#### 03-12-2015



#### Call to focus on climate-resilient farm practices



ltural University Vice-Chancellor A. Padma Raju presents a memento to Indian Agricultural Universities Association president M.C. Varshneya, at the all-India Agricultural University V-Cs' meet in Tirupati on Wednesday

With the country's population predicted to cross 150 crore by 2030, there is a need for adopting a multi-disciplinary approach to achieve the targeted production, said Acharya N.G. Ranga Agricultural University (ANGRAU) Vice-Chancellor A. Padma Raju.

Speaking at the inaugural session of the two-day 40th All India Agricultural University Vice Chancellors' convention focusing on the theme 'Prepositioning Agricultural Universities for Target Food Production by 2030', hosted by ANGRAU, here on Wednesday, Dr. Raju stressed on the need for increasing the production by improving on the prevailing conditions besides looming aspect of climate change. "Discussions will focus on tackling the future aspects and involve all the stakeholders to arrive at a comprehensive approach. 'Land is gold' and depends on the way we use it," he added, recollecting the words of his great grandfather, who was a farmer.

YSR Horticultural University Vice-Chancellor B.M.C. Reddy emphasised on the need for maintaining quality in this aspect and focusing more on the Indian consumers along with the export potential.

Dr. Reddy also asserted that there has been lack in the linkage between farming community and emerging technologies. "There is a lot of scope for extension. Skill and knowledge upgradation of farmers will go a long way in transforming agriculture into a profitable venture," he said.

Indian Agricultural Universities Association (IAUA) president M.C. Varshneya further spoke on current situation in the country and emphasised on the need for designing climate resilient agricultural strategies to meet the upcoming challenges. "Food requirements for the predicted 150 crore population would be 300 million tonnes of food grains, 200 metric tonnes of milk, 320 million tonnes of fruits and vegetables. To move in this direction, farming must be tuned towards climate resilience and there is a need to adopt integrated farming approach," he said. Others further spoke on aspects like improving organic content in the soil, diversification of farming practices, strategies for helping small and marginal farmers and much more. Experts from agriculture and its allied sciences will be taking part in the two-day event.

#### Chenchus take to cotton cultivation

The bumpy ride from Sarlapally, a diminutive hamlet in the Amrabad Forest Reserve, up to Varvarlapally, located alongside the Srisailam Highway, is marked with acres and acres of cotton on both sides

Bacillus Thuringiensis (BT) has apparently made inroads into the Chenchu heartland of Nallamala forests in Telangana, as evident from the frequency with which the white bolls appear against the verdant backdrop in the hamlets closer to the highway.

The bumpy ride from Sarlapally, a diminutive hamlet in the Amrabad Forest Reserve, up to Vatvarlapally located alongside the Srisailam Highway, is marked with acres and acres of cotton on both sides.

As per an estimate, the Amrabad region has about 3,000 acres of cotton. With cotton, entered the usurers, and Vatvarlapally has become the hub of private loans, seed and fertilizer.

Chenchus, the particularly vulnerable tribal group (PVTG) inhabiting these forests for ages, are becoming the reluctant cultivators of this ominous crop. Otherwise, they are into subsistence farming and grow maize and millets, which they exchange for similar crops. "We are forced to plant cotton. Many non-Chenchu farmers are cultivating cotton here. If I cultivate food crops, I will be the sole one to bear the brunt of marauding animals. Earlier, the attacks would be spread out evenly across vast area, equally distributing the losses too," explains Chigurla Mallikarjun, a farmer.

Also the head of 'Chenchu Rakshana Samithi', a local organisation for protection of Chenchu tribe, Mr.Mallikarjun had sown black gram three years ago, only to incur losses.

"Literally, nothing was left for me to harvest. The deer just mopped it off," he says.

However, cotton is not without its repercussions on the traditional livelihood options. A study conducted under the Samithi has found many dead honey-bees in the cotton fields owing to heightened use of pesticides. This is severely compromising Chenchus' traditional occupation of collecting honey. In his own experience, Mr. Mallikarjun has seen that the yield of honey from each hive has come down from 10 to 15 bottles five to six years ago, to two to three bottles now. "The Chenchus are only recent entrants into any kind of agriculture. Often, their lands are cultivated by Lambada, BC and SC migrants. The genuine Chenchu

cultivators, though few in numbers, are forced by this collective choice of cotton," N. Madhu, a member of Food Sovereignty Alliance says.

Even now, for most Chenchus, honey is more valuable than cotton currency, he vouches. Associate Professor from Palamuru University, G. Manoja, working for Chenchus for some time, cannot agree more.

"Their reasoning is quite sound. They have noticed that pesticides are causing health problems, and killing their bees. Further, they can also see that the expenditure on pesticides is eating into their profits," she says.

However, cotton is not without its repercussions on the traditional livelihood options.

#### Centre convenes meeting on T.N. floods

Modi, Rajnath speak to Jayalalitha; Air Force, Navy, NDRF deployed



INS Airavat has been rushed to Chennai for relief operations.

The National Crisis Management Committee (NCMC), headed by Cabinet Secretary P.K. Sinha, reviewed the flood situation in Tamil Nadu, Andhra Pradesh and Puducherry on Wednesday and assured them of all help.

Mr. Sinha took stock of the availability of foodgrains in Tamil Nadu and directed the Ministries of Food, Agriculture, Health, Telecommunication and others to provide all assistance to the State to deal with the flood situation in Chennai and nearby areas. The government said it had already released Rs. 509 crore to Tamil Nadu from the State Disaster Relief Fund (SDRF).

The NCMC also had a videoconference with Tamil Nadu Chief Secretary K. Gnanadesikan, who briefed it of the prevailing situation, a senior official said.

As the Chennai airport is flooded and is not operational, it was decided that the airfields of Arakkonam, Tirupati, Tambaram and Tiruchi be used for relief operations.

Union Home Secretary Rajiv Mehrish had a separate meeting with senior officials of the Disaster Management Division and asked them to be in constant touch with the Tamil Nadu government.

Prime Minister Narendra Modi and Home Minister Rajnath Singh spoke to Chief Minister Jayalalithaa. Mr. Singh also spoke to Puducherry Chief Minister N. Rangaswamy and assured him of all help, and enquired with Chief Minister N. Chandrababu Naidu about the flood situation in Andhra Pradesh.

The amphibious ship INS Airavat with six integral boats, 20 divers and equipment has set sail from Visakhapatnam and is expected to reach Chennai early on Thursday. The Navy helpline 044-25394240 is running rescue and evacuation.

#### A wake up call for Coimbatore



In the past, Coimbatore too has been witness to heavy rains, washing away of bridges and loss of life.

According to data at the Agro Climate Research Centre, Tamil Nadu Agricultural University, the average annual rainfall that the city receives is 674 mm. But, it

received 1299 mm in 1979 – the highest in the last 100 years. The second highest annual rainfall was in 1924 (1085 mm) and then in 2011 (1082 mm). In the 100 years, the highest rainfall received in a day was on November 21, 1979 (107 mm).

The city gets more rain from the north east monsoon where the average rain in the district is 305 mm. S. Panneerselvam, head of the centre, says the district received 292 mm rainfall so far this year. It was 372 mm last year.

"We expect rain in the district for the next four days (December 3 to 6). Hence, this year too we might get the average rainfall from the north east monsoon. The minimum temperature here is fluctuating between 18 and 21 degree Celsius and the maximum between 27 and 30 degree Celsius," he said.

There are residents of the city who recall how in 1979, there were instances of flooding and vehicles being washed away when there were heavy rains. In the last 20 years, the Aliyar and Bhavani rivers have over flown their banks and people were washed away.

In the 1990s, a breach in Sanganur canal inundated Meena Estate and nearby areas, and flooding along Sanganur canal had led to inundation of Kongu Nagar and Kothari Nagar off Tiruchi Road.

Less than a month ago, two died when they were washed away in heavy rain.

In mid 1990's a cloud burst over the Western Ghats washed away a bridge near Thadagam. Heavy rain and cloud bursts in The Nilgiris led to landslips cutting the district completely off from the plains.

#### Monsoon may set new records for State

While previous spells ravaged Cuddalore and Puducherry the recent rains have affected Chennai, Tiruvallur, Kancheepuram

This northeast monsoon seems to be on its way to create new records for the State. While the previous spells ravaged Cuddalore and Puducherry, the north coastal districts of Chennai, Tiruvallur and Kancheepuram were the most affected by Tuesday's torrential downpour. Though there is still a month for the monsoon to wind up over the region, the State has already registered 53 cm of rainfall against its average of 44 cm. Chennai's rainfall missed the record of wettest November of the century by 39.1 mm.

The all-time record of heavy downpour was 1,088.4 mm in November 1918. Tuesday's incessant rain brought nearly 15 cm over Chennai till 6.30 p.m. inching closer to decade's highest rainfall of 23 cm received on December 3, 2005.

Several weather stations in Chennai, Tiruvallur and Kancheepuram districts received very heavy rainfall to extremely heavy rainfall as in Chembarambakkam that recorded 25 cm in less than 10 hours.

Weather experts observe that even a trough of low pressure or low-pressure area can influence such huge volume of rains with a potential of deluge.

Unlike a deep depression or cyclone that may cross the coast in a day or two, these weather systems that persists in the same area over the sea can impact cloud bursts and intense rains.

Moreover, there was not much lull in northeast monsoon activity this year when the State gets respite with long dry spells. This indicates the volatile nature of the monsoon.

While 2015 is a strong El Nino year favouring northeast monsoon, it is not the only contributing factor that brought downpour over the State. A complex interplay of global weather factors such as southern oscillation and Siberian High are also responsible for the heavy spells, notes Y.E.A. Raj, former deputy director general of meteorology, Chennai.

There were years when the State received excess rainfall even without El Nino. The year 2005 presents a classic example with 79 per cent of surplus rains.

### Rain continues in Krishnagiri, Dharmapuri districts

Holiday declared for schools in Harur and Paapireddypatty

The continuing rain in the districts, particularly in Harur and Paapireddypatty, has forced the administration to declare holiday for all schools in the two taluks. The announcement was made on Wednesday morning, after there was no let-up in the rain that continued for the third consecutive day. However, no holiday was declared for colleges. In Vathalmalai, that had reported a series of mudslides following rain over the past fortnight, the repair works taken up to check the breaches were briefly halted. On Tuesday, mud slides were reported in 18 other locations.

### Krishnagiri

In Krishnagiri, the administration had given out an alert to people in low-lying areas as the river was on spate following heavy rain in the district. The administration has requested the public to contact the toll free number 1077 for round-the-clock information from the flood control room.

Krishnagiri registered a total rainfall of 77.30 mm, while Dharmapuri registered 77.7 mm of rainfall.

#### Rain continues to drench Karaikal

Rain continues to lash Karaikal and surrounding villages on Wednesday, throwing normal life out of gear intermittently.

All private and government educational institutions remained closed on Wednesday as a precautionary measure.

E. Vallavan, District Collector, inspected the rain-ravaged areas in the district on Wednesday.

Accompanied by Manick Deepan, Deputy Collector (Revenue) and Rajasekar, Executive Officer, Public Works Department, he inspected the Tsunami habitation area in Kovilpaththu, residential colonies in Thondamangalam, Konna Kavali, the dam at Kazhugumedu, Koozh Kuditha Agraharam, Varuchakodi and Tiruvattankudi areas.

The Collector advised officials to stock essential commodities at all block-level offices and drugs at all hospital to meet any emergency.

#### 'State Water Authority must for managing floods'



S. Mohan, Professor of Civil Engineering, Indian Institute of Technology-Madras.

An IIT-Madras professor has said that the government should form authorities at the State and basin levels to manage water. At present water sources are managed by different agencies, which results in lack of coordination during flood or drought.

"They should have river basins as boundaries, instead of districts, and should be entrusted with the task of managing waterbodies, flow and floods," said S. Mohan, Professor of Civil Engineering, Indian Institute of Technology-Madras, on Wednesday.

Referring to Chenna flood havoc, Dr. Mohan said that creation of a water authority would ensure effective water management. He felt that climate change could be one of the factors responsible for unprecedented flooding but it was also a hydrological phenomenon. In a hydrological cycle, flood tended to repeat itself over a cycle of roughly 30 years. The Chennai flood was a "good deviation from the normal," and it could be a repeat of the 1976 floods, which ravaged the Adyar downstream.

He mooted the concept of 'flood zoning' by which areas vulnerable to flooding could be identified by studying earlier floods. People should be warned against constructing houses in these areas.

They should be clearly told that they would not be eligible to get compensation for any loss if they constructed houses there.

For existing buildings, the government could come out with alternative sites. Flood zoning, he said, should be done for all rivers, including the Vaigai. With availability of proper transportation facilities, residential areas could move out to Sriperumpudur and Chengalpet.

Dr. Mohan insisted that water sources should be handed over to the armed forces during monsoon as was done in the US. "The US Army Corps take over waterbodies whenever there is warning of rainfall or floods and they help in rescue operations."

According to him, it was not proper to blame the government agencies for tardy rescue operations as people were not properly trained for the job. It would not be possible to accurately forecast the amount of flood damage. With trained personnel, it should be easier to undertake rescue and relief operations in floods. Rain and flood alerts and details of whom to call and where to take shelter could be sent over mobile phones and broadcast over radio and social media. One of the main reasons for Chennai choking under flood water was the damage caused to storm water channels, he said.

**Prof.** Mohan moots the concept of 'flood zoning' by which areas vulnerable to flooding could be identified by studying earlier floods

### Transport officials offer 'nilavembu kudineer'



Collector L. Subramanian inaugurated the dengue awareness campaign by distributing 'nilavembu kudineer' at Mattuthavani integrated bus stand on Wednesday.

'Nilavembu kudineer' was offered to over 3,000 persons, as part of a campaign to make Madurai a dengue-free district, at Mattuthavani integrated bus stand here on Wednesday.

The camp, organised by officials of the Department of Transport, was inaugurated by the Collector L. Subramanian.

Officials, led by V. Balan, Joint Transport Commissioner, J.K. Baskaran, M. Singaravelu and K. Kalyankumar, Regional Transport Officers, distributed 'nilavembu kudineer,' a Siddha concoction found to be effective in dengue prevention, to the public, bus crew, drivers of autorickshaws and those who had come to obtain driving licences.

#### Pamphlets distributed

Pamphlets containing information on preparation of 'nilavembu kudineer' were also distributed to the public, according to an official press release.

### Black gram may prove a good bet for farmers in Pudukottai



Scientists explaining the advantages of cultivating blackgram to farmers.

The Krishi Vigyan Kendra has advised farmers to raise black gram as a bund crop on paddy fields as it will increase profitability and preserve soil fertility.

Raising black gram as a bund crop on paddy fields has been in vogue in conventional agricultural pattern but most farmers do not adhere to this practice these days because of poor irrigation facility.

However, in the wake of good monsoon, the Krishi Vigyan Kendra has been popularising the technique this season.

Scientists from the kendra led by S. Marimuthu and comprising M. Kathriavan, R. Manimekalai, and R.P. Gnanamalar visited one of the fields where the black gram had been raised as bund crop at their intervention.

The farmers said that apart from enriching the soil, the black gram had gone a long way in checking the growth of weeds on the paddy fields, particularly where the crop had been grown using direct sowing method.

Ms. Gnanamalar said the direct sowing had been adopted on 75,000 acres across the district during the current samba season in Aranthangi, Avudaiyarkovil, and Manamelkudi blocks.

The scientists said productivity in black gram would step up through this technique.

The kendra had been recommending simple steps for raising the pulses on the bunds for maximum utilisation of land and rainwater during samba season in the above three blocks.

The kendra has been recommending short-duration varieties, including "Vamban 4," "Vamban 5," "Vamban 6," and "Aduthurai 5" with a duration ranging for about 75 days.

Ms. Gnanamalar said the crop would not need additional fertiliser or pesticide while being raised on the bund. Farmers would benefit through an additional income of Rs. 5,000 an acre, she said.

### Ramnad farmers keen on cultivating minor millets

Seed farms ready to provide quality seeds and expand area of cultivation



Agriculture officials along with local farmers inspecting samai crop in a seed farm at Thenpoduvakudi in Ramanathapuram district on Wednesday

After nearly three decades, farmers are keen on raising minor millets in the arid district as the Department of Agriculture has stepped in with raising seed farms to provide quality seeds to farmers and to expand the area of cultivation.

Farmers, who had cultivated the short-term crops which were the best suited for the drought-prone district three decades ago, switched over to paddy and now, after completing a cycle, showed interest in minor millets, thanks to an increased consumption by the people.

N.V. Krishnamoorthy, Joint Director of Agriculture, and S.S. Shaiek Abdullah, Assistant Director, Seed Certification, inspected the seed farms in Paramakudi and Mudukulathur blocks on Wednesday.

The department have raised Samai (Little millet), Varagu (Kodo millet) and Kudiraivali (Barnyard millet) on 25 acres at Thenpoduvakudi in Paramakudi block and Nallur in Mudukulathur block to produce quality seeds, said Mr. Abdullah. He said the seed farms were in good stage and the department proposed to procure about four tonnes of varagu and 1.6 tonnes each of samai and kudiraivali to produce quality seeds and distribute them to farmers for the next season and expand the area of cultivation.

Presently, minor millets, mostly kudiraivali, were cultivated on 1,000 hectares in the district. Farmers could be assured of good yield, if they cultivated the less expensive millet crops, he said.

M.K. Subramanian, a progressive farmer who raised samai and varagu at Thenpoduvakudi, said he had hardly spent about Rs.3,500 to raise samai on one acre and he was confident of making at least Rs.12,000. The department would procure the millets at the rate of Rs.26.75 per kg.

More farmers could be roped in to raise the minor millets as there had been an increasing demand for the cereal grains as they were rich in dietary fibre and nutritious, Mr Abdullah said.

As the millets diminished glucose absorption, they have emerged as highly preferred staple food for health-conscious people in general and diabetes in particular.

### Delta districts get a respite from rain

Farmers in Nagapattinam and Tiruvarur districts are a relieved lot as water recedes

After some widespread overnight rain, there was a let up in the monsoon showers in the delta districts of Nagapattinam, Tiruvarur and Thanjavur on Wednesday.



Most parts of the delta districts received only mild drizzle during the day on Wednesday, bringing some relief to farmers worried over inundation of samba paddy crop, mainly in Nagapattinam and Tiruvarur districts. Farmers have been expressing concern that the inundation could cause serious loss of yield.

According to Agriculture Department officials in Nagapattinam, about 2,000 hectares of paddy crop was inundated in Nagapattinam district but the waters were receding from the fields as the rain subsided on Wednesday.

A senior official of the department said that a major portion of the crops inundated would survive unless there was more heavy rain.

However, crops on about 500 hectares which had been inundated in tail end areas in Vedaranyam and Thalaignaiyru areas for the past 15 days since the previous spell of rain, would be damaged, sources said. Vedaranyam received heavy rain and recorded the maximum of 139 mm of rainfall in Nagapattinam district during the 24-hour period ending at 8.30 a.m. on Wednesday.

The chief amount of rainfall recorded in other parts of the district during the same period were (in mm): Nagapattinam 73, Tranquebar 59, Sirkazhi 42.20, Thirupoondi 40, Thalaignaiyru 34, Mayiladuthurai 26.80, Kollidam 26 and Manalmedu 23.60. The district received an average of 51.51 mm of rainfall during the period.

Thiruthuraipoondi registered the maximum of 78 mm rainfall in Tiruvarur district registered during the corresponding period.

Mannargudi recorded 62 mm, Needamangalam 59, Kodavasal 48.6, Tiruvarur 30.6, Muthupet 29.2, Nannilam 26.8 and Valangaiman 15.4 mm of rainfall.

In Thanjavur district, Neivasal Thenpathi registered the maximum rainfall of 53.23 mm during the 24-hour period ending at 8.30 a.m. on Wednesday.

The chief amount of rainfall recorded in other parts of the district during the same period were (in mm): Madukkur 51.80, Peravurani 43, Kurungulam 37, Pattukottai 32, Adirampattinam 28.70, Eachanviduthi 26, Orathanadu 25.80, Ayyampettai and Vettikadu 20 each, Thirukattupalli 17.80, Papanasam 16.20, Lower Anicut 15.20, Manjalaru 14.60 and Thiruvidaimarudur 14. The district received an average of 22.22 mm of rainfall during the period.

Parts of Tiruchi district received moderate showers during the period with Kallakudi receiving 15.80 mm of rainfall.

### Vaigai water reaches Paramakudi



*To provide supplementary irrigation for farmers* 

Water released from Vaigai dam reached the bed dam at Thelichathanallur near Paramakudi in Ramanathapuram district on Wednesday.

Water released from Vaigai dam to provide supplementary irrigation for the farmers of the district, reached the bed dam at Thelichathanallur near Paramakudi on Wednesday.

Sources in the irrigation wing of the Public Works Department (PWD) said that after released from Vaigai dam at 11.20 a.m. on November 28, the water reached Parthibanur regulator on Tuesday, traversing a distance of 137 km.

It reached the bed dam at the early hours of Wednesday covering a distance of 45 km and expected to reach the Big Tank on Thursday afternoon, the sources said. This was the first time water was saved at the recently built bed dams at Kamudhakudi and Thelichathanallur, the sources said.

The water would reach the Big Tank after reaching Kunappanendal and Kalari bed dams, the sources said. The water would be diverted to 241 system tanks in the district to supplement the irrigation requirements of farmers cultivating about 40,000 acres of land, the sources said.

The government had ordered release 1,400 mcft of water from Vaigai dam in response to a proposal sent by the district administration on November 16 against the district's full credit of 2,400 mcft. The discharge would be closed on December 5, after which the district administration would stake claim for additional quantum of water, the sources said.

As the district has so far received just normal rainfall during the northeast monsoon, farmers here look up to the water in Vaigai dam to supplement the irrigation requirements. Farmers in Sivaganga also staked claim for their full credits of water from the dam.

The Vaigai water is shared by Madurai, Ramanathapuram and Sivaganga districts on 2:7:3 basis. Meanwhile, farmers have demanded that the government revise the share of water among the three districts taking into consideration that Vaigai dam received additional water from Periyar dam.

### Krishi Mela from December 11

Traditional farm equipment will be displayed in the Krishi Mela to be held in the Krishi Vigyan Kendra in Bidar on December 11- 13.

The mela will cover subjects like Agriculture, Horticulture, Fisheries and other areas. Traditional equipment for soil preparation and tilling, seeding, will be on display. Decorative cloth and anklets for bulls and nasal ropes will also be exhibited.

Native seed varieties, insecticide and pesticides will also be there. Details can be had from the KVK helpline (9480696318). — Correspondent

Attractive price, good demand make farmers take up turmeric cultivation

A view of the turmeric field at Shobanapuram on the foot of Pachamalai hills.

Turmeric cultivation at a cluster of villages on the foot of Pachamalai has been brisk, following bountiful rain due to the onset of northeast monsoon. Attractive price for turmeric, simultaneous and steep demand for the produce during the 'Pongal' festival and total clearing of bags stocked in the past three years are some of the major factors which have contributed to the brisk cultivation of the produce in the block which is ideally suited for turmeric by virtue of presence of red laterite soil all around, according to official sources.

Although the area under the turmeric cultivation has been steady on about 200 hectares, cultivation has resumed after a gap of three years.

"All these three years, the crop had been stocked and farmers had cleared it till 'Pongal' 2015.

With the total stock having been exhausted, farmers have raised the cultivation of turmeric this season to meet the demand for 'Pongal' 2016.

Farmers are hopeful of realising attractive returns during the 'Pongal' festival. Against Rs. 6,000 realised last year, the price per quintal is expected to be Rs. 10,000, says the official.

One of the farmers, Saveriar of Shobanapuram village, says he had cultivated two acres of land this season, after a gap of three years. Most farmers had cultivated Co-1, Co-2, or BSR-1variety – all of 10 months' duration.

The crop needed copious water for irrigation, particularly during the initial four or five months. "The current spell of monsoon has come as a blessing for turmeric," he says. Farmers anticipated an average yield of 20 quintals an acre.

The only advantage of the crop is that it could be stocked for about three years and marketed for a more prospective price. However, the 'Pongal' festival provides more prospects every year.

### Soil health cards to be issued from December 5

The Agriculture Department will be starting a drive to issue soil health cards across the district from December 5. Participating in a meeting on the Central government's Soil Health Mission here on Wednesday, Joint Director H. Kempegowda said soil health cards will be given to all the 2,09,000 small, medium and large land holding farmers across the district in two phases. While half the land holders will be covered in the first year, the other half will be covered next year.

Mr. Kempegowda said the 2 lakh-odd land holders have been divided into 48, 652 units by considering 10 hectares of land as one unit.

While this year they will be covering 24,326 units, they will be covering the remaining units next year.

Mr. Kempegowda said samples will be collected from each of the land holding and images of it will be uploaded to the server.

#### Sample testing

The samples will be tested, among others, for pH value, nutrients and levels of Nitrogen, Phosphorus and Potassium. After three days of testing, reports will be

sent to individual farmers. There was also facility for farmer to ask for specific testing of soil for the crop he/she wants to grow in his land.

S.M. Jayaprakash, Soil Scientist, University of Agriculture's Zonal Agricultural and Horticultural Research Station, Brahmavar, said with soil testing the farmer gets to know the fertility status of the soil. As the farmer gets to know fertility of the soil, the overuse of Nitrogen, Phosphorous and Potassium can be prevented. If a farmer wants to go for multi cropping, he/she can get information about requirements for such crops. The soil health card helps in preventing soil turn arsenic, which reduces plants resistance to diseases. Mr. Kempegowda said soil testing will be done in the Government laboratory in Hampankatta, which had been closed for several weeks. This laboratory was being strengthened and reopened. The testing will also be done in the laboratory of Krishi Vignan Kendra in Fisheries College premises in Mangaluru and in laboratory of Central Plantation Crops Research Institute in Vitla.

Deputy Commissioner A.B. Ibrahim and Chief Executive Officer of Dakshina Kannada Zilla Panchayat P.I. Sreevidya attended the meeting.

#### Mettur water level

The water level in Mettur Dam rose to 92.72 ft on Wednesday against its full level of 120 ft. The dam was receiving an inflow of 7,991 cusecs of water. About 700 cusecs is being discharged from the dam for farm activities in Delta region and also under the dam's East-West canal system in Salem, Namakkal and Erode districts, the PWD sources said.

### Agriculture scientist gets two fellowships

Well-known agricultural scientist and former Deputy Director General (Research) of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Dr. C.L. Laxmipathi Gowda received two fellowships from the prestigious agricultural research bodies in India and outside the country.

Recently, Dr. Gowda was conferred the Fellowship of American Society of Agronomy (ASA) during its 2015 Annual Meeting held in Minneapolis, USA.

Early this year, Dr. Gowda was elected Fellow of the National Academy of Agricultural Sciences (NAAS) based in New Delhi.

The Academy is a national-level body in India which is devoted to development and reseatch in agricultural sciences.

Dr. Gowda served ICRISAT for over 39 years and retired as Deputy Director General - Research.

He also served the organisation as the Global Leader for Crop Improvement Programme, and Director of the Grain Legumes Research Programme.

"The smile on the face of a farmer will always be my deepest satisfaction," says Dr. Gowda.

#### **Days of drought-resistant beans**

*Central America tests these hybrid, climate-change defying 'miracle' beans* 

"These beans are miraculous because they beat droughts," crowed Manuel Ceren, a farmer in El Salvador trying out a hybrid, climate change-defying crop produced by Salvadoran, Colombian and Honduran experts.

In Quezaltepeque, a village 30 kilometers north of San Salvador, Ceren and 13 other co-farmers feel fortunate to be the first testing the bean. They proudly showed off an abundant harvest of around 0.7 of a hectare of the bean grown on the farm where they work, to the awed gaze of visitors.

"We were very careful with this initial experiment with these beans, which were hit with a 15-day drought and two storms," the 45-year-old manager of the farm, Baltazar Garcia, said.

The type of light red bean they are using, which is also resistant to an infection known as bean golden yellow mosaic virus, was painstakingly developed with the help of El Salvador's National Center for Agricultural and Forestry Technology (CENTA).

The Salvadoran experiment came as a prolonged drought settled on Central America this year, causing heavy crop losses across a broad swathe of land stretching from Costa Rica to Guatemala. Because of the lack of water, 2.3 million small Central American farmers will need food aid, the UN's World Food Program has warned.

The CENTA-EAC bean is part of a decade-old effort by laboratories in the region to come up with hybrids able to survive and even prosper during the recurring droughts. With the help of farmers, it was noted that it was possible to come up with crops adapted to extreme weather conditions. "Our mission to produce seeds resistant to climate change, which in this region means against high temperatures, long droughts and extremely heavy rainy seasons," Rolando Ventura, another CENTA researcher, said.

The whole region is working along the same lines. In Guatemala, scientists are working on the ICTA-Chorti, which will not only resist droughts but also be rich in iron. In Nicaragua, another institute has made a variety of red bean, the INTA-Tomabu, also able to survive when water is scarce.

In El Salvador, farmers already have the option of using a type of corn called CENTA-Pasaquina, but it has fallen from favor because of its perceived low yield.AFP

# Chronicle

Jayalalithaa aerial survey today



**Chennai**: Chief Minister Jayalalithaa will undertake an aerial survey of the floodaffected areas of Chennai and its suburbs in Kanchipuram and Tiruvallur districts on Thursday. According to a late night statement by the state government, she wanted to undertake the exercise on Wednesday but could not do so because of the bad weather and the inability expressed by the pilots.

In the statement, the Chief Minister detailed the various steps taken by the government to tackle the situation in Chennai and other two districts and the relief and rescue operations being conducted.

She also disclosed that various ministers, including O. Paneerselvam, have been deputed to take charge of the relief works in different districts.



### Chennai flood: Jayalalithaa seeks Rs 8,400 cr, RS MPs offer aid

Jayalalithaa has written to Prime Minister Narendra Modi seeking Rs 8,480.92 crore from the National Disaster Response Fund.



TAMIL NADU Chief Minister J Jayalalithaa has written to Prime Minister <u>Narendra Modi</u> seeking Rs 8,480.92 crore from the <u>National Disaster</u> <u>Response Fund</u> following the damage caused by <u>heavy rainfall</u> in the state.

Presenting the demand afresh in the Lok Sabha Wednesday, AIADMK's A Arunmozhithevan said the "unprecedented flood situation" should be declared a "national calamity", adding that at least 170 people have been killed and thousands displaced.

Meanwhile, <u>Rajya Sabha members offered to donate a part of their MPLADS</u> <u>fund</u>for rehabilitation and rescue work. The idea was mooted by CPI(M) leader Sitaram Yechury, and immediately seconded by Leader of the Opposition Ghulam Nabi Azad, who said that the amount could be decided in consultation with the chairman. Deputy Chairman P J Kurien appealed to the members that the amount should be "sizeable" — Rs 50 lakh to 1 crore or more.

"I would like to state that timely release of adequate funds by the Union government will help Tamil Nadu to undertake temporary and permanent restoration of infrastructure and other utilities on war-footing basis," said Arunmozhithevan, participating in a special discussion in the Lok Sabha on the flood situation in South India.

According to the MP, Tamil Nadu requires Rs 2,630.58 crore for temporary restoration and Rs 5,850.34 crore for permanent restoration. "I sincerely pray and hope that the Union government will be more considerate in this regard after assessing the damage," he said.

While all the MPs, cutting across party lines, supported the demand, RJD's Rajesh Ranjan said the PM should visit the area — a demand later endorsed by the<u>Congress</u>. MoS for Parliamentary Affairs Rajiv Pratap Rudy said the situation was being assessed and Home Minister <u>Rajnath Singh</u> would reply to the discussion on Thursday.

#### Dry State: A better pulse rate



About 95 km from Nagpur and to the left of National Highway-7 leading to Hyderabad is a 14-acre farm that is now the cynosure of many eyes.

This field, at Daroda village in Hinganghat tehsil of Wardha district, radiates only green with no traces of white or brown dots — uncharacteristic for a state experiencing excruciating drought and for a region often seen as the epitome of rural distress. As one enters it, some seven-feet tall arhar (tur or pigeon-pea) plants bent from the middle with their tips virtually kissing the ground attract instant attention. The apparent lodging is not a result of any lashing of rains, but due to

the individual plants laden with the weight of beans numbering anywhere from 750 to 2,000 per plant. And that's precisely why Dilip Pohane is getting a string of visitors.

The high yields are particularly obvious in a two-acre irrigated patch out of Pohane's total 14-acre holding. "I expect 60 quintals from these two acres," says this 44-year-old, 12th class pass farmer. His claim of 30 quintals per acre yield isn't dismissed by the agriculture officer of Hinganghat tehsil SD Sakhare, who puts it only slightly lower at 27.5 quintals: "Either way, this is unbelievable in a region (Vidarbha), where you rarely get anything beyond 5-7 quintals in irrigated conditions," he points out.

Even in his 12-acre non-irrigated land, Pohane is looking forward to harvesting 6.5 quintals of arhar per acre, as against average yields of two quintals for most farmers. "I do proper crop management, starting with preparation of seedbed for sowing to ensure free air flow at the roots. I also give two doses of fertilisers, one in the beginning and the other in the middle of the season. In August, I do cropping of branches that help in formation of more new branches, leading to increased pod/bean yields," he explains. And interestingly, Pohane hasn't planted seeds of any certified established variety or hybrids. "I have sourced seeds not from the market, but those developed by a friend through a process of natural selection," he reveals.



The Shendurkar couple with their not-so-good crop. (Express Photo by: Deepak Daware)

Farmers in Vidarbha normally sow arhar in mid-June and it is planted as an intercrop in alternate rows with either soyabean or cotton. Pohane has shunned cotton in the last couple of years — because of low price realisations — while cultivating arhar intercropped with soyabean that is harvested by end-September. Pohane managed to reap higher-than-average yields of soyabean as well – about 35 quintals from his non-irrigated 12 acres and 18 quintals from the irrigated two acres. This entire crop he sold at Rs 3,525 per quintal.

Pohane's major worry is about the bumper arhar he is set to harvest towards mid-January: "I am afraid that as the new crop floods the market, prices will crash". Arhar is currently fetching Rs 8,000 per quintal at the Hinganghat mandi. That it may fall to Rs 5,000-5,500 levels at the time of harvest is the common refrain of farmers in Daroda, Ladki, Pohana and Ajangaon villages of Hinganghat tehsil visited by <u>The Indian Express</u> early this week.

Pohane is determined not to offload his whole produce in January, enabling traders to buy at low prices and hoard for making a killing later on: "I will sell only 25 per

cent to meet immediate family expenses and dispose of the balance 75 per cent in a staggered manner till August".

Pohane is a progressive farmer, who is also willing to take the risk of holding on to his crop to realise higher prices in the off-season. Having spend roughly Rs 20,000 per acre on his intercrop of soyabean and arhar, he is likely to strike gold this time, even if the latter's prices were to come down to Rs 5,000-per-quintal levels.

Others aren't as well-placed, though. Not very far away, in the same Daroda village, Narayan Shendurkar shows his not-so-good crop that may yield just two quintals per acre; one can count not more than 50 beans in each plant in his three-acre holding. Nor does he have Pohane's holding power; he has no option but to sell his entire crop immediately after harvesting.

Shendurkar estimates to have spent Rs 5,000 per acre on just arhar, which he intercropped with cotton. At Rs 5,000 per quintal, he can be expected to realise Rs 30,000 from selling six quintals, translating into a net return of Rs 15,000 after deducting cultivation costs.

Both Pohane and Shendurkar are united in saying that the benefits of skyrocketing dal prices in the recent period — among the reasons for the Bharatiya Janata Party-led alliance's rout in the Bihar Assembly elections — have flown largely to traders.

Arhar is grown in about 5 lakh hectares in Vidarbha. That includes 3.5 lakh hectares in the Amravati division (Amravati, Akola, Buldhana, Washim and

Yavatmal districts) and 1.5 lakh hectares in Nagpur division (Wardha, Nagpur, Chandrapur, Bhandara, Gondia and Gadchiroli). Roughly 85 per cent of the crop in Vidarbha, which accounts for half of Maharashtra's arhar area — is rain-fed. This year, Vidarbha recorded 11 per cent below-normal rainfall in the southwest monsoon season from June to September. The dry spell was, however, largely concentrated in July, impacting the soyabean crop more than arhar. The rains were, on the whole, not bad – and, at any rate, better than in the rest of Maharashtra or even India. The combination of reasonable precipitation and high dal prices has allowed at least farmers like Pohane to dream of achche din in the days ahead.

But will these hopes evaporate in January with the new crop's arrival? Ashok Goyal, Nagpur's biggest dal miller, discounts that possibility. The Rs 8,000 per quintal rate for raw arhar at Hinganghat is not an indicative price because the arrivals at present are mainly happening in markets such as Gulbarga and Raichur in Karnataka and Narayanpet in Telangana. "The prices there are ruling at Rs 11,500-12,500 per quintal. I don't see these going below Rs 10,000 per quintal even after the crop from Vidarbha starts coming to the mandis next month. Rather, they would continue to be on the higher side and the government will have to import pulses well in advance. The farmer is not going to lose out, in any case," he predicts.

That, of course, isn't bad news at all for Vidarbha's farmers — more so for the likes of Pohane, even if somewhat less for Shendurkar and others.

## hindustantimes

### Chennai rain creates ripples in Paris, Javadekar sees no climate link



The massive flooding in Chennai created ripples at the Paris climate talks where Prime Minister Narendra Modi had highlighted India's vulnerability to extreme weather, though environment minister Prakash Javadekar said the record rainfall was not linked to climate change.

Harjeet Singh of Action Aid India used pictures of the inundation in southern cities to tell the world that India was among the nations most in danger because of climate change and such natural disasters should be covered under a new compensation mechanism being formalised at the conference.

Under Loss and Damage, developing countries would be able to seek financial assistance from the developed world for "measurable" losses by extreme weather events whose frequency has increased in countries like India, government weather data for the last 100 years show.

"Climate may not be directly responsible for the flooding in Chennai but it has definitely contributed," Singh told Hindustan Times, reacting to Javadekar's statement.

The environment minister, who will be back in Paris on Sunday for the ministerial talks, said in New Delhi that what has happened in Chennai over the last ten days is "absolutely" serious but it cannot be "directly attributed" to climate change. "It is natural calamity but needs to be tackled effectively," he said.

A few days ago, Laxman Singh Rathore, chief of the India Meteorological Department (IMD), had told HT the emerging weather patterns fit the larger picture of climate change predicted by Indian scientists as well as global reports with reference to an earlier phase of flooding in southern India.

He had, however, cautioned that individual events should not be directly linked to the broader issue of climate change without evidence. The inundation in southern India does not fall into the category of "individual events".

Singh said the Chennai flood pictures showed India was not just the world's third biggest carbon emitter but among the countries at highest risk due to climate change and the world needs to understand that.

His remarks came against the backdrop of India being considered unwilling to shun its coal-dependent economic growth without rich nations understanding the reality of India's energy story.

"Coal is not our passion but compulsion," Singh said.

At another event, experts from the World Health Organization identified India as among the countries most susceptible to climate change including its adverse health impacts.

"Disaster brings diseases and we are seeing an increase in its frequency in vulnerable countries across the world including India," said a WHO representative who did not disclose his name.



#### Met prescribes week-long vigil for Chennai



Flooded Chennai would need to be prepared to deal with rain of varying intensity for another fortnight, according to the US Climate Prediction Centre.

Back home, India Met Department has on Wednesday extended the 'heavy to very heavy rain' forecast for Tamil Nadu and Puducherry for four more days until Sunday.

#### Met outlook

The Met forecast is as follows:

Thursday: Heavy to very heavy rain at isolated places over Tamil Nadu and Puducherry and heavy at isolated places over Coastal Andhra Pradesh and Kerala.

Friday: Heavy to very heavy at isolated places over Tamil Nadu and Puducherry. Heavy rain at isolated places over Kerala.

Saturday: Heavy to very heavy rain at isolated places over Tamil Nadu and Puducherry. Heavy rain at isolated places over Kerala.

Sunday: Heavy to very rain at isolated places over Tamil Nadu, Puducherry and Kerala.

#### **Rain intensity**

In New Delhi, LS Rathore, Director-General, India Met Department, told newspersons that rains will continue to batter Tamil Nadu for next seven days more but the next two days are 'very crucial.'

Rathore attributed the rains to a 'trough of low pressure' over South-West Bay of Bengal and Sri Lanka coast.

"The rains in the coastal parts of South India especially, southern parts of Coastal Andhra Pradesh, Coastal parts of Tamil Nadu and Puducherry and in some interior parts of Tamil Nadu, are expected to continue."

After four days, an anti-cyclone (which suppresses rainfall) will come into play over Tamil Nadu. This would lead to heavy rains being confined to 'some places' only.

The 'overall show' will go on for the next seven days of which the next two are very crucial. Neighbouring regions of Kerala and Coastal Andhra Pradesh will also see some rain activity during this period.

Rathore said that the Union Home Secretary Rajiv Mehrishi had chaired a highlevel meeting with the stakeholders, including officials of the National Disaster Management Force. The Tamil Nadu Chief Secretary had attended it through videoconference.

This capped the day when the incessant overnight rain relented after flooding the city and its neighbourhood like never before and putting the metropolis to ransom. But the respite may be short-lived as India Met Department has forecast the 'heavy to very heavy rain' forecast for four more days.

Rathore also said that the frequency of rain-driving troughs that moved in from the Bay of Bengal during this year has been above normal, adding to the 'moisture-carry' towards Tamil Nadu and Puducherry.

#### **Pulses rally on higher offtake**

Rally continued in tur and other pulses with demand outstripping arrivals. The Government's move to rein in spiralling prices of tur and other pulses appears to have fizzled out as reduced availability of both domestic and imported tur has lifted its prices in the past one week by about 1,300- 1,500 a quintal.



On Wednesday, tur (Maharashtra) in local mandis rose to 11,300 (9,800-10,000 last week) a quintal. Tur (Madhya Pradesh) rose to 9,500 (up 1,000 from last week).

Traders said rally in tur may end once new crop arrivals hit local mandis next month. Moong and urad also traded higher on weak availability. Moong (bold) was quoted at 8,000 (up 200 from last week), while moong (medium) ruled at 6,500-7,000.

#### Sugar up on firm demand

Sugar prices at Vashi market rose by over 20 on Wednesday tracking firm mill prices. However naka rates were unchanged with thin volume. Producers kept prices firm on back of higher demand.

On Tuesday evening Maharashtra's mills witnessed 30 percent jump in volumes. Futures prices on NCDEX also continued bullish trend. Mill tender rates were up by 10-20.

Arrivals at Vashi market was at around 62 truck loads, while local dispatches were at same level. On Tuesday evening about 18-20 mills offered tenders and sold about 70,000-75,000 bags (100 kgs each) at 2,550- 2,630 ( 2,530- 2,610) for S-grade and 2,630- 2,730 ( 2,610- 2,720) for M-grade.

#### **US fellowship for ICRISAT scientist**

Rajeev Varshney, a senior scientist with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), has been conferred a Fellowship by Crop Science Society of America (CSSA).

Rajeev, Director (Research Programme on Grain Legumes and Centre of Excellence in Genomics), received the fellowship at the society's annual meeting in Minnesota, the USA. "The fellowship was conferred recognising Varshney's work in developing and deploying genomic resources in breeding of chickpea, pigeonpea and peanut," ICRISAT has said in a statement on Tuesday.

#### **Turmeric drops on low buying**

Spot turmeric prices dropped by 200 a quintal on Wednesday. "During this week, the prices were on downward trend due to poor upcountry demand. Turmeric prices are decreasing every day and traders are hesitating to buy good number of bags at the prevailing price, as they expect prices to drop further.

The present prices will remain for another few days and if superfine quality arrives for sale, the price may increase slightly", said RKV Ravishankar, President, Erode Turmeric Merchants Association.

On Wednesday only 45 per cent of the total arrival of 4,000 bags of turmeric was sold. Hybrid finger turmeric was sold at 9,600 a quintal, down 200, while the root variety dropped by 200 a quintal.

#### National Crisis Management Committee reviews Chennai situation

The National Crisis Management Committee, headed by Cabinet Secretary P K Sinha, today reviewed the situation in rain and flood-ravaged Chennai and assured Tamil Nadu government of all possible help.

During the meeting, Sinha took stock of the availability of foodgrains in Tamil Nadu and directed Ministries of Food, Agriculture, Health, Telecommunication and others to provide all required assistance to the state government to deal with the flood situation in Chennai and nearby areas.



NCMC also had a video conference with Tamil Nadu Chief Secretary K Gnanadesikan who briefed it on the prevailing situation, official sources said. The Cabinet Secretary assured the Chief Secretary that all required flood relief materials will be provided to the state government.

The Chief Secretary conveyed that as of now they have adequate arrangements and mechanisms to deal with requirements of drinking water, food, medicines, etc. He also conveyed that the state government has mobilized a large number of fishermen boats for which services of personnel from Navy and Coast Guard would be required and the Ministry of Defence was asked to make suitable arrangements for this purpose.

Principal Resident Commissioner of Tamil Nadu Jasbir Singh Bajaj attended the meeting.

NDRF has already sent about 600 personnel and over 40 inflatable boats to be deployed in relief and rescue operations in Chennai.

Union Home Secretary Rajiv Mehrish too had a separate meeting with senior officials of the disaster management division and directed them to be in constant touch with Tamil Nadu government to provide necessary assistance.

#### Union Home Minister speaks to Jayalalithaa

Meanwhile, Union Home Minister Rajnath Singh said that he had spoken to Tamil Nadu Chief Minister J Jayalalithaa and took stock of the flood situation in Chennai and its neighbouring areas.

Singh said he has also spoken to Defence Minister Manohar Parrikar and requested him to ensure all help from the armed forces.

The Home Minister also spoke to Puducherry Chief Minister N Rangaswamy too regarding the flood situation there and assured all help.

Officials said the Home Ministry is closely monitoring the flood situation in southern states.

The Home Minister called up Andhra Pradesh Chief Minister N Chandrababu Naidu too and enquired about the flood situation in the state. Singh assured Naidu of all possible help from the Centre.

## **THE FINANCIAL EXPRESS**

Farm cover a cropper, new scheme on cards



Only two crore of an estimated 12 crore farmers in the country — earning for a population four to five times as many — had crop insurance cover in 2014-15, even as the facility was just against the cost of cultivation and barely provided any income protection. According to agriculture ministry data, a major chunk of farmers who took crop insurance were in Rajasthan, Bihar, Uttar Pradesh, Maharashtra, Karnataka and Andhra Pradesh.

The dismal performance is attributed to the low insurance payouts, level of premia that the farmers found unaffordable and hassles in settlement of claims.

Crop insurance — under the modified National Agricultural Insurance Scheme and Weather Based Crop Insurance Scheme — is virtually a non-starter in states like Punjab, Haryana and Odisha that contribute significantly to the central pool stocks of rice and wheat. Only a tiny segment of the farmer community availed of the facility last fiscal in Jharkhand, Tamil Nadu, Telangana, Himachal Pradesh and Kerala.

The agriculture ministry has identified issues such as high variability in premium rates among adjacent districts, higher premium in districts with high crop-risk profile and the cumbersome "crop-cutting experiments" to ascertain the extent of crop damage as factors that hit the spread of crop insurance across the country. Given the tepid performance of current schemes, the government plans to launch a new scheme that would cap the premium paid at about 3% of the insured value, cover a substantial part of India's farmland and crop output and make processing of claims hassle-free.

"Insurance based on input-cost mechanism is not going to help. The policy should be to protect the income of farmers from agriculture risks. Besides land record digitisation, satellite images should be used for quicker assessment of crop damage and settlement of dues to farmers," said Ashok Gulati, chair professor for agriculture at ICRIER.

According to Ramesh Chand, member, NITI Aayog, the sum insured at present covers only a fifth of the crop acreage and just 5.5% of the value of total crop output. He is of the view that instead of crop insurance, which has not worked satisfactorily so far, the country should have an "Agricultural Calamity Compensation Fund", shared between the Centre and states, for meeting a part of crop losses faced by farmers.

"Huge subsidy for crop insurance is given across the world. The US provides subsidy of more than 60% while China gives 80% subsidy. The nature of agriculture insurance is such that unless it is heavily subsidised, neither farmers nor private companies will show interest. There are issues about compensating farmers for crop losses when damages are not uniform across the country. There are serious problems of errors of inclusion and exclusion of farmers," said Chand. Under the crop insurance being offered by various public and private sector companies, farmers are presently paying a premium in the range of 3.5-8% of the insured value of the crop and the rest is borne by the government. Currently, around 20% (40.27 million hectares) of the total agricultural land is insured.

#### Both rabi, kharif crops hit by monsoon vagaries: RBI

Agriculture growth is likely to be "moderate" in the current fiscal as prospects of both rabi and kharif crops have been affected by vagaries of monsoon, the Reserve Bank said today.



Agriculture growth is likely to be "moderate" in the current fiscal as prospects of both rabi and kharif crops have been affected by vagaries of monsoon, the Reserve Bank said today.

Agriculture and allied sectors had grown at 1.1 per cent in the 2014-15 fiscal, which was down from 3.7 per cent growth achieved in the previous fiscal. "Overall, the current outlook for agricultural growth in 2015-16 appears moderate at best at this juncture," <u>RBI</u>said while announcing the 5th Bi-monthly Monetary Policy Statement of the current fiscal, 2015-16.

The outlook for agriculture is subdued, in view of both rabi and kharif crops' prospects being hit by monsoon vagaries, it said.

According to RBI, the value-add in agriculture and allied activities picked up on the modest increase in kharif output and timely policy interventions to stem the effects of the deficient south-west monsoon. During the third quarter of this year, the north-east monsoon commenced on a listless note, but the subsequent cyclonic weather has improved precipitation and raised the probability of a normal monsoon as predicted by the Met Department, it said.

"Nevertheless, the exceptionally dry start to the season affected sowing in all major rabi crops, while the excessive rains that followed may have reduced the prospects of coffee and paddy," RBI noted.

As per government data, total area sown to rabi crops is lagging behind at 317.96 lakh hectare till November 27 of the ongoing rabi season that started from October, as compared with 372.61 lakh hectare in the year-ago period.

Sowing of major rabi crops — wheat, pulses and oilseeds — is trailing behind the last year's level, signaling likely fall in rabi output.

Due to 15 per cent deficit in southwest monsoon rainfall, the government has pegged overall kharif foodgrains output to decline marginally to 124.05 million tonnes in 2015-16 crop year (July-June) from 126.31 million tonnes in the year-ago period.