

Training in profitable dairy farming at KVK

A free one-day training programme in profitable dairy farming will be conducted at Krishi Vigyan Kendra in Veterinary College and Research Institute premises on December 8.

A release from B. Mohan, programme coordinator, said that the programme is focused on rearing a calf every year at profit and enable dairy farming effectively. Farmers, members of women self-help group and interested persons can participate. They should come in person on working days or register through phone numbers 04286 266345, 266244 and 266650.

Crop yield contest: prizes for high productivity

Even as the monsoon has become active and even aggressive in some areas, the Department of Agriculture has proposed to conduct crop yield competitions for farmers cultivating paddy and a few more crops.

In a statement, Joint Director of Agriculture L. Perumal, the Department of Agriculture will organise State-level and district-level crop yield competitions, in which farmers growing paddy, maize and blackgram can participate.

Both land owners and lease-holders may participate in the competitions. Last date for enrolment for State-level competition is March 10 and for district-level competition, the last date is March 15.

A minimum of 50 cents of area should be harvested in the presence of designated district officials and farmers' representatives. Yield will also be estimated in their presence.

Crop yield competition will be conducted separately for the State and the district-levels.

Interested farmers can participate either in the district-level or State-level competitions.

Enrolment fee for the State-level competition for paddy is Rs. 100 and for other crops, the enrolment fee is Rs. 50. For district-level crop yield competition for paddy, the enrolment fee is Rs. 50 and for other crops, the amount is only Rs. 25. First prize for State-level paddy yield competition is Rs. 25,000 and the second prize is Rs. 15,000. For other crops like maize and blackgram, the first prize will be Rs. 15,000 and second prize Rs. 10,000.

Likewise, in the district-level crop yield competition, the first prize is Rs. 15,000 and the second prize Rs. 10,000 for paddy.

For other crops like maize and blackgram, the first prize is Rs. 10,000 and the second prize Rs. 5,000, Mr. Perumal said.

Chenchus take to cotton cultivation



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.—Photo: Swathi V.

acillus 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.

Maharashtra is biggest state economy, says report



Nationwide analysis finds state accounts for over 27 per cent of gross state domestic product and registered 11.69 per cent growth. Tamil Nadu, UP are next.

Maharashtra is the biggest economy within India at Rs 16.87 lakh crore in terms of gross state domestic product (GSDP), according to the latest report by credit rating agency Brickwork Ratings. The state is followed by Tamil Nadu and Uttar Pradesh.

The report, which said Maharashtra's GSDP has grown by 11.69 per cent for the financial year ended March 31, 2015, also highlights the fact that Maharashtra earns approximately 70 per cent of its total receipts through tax revenues — the highest among the bigger states — followed by Gujarat and Tamil Nadu.

The findings are part of Brickwork's fourth edition of a nationwide, multi-state research analysing finances of all the states. The rating agency looks at the State government's willingness and ability to honour debt obligations, and the rating criterion includes an analysis of political, economic, budgetary, financial and institutional parameters considered relevant to the State government's creditworthiness.

According to the report, Gujarat and Maharashtra accounted for 27.26 per cent and 25.18 per cent of GSDP respectively in 2014-15, and led other state economies in terms of level of contribution from the manufacturing sector. Other states with higher manufacturing sector share were Tamil Nadu (19.1 per cent), Jharkhand (18.8 per cent) and Haryana (18.1 per cent).

Karnataka leads in the growth of services sector, largely due to the growth in the IT/BPO/ KPO sector, followed by Tamil Nadu, Maharashtra and Andhra Pradesh. Maharashtra, along with Karnataka, has also been able to keep the expenditure on general services under check. Bihar, Orissa, Tamil Nadu and Kerala spend the most on pensions. Also, Maharashtra's infant mortality rate (IMR) of 25 is below the national average for all states, which stands at 50.

Meanwhile, at a national level, India's GDP growth rate at 7.3 per cent in 2015 exceeded that of China, which grew at 6.9 per cent. The report states that China has been registering double digit growth since 1990, and India seems to have begun that journey now.

The three fastest-growing states were Bihar at 17.06 per cent, MP (16.86 per cent) and Goa (16.43 per cent). The laggards were Telangana at 5.3 per cent, Punjab (10.16 per cent), Rajasthan (11 per cent). Telangana was formed only last year and the administrative machinery is still evolving.

While agriculture has been the mainstay of most states, employing 40-60 per cent of the workforce directly or indirectly, it has been neglected by all political parties, according to Brickwork. "The futures markets are not well developed and farmers have to bear the price risk of crops.

That results in everyone going for the same crop like sugar cane, and the sugar factories are unable to crush the standing cane.

"Banks are cautious in lending to agriculture due to fears of loan waivers that result in no repayments from rich farmers," says the report.

Wheat sowing apace in Punjab

Wheat sowing has picked up in Punjab and Haryana, after initial sluggishness due to slightly warm weather in the past month and delayed harvesting of kharif crops including rice and sugarcane.

In Punjab around 90 per cent of sowing has been completed and the rest is likely to be completed in another fortnight. In neighbouring Haryana also the pace of sowing has picked up with wheat being sown in over 17 lakh hectares area till now.

"We are expecting farmers to sow wheat in around 35 lakh hectares during this rabi season. And out of this wheat has been sown in over 32 lakh hectares till now. We are optimistic that in the next 10 to 15 days wheat sowing will be completed across the State," Gurdial Singh, Director, Punjab agriculture department, told *The Hindu*.

Even as sowing has picked up, agriculture experts are concerned about the warm weather conditions that have been prevailing in parts of the wheat-growing States of north India.

Senior agriculture expert and Punjab State Farmers Commission adviser P.S. Rangi said: "Wheat is a winter crop, a prolonged winter spell is always beneficial for the crop's yield. Now we are experiencing a little warmer weather for this time of the year. And if such weather continues for a longer period then there is always a chance wheat yield could see a drop."

However, it is too early to say if output will be impacted, he added.

In Punjab last year wheat was sown in over 35 lakh hectares and it saw a production of 152.75 lakh tonnes. In Haryana, meanwhile last year the total area under wheat was 26 lakh hectares and it produced 103 lakh tonnes.

Showers bring smile to farmers

The drought-hit Prakasam district witnessed light to moderate rain on Tuesday, kindling the hopes among farmers for a good late kharif crop.

With the trough of low pressure persisting, weathermen predicted more rains in the next 24 hours.

The revival of the north-east monsoon came as a big relief to the farmers in the district who have raised crops in 2.48 lakh hectares in the late kharif season. The farmers, who usually raise crops in 3.35 lakh hectares during rabi in the first fortnight of November, could not do so due to the prolonged dry spell.

But the current spell of rain has come as a boon to save the standing kharif crops and also go for rabi crops with optimism in the district, where paddy cultivation could not be taken up in a big way due to non-release of Krishna water.

The wet spell has given an impetus to rabi operations. "The current rain will be beneficial to the standing crops including red gram, cotton and productivity is sure to go up by at least two quintals per acre," Agriculture Joint Director J.Muralikrishna told *The Hindu*.

With the market price of red gram soaring, farmers had taken up the pulse crop in 76,850 hectares this year as compared to the normal acreage of 56,000 hectares. The rains have come at a more opportune time for growers of cotton who have raised the crop in 58,000 hectares. "Farmers are gearing up to sow bengal gram in 1 lakh hectares in the district and reduce tobacco cultivation by half to about 40,000 hectares this year," he added.

N.G. Padu recorded a rainfall of 15.4 mm on Tuesday followed by Gudlur, Ulavapadu with 15 mm each.

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- J. Muralikrishna, Agriculture Joint Director

Agri varsity Vice-Chancellors' convention begins today

The 40th All India Agricultural University Vice-Chancellors' convention, focusing on the central theme — 'Prepositioning Agricultural Universities for Target Food Production by 2030' is all set to commence at Fortune Select Grand Ridge Hotel, from Wednesday. The event is being hosted by the Acharya N.G. Ranga Agricultural University.

The convention will delve on topics such as agricultural education, research and extension to meet the changing demands along with deliberations centred on six sub themes,

Reforming and Empowering State Agricultural Universities for Target Production, State Agricultural Universities as Centres for Research Excellence, Food Production Targets of the Country by 2030 - Preparedness of Indian Agriculture, State Agricultural Universities as Centres for Reaching the Unreached, State Agricultural Universities as Centres for Academic Excellence and Policy support and the way forward. Deliberations arising from the event will also be sent to the respective State governments and the Central government for taking appropriate policy decisions in implementing the strategies relevant to agricultural development. State Ministers Prathipati Pulla Rao (Agriculture), Bojjala Gopala Krishna Reddy (Environment and Forests), Special Chief Secretary (Agriculture) P. Vijay Kumar, ICAR Director General S. Ayyapan, TTD Executive Officer D. Sambasiva Rao, Indian Agricultural Universities Association (IAUA) president Varshini and Executive Secretary R.P. Singh, Vice-Chancellors from 66 agricultural universities across the country, are slated to take part in the two-day event.

With the Indian population predicted to reach 150 crore by the year 2030 and the food requirement 170 million tonnes, the convention will focus on chalking out strategies to achieve the targeted production

When butterflies take a hit



Q. Ashoka Chakkarvarathy (right), ecologist and teacher of environmental science, with his team at the foot of Pachamalai hills.

TAKE IT SLOW ON THE HILLS

Some ways to preserve the ecological balance of a nature reserve:

- Slow down your vehicle. Roadkill is considered to significantly contribute to the population decline of many threatened species, including millipedes, birds, and snakes
- Leave green cover untouched to help tree-dwelling species
- Authorities should clearly mark the sensitive areas of vegetation to discourage human interference
- Stop wildlife from crossing roads, at least when cars are present, using equipment such as ultrasonic whistles, reflectors

ignificant number of butterflies and small animals are ending up as road-kill because of vehicular traffic in the Pachamalai hills, says a team of eco-activists that has been studying the situation since September.

"Different species of butterflies are run over by vehicles, particularly two-wheelers in the monsoon months, especially in the foothills," Q. Ashoka Chakkaravarthy, ecologist and teacher of Environmental Science, Department of Foundation Courses, St. Joseph's College, told *The Hindu*.

Mr. Chakravarthy has teamed up with engineering students and nature enthusiasts K. Arunagiri, S. Gnanapandithan, and G. Agathisan, to systematically study the butterfly population of the Pachamalai hills, 80 km from Tiruchi, and a protected nature reserve, since September.

The group has been spending at least half a day once a week along a 3.5-km stretch on the foothills approached via Thuraiyur, photographing and identifying the different species of butterflies and other small fauna that live in the region.

Lepidoptera (an order of insects that comprises the butterflies and moths) species are known to migrate to southern India in the cooler months from September to February.

The recent rainy weather had increased their numbers, said the team, but had put them at risk of mass destruction as well.

As noticed by the team, among the butterfly types that suffered are Plain Tiger (Danaus chrysippus), common rose (Pachliopta aristolochiae), lemon pansy (Junonia lemonias), and oriental common nawab (Charaxes athamas athamas). "It is really sad that this is happening at a time when we have also got a dedicated Butterfly Park (in Srirangam)," said Mr. Chakravarthy. The tendency of butterflies to engage in 'mud-puddling' behaviour — where they seek out certain moist substances such as rotting plant matter, mud and carrion and suck up the fluid at ground level or on rocky surfaces makes them vulnerable to getting hit by speeding vehicles, he added.

"Butterflies are pollinators and a food source for other species, which is why they are essential to study the impact of habitat loss and fragmentation, and climate change," said Mr. Charavarthy.

"It is important to consider not just big animals, but also small creatures such as the butterfly, millipede, frog, dragonfly, firefly, and snake in the conservation debate," he said.

Pachamalai falls under the purview of the Thuraiyur forest range, which has set up three checkpoints to monitor the motorists going up the hills. "We check every vehicle for plastic bags, alcohol, and narcotics as they are banned in this area," said R. Ravikrishnan, forest range officer.

He said the range office had not noticed animals ending up as road-kill, though "the butterfly numbers had gone up in the foothills due to the monsoons." Pachamalai, which is located 800 metres above the sea level, is home to big animals such as wild boar, bear, and the python.

A community-based eco-tourism project estimated at Rs. 2.3 crore, funded by the Tourism Department and executed by the Forest Department is nearing completion here.

Green efforts by industries

Planting of SAPLINGS is taken up by corporates and smaller companies

In another two years, the stretch from Coimbatore International Airport to Avinashi Road can be called the "pink road", remarked an official of the Forest Department. Nearly 2000 Bauhinia Purpurea saplings have been planted on the roadside and thanks to the rains, they have all grown well, the official said. The saplings were planted with the support of a corporate firm.

There are many companies that are taking up massive tree planting in memory of former President A.P.J. Abdul Kalam. The Department had proposed planting one lakh saplings this year and it was done. Now, more companies and educational institutions have come forward to continue with the effort.

Conservator of Forests I. Anwardeen said that industries and companies in Coimbatore are not only planting saplings in large numbers but are also supporting their maintenance with tree guards, etc.

Managing Trustee of Siruthuli Vanitha Mohan says when companies take up tree planting, they buy 200 to 250 saplings. The Miyawaki concept is catching up and companies are planting little forests along their compound walls.

They are also taking up green cover projects on reserved sites and poramboke land.

Instead of planting only on special occasions, massive planting projects should be taken up regularly on reserved sites in the city too, she adds. In Tirupur, companies joined hands and planted one lakh saplings in three months under the "Vanathukul Tirupur" project.

PM expresses concern over rain

Narendra Modi calls Chief Minister Jayalalithaa, promises support for relief operations

Prime Minister Narendra Modi spoke to Chief Minister Jayalalithaa on Tuesday evening and expressed concern over the torrential and recurring rains which have hit the coastal districts of Tamil Nadu for the second time within a span of a few days.

The Chief Minister thanked Mr. Modi for immediately deputing the Central team to Tamil Nadu to assess the damage after the first spell of rain and to submit its report, said an official release.

A fresh spell

Ms. Jayalalithaa informed the Prime Minister that even as the Central team had completed its visit, the State experienced a fresh spell of torrential rain. She added that the State machinery is fully geared up to meet the challenge of the unprecedented torrential rain which is the heaviest recorded in over 100 years and has battered the northern districts especially, Chennai, Tiruvallur, Kancheepuram and Cuddalore.

The release said that the Chief Minister also briefed Mr. Modi that the State has deployed personnel of the State Disaster Response Force, the Fire and Rescue Services and the Coastal Security Group in all the affected places along with Revenue, PWD, Highways, Municipal Administration, Rural Development and Health officials to carry out rescue and relief operations.

Senior IAS officers have been deputed to all the affected areas and senior Ministers are monitoring the relief and rescue work.

The State has requisitioned the services of the Army, Navy and Air Force to assist in the rescue and relief operations.

The Prime Minister assured Ms. Jayalalithaa of all support to the State Government in the rescue, relief and restoration operations.

The Chief Minister said the State machinery is fully geared up to meet the challenge

This monsoon may set new records for State

Downpour targets Chennai, Tiruvallur and 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, Tuesday's torrential downpour targeted the north coastal districts of Chennai, Tiruvallur and Kancheepuram.

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.

Osai to monitor 1 lakh saplings planted in Coimbatore

Osai will take up a study of one lakh saplings planted by the Forest Department in the district this year.

The survival rate of saplings in any greenery drive used to be a bone of contention in urban areas owing to issues such as watering and stray cattle menace. The success of the drive is largely dependent on the survival rate of the saplings.

According to K. Kalidasan of Osai, the organisation will take up the study next week, jointly with officials of the department, and four teams have been formed for the purpose. The survival rate of the saplings is good in Coimbatore now because of the rains. The study will also reveal details on the growth, and maintenance of the saplings.

Rainwater channelised to sea to prevent flooding



Alternative:Flood water being diverted and channelised to run into the sea in Tuticorin on Tuesday

In a bid to prevent flooding, water flowing through a drain channel at Mela Sankaraperi after the rain, was blocked with sand bags and channelised on the other side to direct the flow of floodwater into the sea.

Around 500 sandbags were dumped underneath a culvert over Madurai bypass road. As per the directive from higher officials, these remedial measures were carried out by the Corporation authorities in association with Highway officials, reliable sources told *The Hindu*.

Since catchment areas of Therkkuveerapandiapuram, Saminatham and Sillanatham received heavy rains in November, water streamed down Mela Sankaraperri Odai, passed through the culvert and entered a tank at Pandarampatti. Normally, when the Pandarampatti tank got excess water, it would flow to Akkarai kanmoi.

Since the waterbody between Pandarampatti and Akkarai kanmoi had been encroached by several houses and private companies, there was flooding and water entered the residential localities of Adiparasakthi Nagar, Muthammal colony, Dhanasekaran nagar and Kurinji nagar in Tuticorin recently.

Hence, the flow of flood water through Mela Sankaraperi odai was diverted and channelized towards the sea. Seven earthmovers were engaged to deepen the channel for about one-and-a-half kilometres. Besides, the approach roads to private factories were cut off at 11 locations to channelise the water flow, sources said. Tuticorin Sub Collector, S. Gopala Sundara Raj inspected the work at Mela Sankaraperi.

These arrangements should not be on a temporary basis and permanent shutters should be erected near the culvert and the flow channel leading to the sea, at Pudurpandiapuram, should also be maintained properly, R. Senthil, a resident of Muthammal colony, said.

Chronicle Chronicle

Tamil Nadu rains: 200 mm in 12 hours



Chennai: It can't get any worst. A third onslaught in a gap of one month and arguably the deadliest of the lot worsened the flooding problem in Chennai. A trough of low pressure over Southwest Bay triggered at least a dozen intense spells on Tuesday. The Nungambakkam weather station recorded close to 20 cm of rainfall and Meenambakkam recorded over 25 cm in just 12 hours. The met department has forecast and warned that the system would bring more rains till December 5.

Though November rainfall just fell short of breaking 100-year-old record by 38 mm, the December month is likely to breach all records and has also begun on a wet note, rather disastrous way considering the rain repair works were still on in the city bearing the brunt of the northeast monsoon since last month.

After a brief lull, heavy rains resumed overnight on Monday and peaked on Tuesday morning and continued all day crippling the normal life. Already, the state's seasonal rainfall from October 1 to November 25 is recorded at 484.7 mm as against the normal rainfall of 334.7 mm, a 45 per cent excess. Among the districts that recorded highest rainfall, Chennai ranks second after Kancheepuram receiving 1,140.4 mm, almost doubling the normal rainfall.

Many weather stations have recorded over 15 cm of rainfall in Chennai and its suburbs, but the worst affected was usual suspect Tambaram which received a mammoth 35 cm of rainfall coupled with gusty winds. The catchments of Chembarambakkam reservoir also received over 30 cm of rainfall forcing the government to open the flood gates. Kattupakkam suburb also got pounded with close to 30 cm of downpour. Places like Poonamallee, Puzhal, Taramani, Anna University, Kolapakkam and Avadi too recorded over and above 15 cm of rainfall.

The weather forecast for next five days is equally worrisome as widespread heavy rains are predicted across the state, especially the north coastal districts, including Chennai. The neighbouring Puducherry was also pounded by overnight rains recording at 15.2 cm in last 24 hours ending 8.30 am on Tuesday.

Trains cancelled, commuters hit

As many as 12 trains bound to southern Tamil Nadu districts from Chennai Egmore was cancelled and five trains diverted as Tuesday's heavy rainfall affected rail commute severely.

The status of inbound trains was undecided with railway authorities contemplating cancelling several of them as water-logged rail tracks near Tambaram crippled the city's rail network.

The suburban service between Beach and Tambaram was affected with trains running only until Pallavaram. "I have my friends waiting at Tambaram station and they told me there have been no train since afternoon," a perplexed S. Vijay Kumar told Deccan Chronicle at Guindy station.

By 2 pm, the service towards Tambaram was stopped near St Thomas Mount for a long time as rainfall increased. Railway police told Deccan Chronicle that the Pallavaram-bound trains were being operated in the main line. Subsequently, several passenger services were delayed by over two hours.

Many suburban services on Beach-Tambaram route as well as Central-Arakkonam-Tiruvallur route were cut as railway authorities told Deccan Chronicle that inclement weather in Avadi, Pattabiram and other northern city suburbs contributed to the cancellation. However, MRTS services were unaffected largely although the movement of the trains was considerably slower.

Jayalalithaa reviews flood situation



Chennai: A flood alert has been issued in Tamil Nadu as coastal districts including Chennai, Tiruvallur, Cuddalore, Kancheepuram and Nagapattinam continued to receive heavy rain without break for more than 16 hours. Chief Minister J. Jayalalithaa convened an urgent meeting with the state top brass and reviewed relief arrangements.

She also announced postponement of half-yearly examinations for school students scheduled in December to first week of January 2016. She directed state ministers to expedite monsoon works by visiting their respective districts.

Reviewing the status of 89 major reservoirs in Tamil Nadu and inflow, she ordered release of water from 45 major dams. She instructed the health department to move in-patients from hospitals that are inundated and also advised electricity board officials to prevent deaths due to electrocution by double checking the safety of electrical cables and transformers.

Post lunch, secretariat wore a deserted look forcing highways, public works department, local administration and rural development departments to pass instructions to all its field staff that no leave would be granted to them during rain.

Ripon Buildings, the seat of Chennai corporation, saw four senior ministers Natham Viswanathan, R. Vaithilingam, Gokula Indira and B. Valarmathi visiting the marooned heritage building to assess the monsoon damage and measures taken by city corporation.

Ministers and state officials also conducted inspections directing district collectors to open sluice gates of more than 40 per cent of dams and reservoirs in northern Tamil Nadu. State transport corporations and metropolitan transport corporation suspended bus services as several state highways, including Grand Southern Trunk road and district main roads were marooned.

Floods affected traffic between Chennai- Kancheepuram-Villupuram and Tiruchirappalli districts resulting in stranding of vehicles on highways. The situation continued till late night. At Thiruporur and parts of OMR here, fire and police personnel started evacuating people as the localities were marooned by Tuesday noon.



Maharashtra seeks Rs 4,500-cr aid to tackle farm crisis

The Centre had sent officials to some drought-hit districts of Marathwada to ascertain facts presented by the state government



Sources conveyed that Radhamohan Singh indicated some delay in receiving the comprehensive report from Maharashtra government. Facts based on ground situation had to be ascertained first.

Maharashtra is seeking a central assistance of Rs 4,500 crore to override the agriculture crisis in the state following drought, hailstorm and unseasonal rain. Chief Minister Devendra Fadnavis and Agriculture Minister Eknath Khadse have taken up the matter with Union Finance Minister Arun Jaitley and Union Agriculture Minister Radhamohan Singh.

The Centre had sent officials to some drought-hit districts of Marathwada to ascertain facts presented by the state government. The Centre indicated that delay

in release of the financial package is because of late filing of report. The state government's own package included crop loans to farmers worth Rs 34,200 crore during 2014-15 (November). The state government stood guarantor for banks and institutions lending to farmers.

Sources conveyed that Radhamohan Singh indicated some delay in receiving the comprehensive report from Maharashtra government. Facts based on ground situation had to be ascertained first.

A senior cabinet minister said, "We sought a special package and sent a detailed report four to five months ago. But there were some aspects related to guidelines, which led us to revise our report."

The second kharif sowing coupled with early rabi sowing led us to wait for completion of crop cycle before making fresh assessments. Fadnavis had given directives to the department of relief and rehabitation to process compensation and special subsidies to farmers without waiting for financial help from the Centre.

The state conveyed the details along with the financial component to tackle the crisis. It included a special package to 68 lakh farmers from 14 districts of Vidarbha and Marathwada, which have maximum suicides. Overall, 819 crore were incurred on free power and 47.28 lakh new electricity connections. Waiver of electricity charges, heavily subsidised rice at Rs 3 per kg and wheat at Rs 2 per kg upset the state budget.

Almond Panna Cotta recipe: Get the taste of Italy's favourite dessert in

your kitchen

Satiate your sweet tooth with this delicious, easy-to-make recipe!



A traditional and delicious Italian custard, panna cotta is really easy to prepare. No, we are not kidding! You just need the right recipe. Chef Nita Mehta tells you how.

Serves: 4

Ingredients

2 cups packaged milk (preferably Tetra Pak)

4 tsp gelatin

250 g fresh cream

½ cup sugar

1-2 drops almond essence

¹/₄ cup almonds (blanched and chopped)

2-3 tbsp strawberry crush

1 inch cinnamon

1 tsp cornflour

½ cup water

A few almonds (slivered and toasted)

Method

*Pour ½ cup milk into a small bowl, and stir in the gelatin powder. Set aside.

*In a saucepan, stir together the remaining milk, cream and sugar, and set over medium heat. Try not to bring the mixture to a full boil.

*Heat the gelatin and milk mixture, stirring continuously until the gelatin is completely dissolved. Now, pour this mixture in the saucepan, add almond essence to it and mix well. Refrigerate it for an hour.

- * After an hour take out the mixture from the fridge and add chopped almonds to it. Give it a stir.
- *Transfer to individual moulds and then refrigerate it for another 3-4 hours.

*To prepare the sauce, mix cornflour in 2 tbsp water and add the strawberry crush to it. Now, put water in a saucepan with the cinnamon stick and let it simmer for a couple of minutes. Mix it all together and let it simmer till you get a sauce like consistency.

- *Remove the cinnamon stick from the mixture and let it chill.
- *Take out the panna cottas from the fridge, decorate it with slivered almonds and serve it with the sauce.

hindustantimes

Warm winter poses threat to optimum wheat yield in Madhya Pradesh



Most farmers in Madhya Pradesh may not be aware of the UN conference in Paris, but they are certainly losing sleep over climate change that threatens to impact the wheat yield this year.

"The temperatures have been exceptionally high for this time of the year, and it will certainly impact the yield of the early sown crop as low temperatures are needed for optimum tillering. The overall yield will depend on the ratio of early sown crop and the temperatures in the coming days," agriculture expert and farmer Samar Singh said.

In October this year, scientists had advised the farmers to go for late sowing of wheat to neutralize the effect of comparatively warmer winter in Madhya Pradesh this year. The problem is that many farmers look at the availability of water rather than the temperatures before sowing the crop.

"At present, the nights are cool but temperature needs to come down in the coming days for optimum yield," head of Indian Agriculture Research Institute (IARI), Indore regional station, Dr S V Sai Prasad said.

According to data of the state agriculture department, area under wheat cultivation is 55.85 lakh hectares this year and about 70% sowing of wheat has been completed.

The Regional Meteorological Centre (RMC), Bhopal, has predicted relatively warmer winter in MP this year with temperatures expected to remain 1.5 to 2 degrees Celsius above the normal mark. Higher average temperatures would translate into a lesser intensity of cold, according to RMC.



Extreme rain forecast for Chennai, Kanchipuram, Tiruvallur districts

The 'soaker trough' spraying rain into Tamil Nadu, Puducherry and coastal Andhra Pradesh will not get a move off its current perch over South-West Bay of Bengal until Saturday, global weather maps show.

India Met Department has maintained heavy to very heavy to extreme heavy rain over North Tamil Nadu coast for the rest of today.

Extreme rain

The extreme heavy rain alert is valid for Chennai, Kanchipuram and Tiruvallur districts in North Tamil Nadu. Heavy rain has been forecast for the rest of the State, especially in the delta regions in the South.

Meanwhile, the trough is a only a primitive form of a low-pressure and represents an elongated (unlike circular in a 'low') area of lower pressure.

But it can do much more harm given the right ambient conditions, as is now being revealed.

The trough features a cyclonic circulation moving around Sri Lanka and which is responsible for anchoring the strong easterly North-East monsoon flows around, and by extension, across entire Tamil Nadu.

The flows are strongest over the North Tamil Nadu coast, which explains the targeted, unrelenting heavy to very rain over an area from south Coastal Andhra Pradesh to Chennai to Puducherry.

Cloud system

The flows have ensured that a semi-permanent and hyperactive cloud system hang over Nellore-Chennai-Puducherry half over land and half over sea to pour down its contents over the area.

This (Wednesday) morning, satellite pictures showed the heavy bank of cloud rather unmoved from the previous day's alignment covering south coastal Andhra Pradesh, and North and Central Tamil Nadu coast, and gradually probing areas to the South as well.

Compared to this, rain activity over Sri Lanka, around which the embedded cyclonic circulation is moving, is muted with only a couple of parcels of cloud over the North of the Island in Batticaloa and Jaffna.

The 'soaker trough' in the South-West Bay is forecast to push itself to the West of Sri Lanka and move into the South-East Arabian Sea, setting off rain and thunderstorms on the West Coast from next week.





Planning to cultivate paddy? Wondering where to look for farm hands? No worry. A group of social entrepreneurs in Palghat district of Kerala have joined hands to establish a labour bank.

This bank has a pool of over 30,000 rural womenfolk, who have gained some expertise in rice farming.

"The effort is aimed at economic upliftment of rural women coupled with tackling shortage of farm hands," says Vinod Kumar, Chief Executive, Palakkad Coconut Producer Company Ltd (PCPCL) and member of Little Tree, a training centre established in partnership with Maithri, a Non-Governmental Organisation.

Little Tree is located at a distance of about 30 km from Palghat at Urkulam, Muthalamada.

Farm orientation

"Basic training in rice cultivation is being imparted at this centre. It is a residential programme. Women from Palghat, Malappuram and Thrissur districts are being identified for the training. They are trained in batches of 60, and this includes field training/practical orientation," Padmanabhan Bhaskaran, Vice-President, PCPCL, said.

Farm contracts

The women are empowered under the government-supported Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in Kerala, he said, and pointed out that the trained women do not go as farm labourers but contractors.

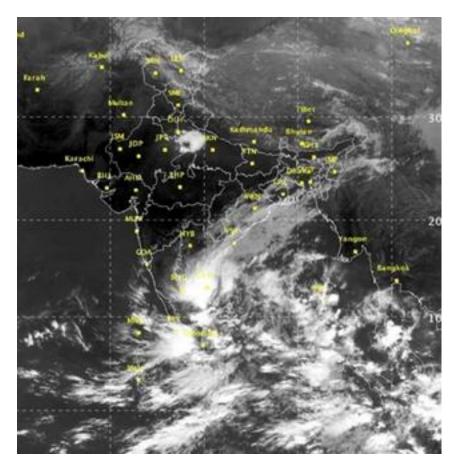
"These people do not work like daily labourers or coolie. They are contracted for a fee and this depends on the acreage of the field. The cost of transplanting an acre of paddy works out to ₹7,000-8,000 an acre when done manually. These women are trained in mechanised farming practices. This not only brings down labour cost but also in greater coverage of area. While they are assured of employment for at least 50 days in a season, the manpower requirement (for say transplantation) would just be 2-3 per acre and they can easily cover up to 3 acres in a day," Vinod Kumar explained.

Little Tree is partnering with Green Army (said to be the first Labour Bank in India) is building labour bank to tide over paucity of farm labour.

Tamil Nadu's woes to aggravate as heavier rain forecast

The hyperactive trough that is drenching Chennai and the rest of Tamil Nadu will stay 'live' until the weekend to extend the wet spell for as long and beyond.

The rains will continue to be heaviest around Chennai, Tiruvallur and Kanchipuram districts and adjoining south coastal Andhra Pradesh, say global forecasts.



Heavy rain forecast

The Regional Met Centre, Chennai, agrees, and has put out the following warning: Wednesday: Widespread showers over Tamil Nadu and Puducherry with isolated extremely heavy rainfall over Chennai, Tiruvallur and Kanchipuram districts.

Heavy very heavy rain over coastal Tamil Nadu and Puducherry. Isolated heavy rain over interior Tamil Nadu.

Thursday: Widespread showers with heavy rain and isolated heavy to very rain over Coastal Tamil Nadu and Puducherry.

Isolated heavy rain over interior Tamil Nadu.

Friday: Widespread showers with isolated heavy to very heavy rain over Coastal Tamil Nadu and Puducherry. Isolated heavy rain over interior Tamil Nadu.

Saturday: Isolated heavy to very heavy rain over Coastal Tamil Nadu and Puducherry.

Isolated heavy rain over interior Tamil Nadu. There is no significant change in weather seen until Tuesday.

Potent trough

The causative trough (precursor of a low-pressure area) is expected to weakening after North-Easterly flows rush through the Palk Straits and the Gulf of Mannar to form another trough in the Lakshadweep Sea.

Even this trough will continue to attract the moisture-laden flows from the Bay of Bengal to Gulf of Mannar, raining it down on the Tamil Nadu and Puducherry coasts along the way.

These rains will gradually weaken from the North from Tuesday (December 8), and concentrate more on south Tamil Nadu and adjoining Sri Lanka.

The movement of the trough into the Lakshadweep Sea will in turn set off thunderstorms along the West Coast as also the interior of the peninsula.

Meanwhile on Tuesday, heavy rains lashed parts of Tamil Nadu, including Chennai, and neighbouring Puducherry, disrupting flight movement and leaving several areas inundated.

There is apparently no respite on Wednesday either since the Met Office has forecast heavy to very heavy rainfall for Tamil Nadu, especially over the northern districts as well as Puducherry.

The havoc wrought by the heavy downpour brought home the realisation how a fully-charged trough – no full-fledged low-pressure area here or depression here – can hold a metropolis to ransom.

Some of the troughs can drop anchor for much longer than slowly-paced low-pressure areas and produce sustained heavy to very showers, which is on view right now.

Tamil Nadu's coast is always vulnerable to the whims of the Bay of Bengal which stays more active than the Arabian Sea through the monsoon seasons – South-West or North-East.

India set to become a urea surplus state soon: Govt

India will soon become an urea surplus state from a deficit state and start exporting it, Union Fertiliser Minister Ananth Kumar said today.

Kumar told Lok Sabha during question hour that the country will produce 20 lakh tonnes additional urea this year after a number of pro-active steps, including revival of defunct fertilizer plants, taken by the government.

"We will soon become a urea surplus country from a urea deficit country as we are going to produce 20 lakh tonnes additional urea this year. We will start exporting urea soon," he said.

The Minister said there was no crisis of fertiliser anywhere in the country and all states and union territories were satisfied with its availability.

"There is no shortage of fertilisers during the current sowing season," he said.

Further, to ensure adequate availability of fertilisers, the Ministry has taken a number of steps that include assessment of month-wise demand, regular monitoring of movement of all major subsidised fertilisers throughout the country by a web-based monitoring system besides others, he said.

Whitefly attack to shrink cotton output to 370.50 lakh bales



The total cotton output in the country is estimated to be 370.50 lakh bales for the 2015-16 season which began on October 1, an industry body said today.

This figure is same as the October estimate of 370.50 lakh bales (of 170 kg each), the Cotton Association of India (CAI) said in a release here.

However, the estimate is lower by 12.25 lakh bales than the output of 382.75 lakh bales for the cotton season 2014-15, it added.

The crop damage in the northern region due to the white-fly attack this year remains a cause of concern, the association said.

The total crop estimated in the northern zone during the season 2015-16 is 47 lakh bales, down from 53.50 lakh bales last year.

The projected balance sheet drawn by the CAI estimated total cotton supply for 2015-16 at 463.15 lakh bales, while the domestic consumption is pegged at 325 lakh bales, leaving a surplus of 138.15 lakh bales.