farming for its livelihood.

Plentiful rains could also encourage the Reserve Bank of India to cut interest rates after the Reserve Bank of India (RBI) this month eased its repo rate by 25 basis points to its lowest in more than five years.

A normal or average monsoon means rainfall between 96% and 104% of a 50year average of 89 cm during the four-month season from June.

Two straight years of drought in India - for only the fourth time in over a century - have sparked anger among farmers against Prime Minister Narendra Modi.

# BusinessLine

#### Zero probability of deficit monsoon: IMD



Will hit Kerala coast within five days



Forecasting good news for the country's economy and farmers, the India Meteorological Department (IMD) has reiterated its initial prediction of 'above normal' rainfall in this year's South-West monsoon season.

"The conditions are congenial for the onset of monsoon in the next four-five days and the rainfall quantity will pick up in the second half of June," IMD Director-General LS Rathore said at a press conference, while releasing an update for the long-range monsoon forecast (June-September) on Thursday.

The icing on the cake is the IMD ruling out a deficient monsoon. "There is a zero per cent probability that the rainfall will be deficient," Rathore said. A deficient monsoon, which means less than 90 per cent of the long-period average (LPA) rainfall, could cause severe distress to farmers, crop loss and drought.

This year's projected plentiful rainfall will bring to an end to two consecutive years of drought. Last year, the country suffered a rainfall deficit of 14 per cent, while in the previous year, the shortfall was 12 per cent.

Above average

Quantitatively, monsoon season rainfall for the country as a whole is likely to be 106 per cent of the LPA, according to the projection. The monsoon is considered to be above normal when the rainfall is between 104 per cent and 110 per cent of the LPA.

Region wise, the seasonal rainfall is likely to be 108 per cent of the LPA over North-West India, 113 per cent over both Central India and the Peninsula and 94 per cent over North-East India.

While the probability of excess rainfall (rain over 110 per cent of LPA) is 23 per cent, Rathore dismissed concerns on the possibility of floods. "Floods happen if you have continuous excessive rain within a short span. But if the distribution is good, there are no floods," he said.

The monthly rainfall over the country is likely to be 107 per cent of its Long Period Average in July, and 104 per cent of the LPA in August, both with a model error of (+/-) 9 per cent.

La Nina may set in

The low rainfall of the last two years was mainly attributed to El Nino, an irregularly occurring series of climatic changes affecting the equatorial Pacific region, which causes drought conditions in Asia.

This year El Nino conditions have already turned to neutral after becoming moderate in April and weakening in early May, according to the IMD.

On the other side, there is a 50 per cent probability of La Nina conditions, which favour the monsoon, during the season. "When there is a La Nina condition, there is a probability of extension of rains," Rathore said, indicating that rains could continue in October.

#### Amul hikes milk prices as production cost rises

Hot market Drought and heat wave conditions in key producing States have forced dairy companies to raise milk prices

Raises prices by up to 2/litre in Delhi-NCR; other dairy players may follow suit

India's largest milk co-operative Amul on Thursday hiked prices in the Delhi-National Capital Region by up to 2 a litre, which will be followed by a hike in Gujarat by Saturday.

Citing the increase in production cost, the company said it will increase prices in other regions of the country over the next 7-10 days. Other dairy players may follow suit.

Rs. Sodhi, MD, Gujarat Cooperative Milk Marketing Federation, which markets Amul, said:

"We are taking a price hike of about 4 per cent, which we are doing after nearly 25 months.

The cost of production for the farmers, which on an average has gone up by 20 per cent, as well as the pressure of inflation, has led us to increase milk prices."



He added, "We are increasing prices in Delhi-NCR from Friday and in Gujarat by Saturday.

In the rest of the regions we will increase prices in the next 7-10 days."

In Delhi-NCR, the company will be raising prices by 1 on one litre and halflitre packs.

The toned one-litre polypack, which was priced at 38, will now cost 39, while the half-litre pack, which costs 19, will now cost 20.

Amul sells around 30 lakh litres of milk in Delhi NCR accounting for about 40 per cent of the pouched milk sales in the region. GCMMF's estimated average milk procurement stands in the range of 180 lakh litres/day (LLPD), which is

down by 35 LLPD or 16 per cent from the peak procurement of 215 LLPD in early January.

#### Other dairy cos

Meanwhile, a Mother Dairy spokesperson said it was not increasing the prices for now.

"Though farmer prices have been increasing over the past three months by about 2.50/kg — due to environmental temperature, summer and season demand — Mother Dairy has been able to absorb the impact.

The prices are likely to go up further in coming months. We are keeping a close watch on milk availability and the price situation and may take a call on consumer prices if the situation warrants," a Mother Dairy statement read.

A senior executive with Kwality Ltd said the company may look at following Amul and will debate the decision internally.

Conditions of drought and heat wave across the key milk producing regions of Maharashtra, Gujarat, Uttar Pradesh and Rajasthan have led to a drop in milk procurement.

In key milk producing regions, the decline ranges from 20-50 per cent across these States.

#### Weather Risk Management Services sees monsoon onset by June 6

Weather Risk Management Services (WRMS), a private weather forecaster based out of Delhi, is targeting a 10 fold increase in its subscriber base over a three to four year period.

Set up in 2004, WRMS operates in 15 States in India and in countries like Sri Lanka, Myanmar, Bangladesh, Cambodia, Indonesia, Tanzania, South Africa, Mozambique and the US.

Apart from weather forecasting, it also provides agro-advisory service on crop diseases, market-linkage, arranging for insurance and finance and also market linkage facilities in India. Revenues come on the basis of subscription models (for the services it offers) from farmers and insurance companies and banks; fixed payments; percentage basis; among others.

According to Sonu Agrawal, Managing Director, WRMS, the company caters to over 10 lakh farmers (one million).



Sonu Agrawal, Founder, WRMS. - Photo: ASHOKE CHAKRABARTY

"We intend to ramp up our presence across the various States and look at a 10 fold growth in subscriber base," he told reporters on the sidelines of a seminar on Monsoon Outlook 2016 organised here in the city.

Some of the States that will be on the company's radar for expansion include West Bengal, Odisha, Bihar, Uttar Pradesh, Punjab, Haryana and Rajasthan.

WRMS has its own network of 2,000-odd micro weather stations (also called granular weather stations).

Subscription rates for farmers vary between 500 per hectare of production and 3,000, depending on the type of service chosen.

#### Predictions

According to Kanti Prasad, climate scientist at WRMS, the onset of monsoon in the country is expected to take place around June 6 or June 7.

Monsoon rains are expected to commence over north-eastern States around June 10 and advance across West Bengal, Bihar, east UP and Himalayan belt between June 16 and 20.

The agency said the western side of the country may receive a little less than normal rainfall in June; while in the next few months there will be normal or excess rainfall throughout the country except in some pockets.

#### India's fisheries subsidies may be targeted at WTO

India against negotiations on these subsidies ahead of other issues

Subsidies given to small and marginal fishermen in India could next be targeted by developed nations at the World Trade Organisation (WTO) as attempts by members to cherry-pick issues at the multilateral trade forum continue.

"We are apprehensive of attempts being made at the WTO by some members to push negotiations on fisheries subsidies ahead of other issues.

The livelihood of a large number of our fishermen is dependent on the small subsidies we give them for items, such as their boats, which we do not want to be affected," a government official told BusinessLine.

The Centre is concerned about a recent observation made by the chairman of the negotiations group on rules stating that WTO members had expressed a 'clear interest' in getting results on fisheries subsidies at the organisation's 11the ministerial conference in 2017.

Members, including New Zealand, Iceland, Colombia, Norway, Uruguay and Pakistan, are most aggressively pushing for an early pact on fisheries subsidies at the WTO.

Some other members such as the EU, the US, Canada and Chile, too, are in favour of an agreement.

"India has been saying for long that fisheries subsidies should not be singled out and we will keep opposing it," the official said.

Other issues that are part of the rules negotiations include anti-dumping, subsidies and countervailing measures and regional trade agreements.

While India and many other developing countries have been emphasising that all issues that are part of the ongoing Doha Round of negotiations of the WTO,

including market access for industrial and agricultural goods, special measures for protection against import surges and pending issues from the earlier rounds to be addressed simultaneously, members have started carving out small pacts.

The trade facilitation pact agreed to in the Bali Ministerial Meeting in December 2013 and the agreement on doing away with all export subsidies in the farm sector reached at the Nairobi Ministerial last December were the result of efforts made by powerful members, such as the US and the EU, to push their areas of interest.

"India was made to agree to do away with all kinds of export subsidies in agriculture by 2023, while it got nothing tangible in return. If it is not careful, the same thing could happen in the case of fishery subsidies," a Delhi-based trade expert said.

#### SEBI issues draft paper on warehouse service providers



Capital and commodity market regulator SEBI has proposed to ban key management personnel and relatives of warehouse service providers from trading on the exchange that has availed its services.

The regulator has also made compliance of 'fit and proper' criteria mandatory for warehouse promoters, assayers and members of the management. These are some of the norms proposed in the consultative paper on warehousing norms for agricultural and agriculture processed commodities traded on national commodity exchanges issued on Thursday.

As every commodity derivatives exchange is required to ensure guarantee for settlement of trades, the 'fit and proper' criteria will have similar meaning as defined under Regulation 20 of SECC Regulations, it said.

The exchange should obtain an annual declaration from the compliance officer of WSP to ensure that management of WSP or persons 'acting in concert' have not traded on exchange.

Exchanges need to have at least one warehouse at each of the delivery centres as specified in the contract specification at the time of launch of contract and ensure that the third party warehouses used by WSP does not exceed over 50 per cent of its capacity.

The accredited warehouses should also take insurance for the full value of goods stored and its value should be marked-to-market on replacement value on ongoing basis.

An accredited WSP should have subscribed share capital of 10 crore and net worth of 50 crore for multi-commodities or multi location while it has been fixed at 25 crore for single commodity or single location WSPs. The net worth has also been linked with the values of goods stored.

WSPs need to submit an audited net worth certificate to the exchange every June and December. Apart from the security deposit of 50 lakh, WSPs have to furnish fixed security deposit of three per cent on the aggregate value of stored commodities, which is less than 250 crore, four per cent on the aggregate value of stored commodities up to 500 crore and five per cent on the aggregate value of stored commodities is above 500 crore.

#### Food firms to display specifics of edible oil, fat content on label

The Food Safety and Standards Authority of India (FSSAI) has notified some amendments in standards for labelling, which is expected to offer clarity to consumers on the kind of edible vegetable oil and vegetable fat used in various food products. Companies will also now have to declare trans-fat and saturated fat content on the label.

The regulation, called the Food Safety and Standards (Packaging and Labelling) Second Amendment Regulations 2016, was floated as a draft in July last year to seek public and stakeholder opinion.

The food regulator, in its notification uploaded on its Web site on Thursday, said that packaged food companies will need to give specifics on the source of edible vegetable oil on the label of pre-packaged food. So, the companies will
now need to specify the kind of edible vegetable oil used, such as mustard oil, groundnut oil among others.

#### Nutritional facts

Similarly companies will also have to specify the type of edible vegetable fat used in the product. For instance, they will have to specify whether they used interesterified vegetable fat, hydrogenated oils, partially hydrogenated oils, edible vegetable fats, margarine and fat spreads, such as mixed fat spread and vegetable fat spreads etc.

The notification also states that in terms of nutritional information, companies will also have to declare the quantity of trans-fat content and saturated fat content on the label.

#### Dakshina Kannada milk union to tap solar power

Dakshina Kannada Cooperative Milk Producers' Union Ltd is planning to install solar power plant at its dairy in Mangaluru. This will help meet the requirement of the dairy partially.

In an informal chat with presspersons on the sidelines of a programme to celebrate 'World Milk Day' in Mangaluru on Wednesday, Raviraj Hegde, president of Dakshina Kannada Cooperative Milk Producers' Union Ltd, said the cooperative union has made a provision of 2 crore for the establishment of a solar power plant at its dairy in Mangaluru.

BV Satyanarayana, Managing Director of the union, said the cooperative would install a 125-kW solar power plant on its dairy premises in Mangaluru. He said the process would be finalised in six months.

#### Milk in flexi pack

On the other plans of the cooperative, Hegde said that the cooperative has launched milk in flexi packs under the brand name 'Trupti'. This milk has a shelf-life of around 90 days.

Though 'Trupti' was launched in April, it was under observation all these days to ensure the quality parameters. The product will be released to the market in a week, he said.

The Mangaluru dairy of Dakshina Kannada Cooperative Milk Producers' Union has a capacity to produce 60,000 litres a day of milk in flexi pack.

Hegde said the Milk Producers' Union procures around 4 lakh litres of milk a day from around 600 milk cooperative societies in Dakshina Kannada and Udupi districts. Of the 600 milk cooperative societies, nearly 50 societies procure more than 1000 litres of milk a day from farmers, he said.

On an average, the Milk Producers' Union pays 33 for a litre of milk procured from farmers.

## **Business Standard**

#### TERI signs MoU with IKSL

Pact will empower farmers by providing them information about efficient use of natural resources

The Energy and Resources Institute (TERI) and a subsidiary of Indian Farmers Fertiliser Cooperative Limited (IFFCO) on Thursday signed a pact to work together in empowering farmers by providing them information about efficient use of natural resources to help them increase their productivity.

"TERI and IFFCO Kisan Sanchar Limited (IKSL) on Thursday signed a Memorandum of Understanding to work together with the objective to empower farmers and people living in rural India with pertinent and high quality information and services through affordable communication network in a sustainable manner," a TERI statement said. TERI has the expertise in developing knowledge based sustainable solutions in the field of agriculture and rural electrification to mitigate impact of climate change and promoting efficient use of natural resources.

IKSL has extensive experience in broadcasting informal messages to rural communities, this is the first time that the organisation will venture into enlightening rural households as part of its mandate.

The partnership will include creating awareness about benefits of clean lighting and cooking solutions, providing information on energy solutions and community level solutions that improve energy conditions in schools, public health centres.

"The partnership will provide bio-based products such as pesticides and fertilizers and awareness about efficient use of natural resources to farmers in order to support increased productivity with increased sustainability.

"This will enhance the livelihoods and the quality of life of over one billion Indians who depend on agriculture," Ajay Mathur, director general, TERI said

The partnership will also include training and capacity building for energy entrepreneurs and technicians at a village level for providing clean energy, promotion of integrated pest and nutrient management of various crops, promotion of bio-pesticide and bio-fertilizer amongst others.

"We are relying on the technology developed by TERI to provide the kind of support that will empower the farmer and disseminate that research knowledge through our platforms," said Sandeep Malhotra, CEO, IKSL.

#### Insecticides India aims 15% top-line growth in 2016-17

Positive forecast of a normal monsoon and new product launches are expected to boost the company's profitability this fiscal

Insecticides India Limited (IIL), which clocked total income of Rs 988.71 crore in 2015-16 (a marginal growth of 2.5 percent compared to last fiscal's Rs 964.63 crore), is targeting for a top-line growth of 15 percent in 2016-17.

Forecast of a good monsoon coupled with IIL's plans to launch a series of new products is expected to provide a boost to the company's profitability this season.

"The past two years have been tough for agriculture. However, the recent prediction by the Met department of a healthy monsoon has given a fresh confidence booster to the sector.

We are positive of making a good recovery this fiscal starting from June itself.

Our plans for this fiscal include launching a series of new products to boost profitability and growth," informed Rajesh Aggarwal, managing director of Insecticides India Ltd.

With a positive forecast of a normal monsoon this season after two years of successive drought, the company is expected to kick in a recovery period starting June 2016, as the crop protection industry gets back on growth track.

With two years of deficit rainfall affecting the farm sector, the crop protection industry has also been reeling under the impact of a slowdown.

However, owing to the variety in its product bouquet and pan India presence, Insecticides India has managed to minimise the effects of the two-year drought.

With plans to launch a series of new products, the company is looking at an encouraging top-line growth as well as profitability this fiscal.

In recent years, IIL has aggressively expanded its product bouquet, adding a variety of new products to its list of brands Nuvan, Pulsor, Hakama, Lethal, Victor, Thimet and Monocil. In 2014, IIL launched Mycoraja, its first bio-product.

Recently, the company introduced in India a new post emergence herbicide Green Label, a Japanese-origin product, manufactured in India for the first time using advanced technology, making the product available to Indian farmers at a much lower price.

# THE TIMES OF INDIA

#### Agriculture dept to introduce new crops

Paving a new way for agriculture in the state, the department of agriculture is making efforts to get farmers to try their hand at cultivating four crops hitherto not grown in Goa.

The department will provide the seeds to farmers free of cost, which include the green gram, a variety of tur dal called the vambam red gram, and two rice varieties namely Korgut selection 17 (KS17) and Korgut selection 12 (KS12).

"These varieties have been approved by the central coastal agricultural research institute (ICAR). They have found that these are suitable to Goa's climate and, furthermore, are better yielding," said director, agriculture, Ulhas Pai Kakode .

He added that the cultivation will be carried out by local farmers in the khazan areas. While the new rice varieties have to be sown in the kharif season, the new tur dal variety can be sown in both kharif as well as rabi seasons.

Introducing a new crop variety to traditional farmers is always a challenge. For the agriculture department, convincing farmers to adopt the new seeds was a tough task since traditionally farmers have been accustomed to only certain varieties of rice.

"There is fear in their mind that the new variety may fail, thus they are hesitant to grow them. Only Jaya and Jyoti varieties of rice have been harvested in the state for over two decades, until now," said Kakode adding that cultivation of new varieties is usually taken up by progressive farmers. These comprise of 10% of the total number of farmers in the state, which is approximately 2,500 registered farmers.

"Progressive farmers are usually always ready to experiment. It is only when they succeed in growing the new crop that the primitive farmer slowly adopts the new varieties," said Kakode.

#### Varsity sensitizes farmers on PMFBY

Assam Agricultural University has embarked on a mission to help farmers become aware of the Centre's ambitious crop insurance scheme.

A daylong farmers' fair-cum-awareness programme on Pradhan Mantri Fasal Bima Yojana (PMFBY) was organized on the Kahikuchi campus of the varsity on Tuesday.

Organized under the aegis of Krishi Vigyan Kendra (KVK), Kamrup, in collaboration with Horticultural Research Station, Kahikuchi, the programme was attended by over 700 farmers from different parts of Kamrup district.

The inaugural meeting of the programme was chaired by vice-chancellor of Assam Agricultural University, KM Bujarbaruah, and attended by Guwahati MP Bijoya Chakraborty as chief guest.

Delivering a speech, Chakraborty emphasized on soil health analysis to increase farm productivity and said PMFBY is an excellent scheme for farmers to recover losses caused by vagaries of nature. Chakraborty urged farmers to avail themselves of the advantages guaranteed by government schemes.

During the meeting, soil health cards were distributed to farmers from Satpokholi village which has been adopted by KVK, Kamrup, under the 'Mera Gaon, Mera Gaurav' programme.

#### Rubber farmers hail new policy

The rubber farmers are upbeat as the Centre is set to announce the National Rubber Policy. The meeting between chief minister Pinarayi Vijayan and Prime Minister Narendra Modi in Delhi has also fuelled the hopes of the farmers.

Vijayan after the meeting had said that Modi has agreed to consider the state's proposal favourably for using natural rubber in highway construction and had agreed in principle to the demand that the Centre to declare support price for rubber.

The scheme aims at protecting the farmers from the slump in the price of rubber and from crop loss due to extreme weather. The trial run was conducted here in Palakkad and Idukki districts. The benefit from the scheme is available for only those who register with the Rubber Board.

#### Minimum support price for paddy too low: Delta farmers

The decision of the cabinet committee on economic affairs (CCEA) to increase the minimum support price (MSP) of paddy by Rs 60 per quintal has not gone down well with farmers in the delta districts. They expressed their displeasure over the BJP's failure to keep its electoral promise of implementing agriculture scientist M S Swaminathan's recommendation for fixing the price of paddy.

The committee on Wednesday increased the support price of common variety paddy by Rs 60 per quintal thus providing Rs 1,470 per quintal and Rs 1,510 for fine grade variety paddy for 2016-17.

The farmers termed it the inability of the Narendra Modi-led BJP government to implement one of its main promises in the electoral manifesto in the general election in 2014.

"We expected the central government to keep its promise by implementing the M S Swaminathan recommendations by fixing the MSP at Rs 2,500 per quintal.

The latest announcement will further aggravate the agony of the farmers and it will not stop the farmers from committing suicide," said general secretary of the federation of farmers association, Cauvery delta districts Arupathy P Kalyanam.

According to Kalyanam, paddy is cultivated in 44 million hectares across the country.

The government has set a target of producing 108 million tonnes rice for 2016-17, for which the farmers should produce 168 million tonnes of paddy.

"If the central government is unable to fix the price at 50% above the production cost, fearing likely escalation of essential commodities in the open market, the state government should take the burden by announcing an incentive of Rs 500 per quintal. Otherwise, the central government should give Rs 20,000 as incentive per acre," said Kalyanam.

As of now, the state government is providing Rs 1,520, including its incentive, per quintal as MSP.

"Rs 2,500 per quintal of paddy is essential given the escalation in production cost.

Free rice provided to people through PDS outlets is preventing the state government from increasing the incentive.

So the new state government should consider fixing Rs 2 as the price for one kg of rice that will not burden the people," said district secretary of the Thanjavur district Cauvery farmers' protection association Swamimalai Vimalanathan.

The farmers said the BJP government was no way different from UPA regime in treating farmers. "The present stand of the BJP on farmers' welfare is the same as that of the UPA government.

We are wondering what Modi will do to double the income of the farmers by 2022 as he is promising," said state spokesperson of the Bharatiya Kisan Sangam N Veerasekaran in Trichy.

#### Whatsapp way to treat crops

Farmers get a 'whatsapp cover' for their crops now. To make farmers aware of the provision, agriculture department has taken to wall-writing in villages.

UP loses at least 20% agriculture production to pests and insects every year.

Whatsapp and SMS can help save the crop and bring down annual crop loss by ensuring quick treatment.

The department of agriculture has launched Participatory Crop Surveillance and Response System(PCSRS), a direct interface between farmers in the state and directorate of agriculture by way of mobile phones.

Farmers, agriculture experts and even aware citizens can drop information about crops affected with pests and insects on two mobile numbers 9452247111 and 9452257111 which the department has allotted especially to receive complaints regarding infected crops.

Those who own a smartphone can do so by using Whatsapp while others can simply drop in an SMS mentioning details like farmer's name, variety of crop, village and district where the field is located and, if easily decipherable, the type of infection the crop has caught.

As soon as the details reach the allotted numbers the same would be uploaded on the directorate's portal though manually.

"We wish to make it automated in future so that complaints can automatically be uploaded on the portal," said principal secretary, Agriculture, Amit Mohan Prasad.

The district plant protection officer has to solve the grievance uploaded on the portal in 24hours.

The progress will be monitored by the high-ups in the directorate. So far, farmers were required to visit the plant protection office himself.

The department often received complaints against officers not cooperating.

The system is accessible to all. In case farmers themselves can not write SMS or have smartphones, they can take help of others.

Farmers are being informed of the system in 'Kharif Goshthi' which is on in villages in the season. The allotted numbers are being written on walls of plant protection office in districts and in government advertisements.

In UP, all crops get infected by pests and insects. But a quick information and response can help prevent damage.

"In case of an contagious infection, officers can rush to the spot and take preventive measures like spraying of insecticides to prevent infection from spreading," said the official.

#### Crop fails, market ripe for mango from other states

Storms accompanied by rain in the past two weeks could deprive city people of Dussehri, Chausa, Desi and Amrapali varieties of mangoes.

The fluctuating weather conditions have affected 40% of standing mango crops, claims official figure.

Till the first week of May, officials were estimating an overall 85% production this year with unseasonal rain and hailstorm damaging only about 15 per cent of the crop in the month of February.

Meanwhile, farmers have estimated that over 60% harvest have been affected in the region due to consecutive storms and such weather conditions could damage more crops in the next few days.

So people might have to depend on mangoes brought from the Haryana, Punjab and Maharashtra.

The storm had hit the crop at flowering stage as well, due to which around 15% of it was affected by power-dry disease and the recent spells of storm followed by drizzle had resulted into mango-drop (mass fall of the fruit on ground from trees) in the outskirts of the district resulting in poor production this year, said horticulture inspector Anil Dube.

"Exports will also be affected," said Dubey.

However, Ramsajeewan Sharma, a farmer, said, "In majority of the areas, around 55 to 60% mango crop has been damaged so the official figure of 40% is low."

The Gandhiyari and Lalgopalganj mango belt of Allahabad, Sirathu and Kada areas of Kaushambi district, Kunda belt of Pratapgarh district and Malihabad mango belt are known for the varieties they produce.

The Kalmi variety is grown in the city but this year the harvest will be affected.

Safeda and Langda are the prominent varieties which are brought from other districts as they are not grown in the mango-belt of the Allahabad division.

#### TN govt announces Rs 54-crore package to save kuruvai crop

Chief minister J Jayalalithaa's announcement of a special Rs 54.65-crore agriculture package has come as a shot in the arm for farmers in the delta districts to save the kuruvai crop.

After convening a meeting with agriculture minister R Doraikannu and officials in Chennai on Wednesday to discuss the feasibility of kuruvai cultivation, the chief minister said in a statement that the release of water from the Mettur dam on June 12 would not be possible given the present level of 45.82 feet against its capacity of 120 feet.

The government is convinced that all six districts which have taken up kuruvai cultivation have received sufficient summer rain that has augmented the ground water level.

This is the fifth consecutive year the government is coming out with a special package to take up kuruvai due to the water scarcity.

Free three-phase power supply for 12 hours a day is also part of the package. However, the farmers are demanding 16 to 20 hours of free power supply a day. Exuding confidence that kuruvai cultivation will be carried out in 3 lakh acres using ground water, Jayalalithaa said Rs 4,000 will be provided as 100% subsidy to those who are involved in mechanised cultivation under the system of rice intensification (SRI) method.

Paddy MSP hiked by Rs 60 per quintal

The Centre on Wednesday hiked the minimum support price of paddy by Rs 60 per quintal for the 2016-17 season.

The MSP of common variety paddy has been increased from Rs 1,410 to Rs 1470 per quintal and grade A variety from Rs 1,450 to Rs 1,510 per quintal.

### THE ECONOMIC TIMES

#### Government to establish 250 agro-processing clusters all over India



The idea is to help farmers realise better income for their produce and it will also keep the prices of perishables under check.

NEW DELHI: Government plans to set up 250 small agro-processing clusters at an estimated cost of over Rs 5000 crore, Food Processing Minister Harsimrat Kaur Badalsaid today.

After getting the required approvals, theFood Processing Ministry will invite expressions of interest from both public and private players.

"We are looking to establish small agro-processing clusters near producing area of one specific fruit or vegetable. So, if someone wants to establish small processing cluster like for onion, he can do that and the government will provide subsidy of up to Rs 5 crore per cluster," Badal told reporters here.

The idea behind this proposal is to take the processing at doorstep of the farmers so that their income can be raised and at the same time wastages can also be reduced which will also help in checking the rise in prices, she said.

The blue print has been prepared to establish 250 such small clusters and each cluster will require an investment of nearly Rs 20 crore, Badal said.

Sharing the achievements of the government, the minister said that 32 lakh tonnes of food processing capacity with an investment of about Rs 2,000 crore has been established in last two years.

"With this, India has started moving toward zero tolerance of food wastages. The new addition of processing capacity will reduce wastage of fruits and vegetables worth Rs 9,000 crore per annum because the same value of these commodities can now be processed," Badal said.

On one side, this addition of capacity is helping the farmers to realise better income for their produce and on ther side, it will also keep the prices of perishables under check, she added.

Badal further said the Narendra Modi led government has sanctioned 37 Mega Food Parks, out of which eight have been operationalised. Out of these eight, six were operationalised in 2 years of NDA tenure while 2 were made operational in 10 years of UPA tenure, she said. Similarly, 134 cold chain projects were sanctioned and 81 have been completed. Out of which 44 were done in only 2 years of NDA tenure, she added.

With the completion of these cold chains, we have added a capacity of 1.28 lakh metric tonnes of cold storages, 53.05 tonne per hour of individual quick freeze (IQF) and 19 lakh litres per day of milk processing capacity, she said.