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# THE HINDU

## **Nutrition-packed nut**



World Coconut Day-2015, themed ‘Coconut for Family Nutrition, Health and Wellness’, will be celebrated on September 2.

The Coconut Development Board has said in an official release that around 500 farmers from coconut-growing states of the country are expected to attend the function here.

Of the total farmers, around 75 per cent coconut-growers are from Andhra Pradesh.

An exhibition will be held at the venue showcasing the latest technologies in the coconut sector and various value-added coconut products.

As per the latest statistics from the Horticulture Department, Ministry of Agriculture, Andhra Pradesh occupies the first place in coconut productivity at 14,997 nut per hectare.

The state occupies the fourth place in terms of area with 1,21,920 hectares being used for cultivation of coconut, while in terms of production with 1828.46 million nuts, it occupies the fourth place in the country, the release said.

Since 1990, the board has been implementing various development schemes in Andhra Pradesh for expansion of area under coconut, improving production and productivity.

During 2015-16, the board allocated Rs 1284.32 lakh for implementation of various development schemes in Andhra Pradesh for coconut.PTI

## Following bees

*Micro sensors stuck to honey bees to help study mass deaths*



Australian scientists revealed that they are using micro-sensors attached to honey bees as part of a global push to understand the key factors driving a worldwide population decline of the pollinators.

There has been a sharp plunge in the population of honey bees, which pollinate about 70 percent of global crops, or one-third of food that humans eat including fruits and vegetables, raising fears over food security.

“The micro-sensors that we are using help us ask questions that we couldn’t ask before because we’ve never been able to quantify the behaviour of bees both out in the environment and in their hives,” said Gary Fitt from Australia's national science agency CSIRO.

The sensors, 2.5 millimetres (0.1 inches) in width and breadth and weighing 5.4 milligrams — lighter than pollen that bees collect — are glued to the back of European honey bees. Sophisticated data collection receptors are also built into hives.

The CSIRO, working together with US technology firm Intel and Japanese conglomerate Hitachi, is now offering free access to the sensor technology and data analytics to identify global patterns. “What we are gathering with the sensors is environmental information from

where the bees have been,” said Fitt, the science director of the CSIRO’s health and biosecurity division.

“It tells us about their changes in behaviour; how often and how long they’re foraging, whether they’re feeding, whether they’re collecting pollen and what they’re doing in the hives. We can then see if we can interpret those changes to tell us how they are responding to different stresses.”

About 10,000 bees and their hives in the southern island state of Tasmania have been tagged, with others set to be monitored in the cities of Sydney and Canberra.

Around the same number of bees in Brazil were also being monitored by researchers, with interest expressed from scientists in Europe and North America, Fitt said.

“(We’ll) use the same approaches and ask similar questions but in different parts of the world to get a much bigger picture of the problem and collectively find solutions,” he added.

In countries such as the US, beekeepers lost 42 percent of colonies over the 12 months to May this year — the second-worst year on record for US bee mortality, with the worst season reported in 2012-13, the US Department of Agriculture have estimated.

#### **West Bengal govt. selling onions at subsidised rates**



One of the outlets in Kolkata where the State government has started selling onions at a subsidised rate.

In the wake of steep hike in onion prices, the West Bengal government has started selling onions at a subsidised rate of Rs.50 per kg from 49 outlets in the city and its outskirts.

“We had no other alternative, but to take this decision after a meeting with traders,” State Agriculture Marketing Minister Arup Roy told PTI.

As the traders were apprehensive that prices would remain high till fresh crop reached markets, the State government resorted to this strategy to give some relief to the people, he said.

Chief Minister Mamata Banerjee had earlier directed traders to crack down on illegal hoarders and also asked the task force to visit markets to ensure people were not charged exorbitantly.

Mr. Roy said one would be able to buy 500 gram packets of onion for Rs. 25 per day from government outlets and selling of onions at subsidised rate would continue till prices eased.

Of the 49 outlets, 25 stalls were run by the Agriculture Marketing department, while the remaining would be run by the Horticulture Department.

Stating that all these outlets were in Kolkata and its adjacent Howrah, North 24 Parganas and South Parganas districts, Mr. Roy said: “Some of them are mobile units. The State government has plans to increase the number of outlets.”

These outlets would also come up in *sabzi mandis* in other districts, he said.

The Minister said at present the wholesale price of onions was around Rs. 60 per kg, while the retail prices were varying between Rs.70 and Rs.80 per kg.

To a question, he said: “The State produces only four lakh tonnes of onion against its annual demand of 8.5 lakh tonnes. We earlier produced only one lakh tonne of onions, which has now gone up to four lakh tonnes with special initiative of the Chief Minister,” he said.

“We have to depend on Maharashtra and Karnataka for the rest to meet our demand. Onion prices could come down only after fresh produce enters the market in early November,” Mr. Roy added. - PTI

### **Farmers want oil palm price at Rs. 9,000 a tonne**

The Cauvery Delta Farmers’ Welfare Association has urged the State government to fix the minimum procurement price for oil palm at Rs. 9,000 a tonne.



In a statement here, Mahadhanapuram V. Rajaram, working president of the association, said raw and refined palm oil accounted for 80 per cent of the cooking oil imported by the country every year. About 1.90 crore tonnes of cooking oil was consumed in the country every year. The Union Agriculture Ministry is said to have requested the Finance Ministry to increase the import duty on cooking oil. Chief Minister Jayalalithaa had taken steps to promote oil palm cultivation in districts other than Chennai in the State, he said.

### **Jasmine selling at Rs. 500 a kg**



Mullai was selling at Rs. 450 a kg in the Sathyamangalam market in Erode on Wednesday.

At the Sathyamangalam Flower Market, the only place in Tamil Nadu where farmers fix prices, jasmine was sold for Rs. 500 a kg on Wednesday ahead of Onam in Kerala, Varalakshmi Vratam in Karnataka and 'Muhurtham' day on Thursday in Tamil Nadu.

The cost of *Mullai* (Arabian jasmine) ruled at Rs. 450 per kg, *Kanangabaram* Rs. 600 and *Kakada* at Rs. 450 per kg. Only a week back, the cost of these flowers was just one-tenth.

If the trend of previous years continues, the price could increase further on the eve of Onam on Thursday, flower growers said.

Pricing depends on the arrivals. On Wednesday, the arrival was a little over six tonnes, Muthusamy, president of Tamil Nadu Vivasayigal Malar Urpathialargal Thalamai Sangam said, adding that the demand-supply dynamics will determine the price on Thursday.

Flower growers themselves trade their produce at the Sathy Market thereby leaving little scope for commission agents.

The nearly 1,200 members of the Sangam together cultivate flowers on an estimated area of 50,000 acres spread over several villages around Sathyamangalam including Sikkarasampalayam, Pudukuyyanur,

Puduvadavelli, Thandampalayam and Kenjanur. The flower growers who suffer heavily when the cost of flowers crashes have been asking the Agriculture Ministry for sanction of a cold storage.

The produce is sold everyday to buyers based in Coimbatore, Tiruppur, Erode, Salem, and neighbouring States of Andhra Pradesh, Kerala and Karnataka.

“When the price gets too low, we transport the produce ourselves to Mysuru Market for better returns,” Mr. Muthusamy said, informing that the Sangam has made an earnest attempt to start a perfumery unit at Sathyamangalam for value addition.

### **Farmers to get subsidy in their bank accounts**

As the government has decided to directly transfer the subsidies to farmers’ bank accounts on the lines of cooking gas subsidy, farmers have to buy agriculture inputs, seeds and fertilizers in the demonstration stalls by paying full amount from this season.

The Department of Agriculture used to offer seeds, inputs and farm machinery at subsidised rates to farmers while organising block-level demonstrations. But, from this year, the subsidies will be directly transferred to the farmers’ bank accounts under Electronic Clearing System (ECS). Personal Assistant to Collector (Agriculture) R. Harivasan and Joint Director of Agriculture N.V. Krishnamurthy said that officials had started informing the farmers in the villages about the new system and advised them to open bank accounts.

As per a Central government directive, the department was required to demonstrate certified seeds of less than 10 years and latest agriculture equipment, seeds and machinery would be purchased from private dealers and make them available to farmers, they said.

Farmers, who raised seed farms, used to receive subsidies in the form of cheques and demand drafts.

The department would demonstrate seeds of paddy and pulses and farm inputs next month, ahead of the northeast monsoon, they said adding the paddy seeds to be displayed included NLR 344449, CO 51, Anna R4 and CO 50.

Farmers had cultivated paddy in about 1.30 lakh hectares in the district and about 80 per cent of them had taken up direct sowing to raise rain-fed crops. The direct subsidy would be available only to targeted beneficiaries, they added.

### **Get agriculture implements for rent**

Eight centres would come up in the district to provide farm implements, and machines on a rental basis to farmers.

The Agriculture Engineering Department would set up 20 centres in each blocks. Of which eight were sanctioned for 2015-16.

Committees can be formed to buy the equipments costing up to Rs. 25 lakh.

A grant of Rs. 10 lakh would be provided and the balance Rs. 15 lakh has to be born by the committees.

Committees in Salem, Ayothiapattanam, Vazhapadi, Yercaud, Veerapandi, and Panamarathupatty can contact the Assistant Executive Engineer (Agricultural Engineering), Kumarasamipatti, Salem-7.

Those in Mettur, Kolathur, Tharamangalam, Nangavalli, Mecheri, Omalur, and Kadayampatti blocks can contact the Assistant Executive Engineer (Agricultural Engineering) at Mohan Post, Kunjandiyur, Mettur.

Those in Attur, Thalaivasal, Gangavalli, and Pethanaickenpalayam can contact the officer at 60 feet Road, Gandhi Nagar, Attur.

The committees in Sankari, Edappadi, Konganapuram, and Magudanchavadi can contact the officer in Ramakrishna Complex, Salem Main Road, Sankari, a release here has said.

### **Applications invited from farmers for awards**

The University of Agricultural Sciences, Bengaluru, has invited applications from farmers from 10 districts coming under its jurisdiction for the district-level best farmer and taluk-level best youth farmer (for both men and women) awards. The awards will be presented during the Krishi Mela in November. Call 080-23418883 for details.

### **‘Plant-derived antimicrobials a boon to organic farming’**

While organic products are getting popular across the globe, use of plant-derived antimicrobials for improving food safety in organic agriculture has become an emerging area of research, Kumar Venkitanarayanan, Professor, Department of Animal Science, University of Connecticut, USA, has said.

Talking to media persons during his brief visit to the Kerala Veterinary and Animal Sciences University (KVASU) headquarters here, Dr. Kumar said the United States Drug Administration recommended the production of food products using methods that preserved the environment and avoided synthetic materials, including pesticides and antibiotics.

The U.S., Germany and France were the emerging markets for organic products. Food safety was emerging as the major component of sustainable organic agriculture and the World Health Organisation (WHO) listed the major concerns on food safety as microbiological hazards such as salmonellosis and chemical toxins such as aflatoxins, he said.

“Nearly 2.2 million people are killed annually worldwide, including nearly 3,000 deaths in the U.S., due to salmonellosis, Dr. Kumar said.

Interventions for improving food safety were required at pre-harvest, post-harvest and consumer level to tackle it. Identification of treatments and practices that maintain and improve animal health and food safety without jeopardising the organic standards had been made critical for the progress of the organic livestock industry, he added.

Plant-Derived Antimicrobials (PDAs) such as phytophenolics were regarded as safe, food grade and bio degradable with plant defence mechanism, he said.

### **Coconut wood furniture unit to take off soon**

Department of Wood Science, Kerala Agricultural University and Coconut Development Board have joined hands to set up a furniture demonstration unit that will tap the abundance of coconut timber supply in the State.

The project, for which an outlay of Rs. 50 lakh has been sanctioned, is linked to Coconut Board's ongoing replanting and rejuvenation of coconut gardens programme. The Board is providing aid to coconut farmers to remove senile palms and to replace them with new ones.

According to an estimate by the Board, there are a total of 18 million coconut palms in the State of which 14,83,107 have been reported to be senile.

This implies that there is abundant supply of coconut timber in the State though the palms are now cut down and mostly wasted, said E.V. Anoop of the Wood Science Department.



A Board official said that the removal of senile and sick palms was in progress. Root-wilt affected palms are concentrated in the districts of Alappuzha, Pathanamthitta, Kottayam and Idukki though the Coconut Board programme is on throughout the State.

The furniture unit is meant to make export-oriented, high-end furniture. It is also expected that people in Kerala will give up their apparent aversion to using coconut timber for making furniture.

The furniture unit, which will be a technology demonstration facility, is being set up in collaboration with the Kodungalloor Coconut Producer Company and Kerala Furniture Consortium, said Mr. Anoop.

The response has been positive as coconut producer companies and furniture-makers are eager to utilise the new opportunity, he added. The venture will work on a value chain model involving coconut timber extraction, conversion on site, design and manufacture. One of the most difficult areas for farmers now is to find labour for cutting down the palms and transporting the timber.

### **Outbreak of coconut disease confirmed**

*KAU scientists visit Marayur, say virus is phytoplasmas*



Scientists from KAU inspecting a disease-affected areca nut plantation at Anackalpetty, Marayur, in Idukki district on Wednesday.

A team of scientists from Kerala Agricultural University (KAU), who visited Marayur on Wednesday, following large-scale spread of a disease among coconut and areca nut trees, confirmed that it was phytoplasmas, a micro plasma like virus spread by insects.

Phytoplasmas had been identified as a major disease that spreads fast and could pose a threat to cultivation in the entire region. An earlier report in the *The Hindu* had highlighted the disease spreading in Marayur. The expert team also suggested that the only remedy is to cut the affected trees and destroy them to prevent its fast spreading. K. Murgugan, Marayur Agriculture officer, who accompanied the team said that to prevent its spreading farmers would be detailed on the measures taken. The symptom of the disease is yellowing of the outer leaves, resulting in decay of the tender leaves and complete drying up of the trunk. Once the disease is noticed in a few coconut trees, it spreads to nearby farms.

He said that the Agriculture Department has also requested the help of the Central Plantation Crop Research Institute, Kasaragod to suggest measures to contain the disease. He said that the team also found root grab and deficiencies of nutrients in the soil.

The team consisted scientists Jim Thomas, A.B. Mathew and D.P. Sureshkumar. Govinda Raju, S. Manikandan and Angel C.R., officials of agriculture department, also accompanied them.

### **State's initiative in vegetable production bears fruit**

*Nearly 500 tonnes of homegrown vegetables hit markets*



The policy of cultivating vegetables wherever land is available has increased production and reduced dependency on vegetables from other States. A fully stocked vegetable market in Kottayam.

The State's initiative on the vegetable front appears to have borne fruit, this Onam. Not only has the arrival of vegetables from Tamil Nadu been hit, the price has also been stabilised in the Kottayam market. According to wholesalers, the situation is not different in other districts.

“In the past, by this time, the market would have off loaded more than 40 loads of vegetables from Tamil Nadu, in connection with the festival buoyancy. This time we have so far brought only 18 loads for the Onam market,” said Siby Devasya, one of the wholesale vegetable merchants in Kottayam market.

According to him, most of the rural markets have become alien to the wholesalers.

“A large number of people are engaged in raising homestead vegetable gardens. Their dependency on the market has come down,” he said. Many of the residents associations had also launched their individual initiatives in raising homestead vegetable gardens, he said.

Says T. K. Sajeev, another merchant here: “It's not only the quantity that is hit. The price of all vegetables other than onion is lower than last years. The price of ladies finger is half of

last years while chilli goes for just two-third of last years' price. Raw plantain goes for Rs.30 to 33 a kg, " he pointed out.

According to C. Geetha, Deputy Director of Agriculture, the department's concerted effort in vegetable production has contributed immensely to the unprecedented increase in production. It was from 2012-13 that the new initiative took root.

### **Jump in allocation**

From the meagre allocation till then, the budgetary allocation for vegetable production campaign found a quantum jump: "Today I have a budget of Rs.3.60 crore for the various schemes in this regard," said Ms Geetha. To begin with, the campaign focussed on school students who were given packets of seeds to raise kitchen gardens. Through various schemes, the department brought in the services of women, residents associations, clubs and even police department and jails. "Our policy was to cultivate vegetable where ever we found fallow land," she said.

In addition, the department also raised eight clusters of traditional farmers in the district, who were extended a financial assistance of Rs.15,000 per ha. Each cluster had an area of five hectares.

"We cannot say the produce is 100 per cent organic. I would put it at 80 per cent organic, much better in quality than those coming from outside," Ms Geetha said. "We don't have the exact figures, but so far nearly 500 tonnes have entered the local market through our efforts and the flow will increase in the coming few days," she said.

She is, meanwhile, aware of the new challenges posed by the glut in the market and the impact of a slump in prices on the future of the campaign itself. "Time has come for us to think about the way ahead, about new facilities for long term storage of vegetables and fruits and opening up of new markets for the produces from Kerala," she said.

***We cannot say the produce is 100 per cent organic. I would put it at 80 per cent organic.***

### **Drought-hit farmers seek increase in procurement price of milk as relief**



The Thenpennai - Palar link scheme will help revive agriculture in Vellore district. File photo of the Palar at Vaniyambadi.

The Vellore district consultation meeting of the Tamil Nadu Farmers Association has urged the Tamil Nadu government to enhance the procurement price of milk since the farmers, who are already hit by drought have been driven to suicides because of the sudden reduction in the price of milk and in the procurement of milk by Aavin.

A resolution to this effect was passed at the consultation meeting held under the presidentship of K. Kannaiah Naidu, district president of the association here on Wednesday.

### **Drought-affected**

By another resolution, the association requested the government to declare Vellore district as drought-affected, and grant drought relief at the rate of Rs.20,000 per acre.

By another resolution, the association requested the government to expedite the implementation of the Thenpennai-Palar River Link Project which was announced by Chief Minister Jayalalithaa in the Assembly in 2011. In the light of the continued failure of the monsoon and the dryness of the Palar River, it is high time the project is expedited, the resolution stated.

### **Mineral water plants**

The association urged the government to cancel the licences given to the three mineral water plants in Alasandapuram in Vaniyambadi taluk since the indiscriminate extraction of groundwater by the plants has affected agriculture and drinking water availability owing to the drying up of the wells and deep borewells of the farmers in the villages of Alasandapuram, Simukkampattu, Kollapalli, Dhasirivattam, Guntur, Kanakapuram, Melpallathur, Kilpallathur Mottur, Thimmampettai, Mindapattu, Kathiripuram, Narayanapuram, Venkatarayapuram and Kathirikuppam.

The association urged the government to direct the three cooperative sugar mills in the district to expedite payment to the cane farmers who supplied sugarcane to them. The

association also pleaded for long term loans to the farmers to enable them to cultivate the fresh sugarcane crop and augment production.

### **Check dam across Vaigai to recharge groundwater**

The Public Works Department has started constructing a massive check dam across the Vaigai at an estimated cost of Rs. 2.65 crore under the NABARD scheme to augment irrigation and drinking water sources in Andipatti union.

The 50-metre-long check dam would have a capacity to store 1.5 mcf of water. Water could be stored up to 1.5 metres in the check dam. Rainwater would be stored in the dam and used during summer, the officials said.



Collector N. Venkatachalam (left) inspecting the construction of a check dam across the Vaigai at Govindanagaram near Theni

Construction of the concrete bed across the river was over. Strengthening of banks on both sides of the river and raising the dam wall would be done in the next phase.

When the check dam was built, groundwater table in the areas within 1.5-km radius would rise, benefiting Govindha Nagaram, Ramachandrapuram, Athankaraipatti, Solaithevenpatti and nearby areas.

A total of 120 irrigation wells in these areas would be recharged ensuring indirect irrigation to 49.26 acres of agriculture lands. Storage in the check dam during summer would be useful for the cattle farmers too.

Above all, the quality of groundwater would change as groundwater in these areas was saline. Infiltration of water into the ground would soften the hard water and improve its quality, they added.



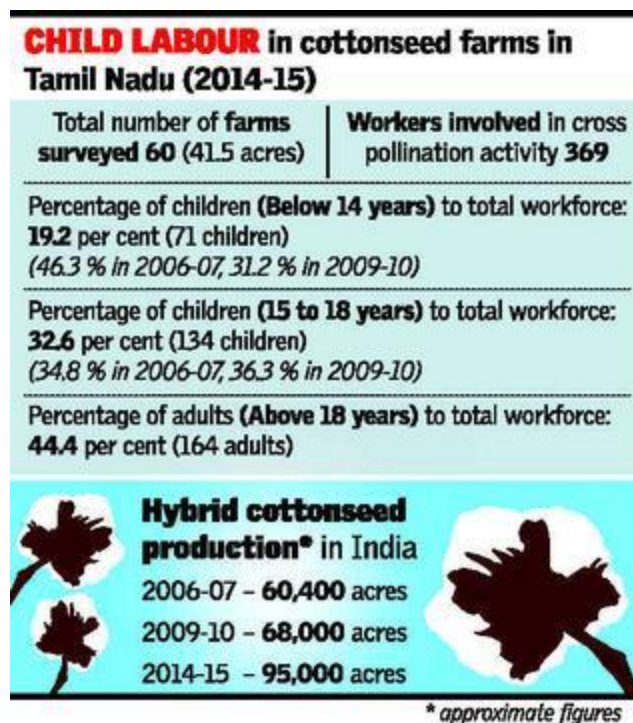
After inspecting the construction work at Govindhanagaram on Tuesday, Collector N. Venkatachalam said that top priority would be given to this project considering the commencement of monsoon and the condition of drought-prone areas in Theni and Andipatti union in the district.

Farmers who had dry lands would immensely benefit from the dam. The district administration would extend all assistance to complete the project quickly.

The project was expected to be completed by October 15, he added.

He advised the officials to stick to the deadline in completing the project to enable farmers to enjoy the benefits.

### Healthy sign: study reveals decline in child labour in cotton fields



With issues of child labour in hybrid cotton seed production in the country receiving global attention, a study has revealed that there is a sharp decline in the number of children below 14 years employed in the highly labour intensive activity in the recent years.

The study was jointly conducted by India Committee of the Netherlands (ICN), an NGO involved in advocacy work on human rights issues and Stop Child Labour, a coalition of NGOs and trade unions, between July 2014 and January 2015.

A team led by Davuluri Venkateswarlu, Director of Global Research, Hyderabad, carried out the study in 396 cotton seed farms in six States, including 60 farms in Tamil Nadu, which account for 90 per cent of the total cotton seed production in the country and submitted a report, "Cotton's Forgotten Children."

Of the total 95,000 acres of cotton production in India in 2014-15, Gujarat has largest area covering 48,000 acres (50 per cent) while Attur taluk in Salem district is the main production centre in the State with about 7,000 acres (7.4 per cent), followed by Kallakurichi in Villupuram district and Sitteri in Dharmapuri district.

However, the study revealed that production centres were relocated and expanded to new areas such as Karumandurai Hills in Salem district owing to rise in production cost, mainly labour cost, and companies opting for shift from large to small farms. The study revealed that new production centres are remote tribal locations where most of the seed growers are small and marginal farmers mostly depend on family labour.

The survey finds that girls account for 65 per cent of the total child labour and most of them are school dropouts or have never been to school. Since, child workers are mainly employed for cross-pollination period between October and December every year, temporary dropouts during these months have also increased.

Though the survey estimates that there is a drop in child labour in the State from 38,700 in 2006-07 to 15,500 in 2009-10 to 11,900, there is a sharp increase in the number of children (15 to 18 years) employed in the farms from 17,000 in 2009-10 to 22,400 in 2014-15. This is due to increase in production area and more families taking up the work.

Child rights activist P. Balamurugan told *The Hindu* that awareness campaigns and coordinated action by various departments in carrying out raids in cotton fields in the Attur region has led to drop in child labour in cross-pollination work.

However, children in the 15-18 age group are more vulnerable now and focus should be to prevent employing them.

## **Turn system in Vaigai dam**

*Six-day water release to be followed by four-day suspension*

The Public Works Department (PWD) has announced introduction of turn system of irrigation from August 31 for the double-crop areas in Madurai district till September 19.

In a meeting held with double-crop farmers and PWD officials here on Wednesday, it was decided to implement turn system from August 31, under which six days of water release would be followed by four days of suspension.

“Currently, over 900 cusecs of water is released every day for irrigation since July 15. On August 31, we will stop the discharge for four days and again release water on September 4. Water will be released till September 10 and then stopped for four days,” said Periyar-Vaigai Basin Circle Executive Engineer M. Muthupandian. The decision to introduce turn system was made following the dwindling storage level in Vaigai dam and to ensure that there was adequate water available for irrigation for the single-crop area.

“In the double-crop area, more than 80 per cent of farmers have finished transplantation. Since the storage in the dam is dwindling, the available water will last only for a few days. But with the turn system, the present storage will last for at least 40 days,” said M. Murugan, president of the farmers’ association for double-crop area in the Periyar-Vaigai basin.

A few farmers said that a few tail-end areas in the double-crop area had not received water and hence the turn system would benefit them.

### **Livestock de-worming camp in all districts on August 29, 30**

The Animal Husbandry Department will be conducting a de-worming and reproductive health campaign in all villages in the district on August 29 and 30 to livestock distributed under a State Government’s scheme.

In a release, District Collector M. Lakshmi said that milch cows, goats and sheep were distributed free of cost to women belonging to Below Poverty Line across the State to increase milk production.

### **Beneficiaries**

Under the scheme, a total of 4,618 milch cows were distributed to 4,618 beneficiaries in 92 village panchayats from 2011 to 2015 while 1,56,940 goats and sheep were distributed to 39,435 beneficiaries in 863 village panchayats.

Ms. Lakshmi said the department had decided to conduct the reproductive health camp and mass de-worming campaign in order to benefit the cows, goats and sheep distributed under the scheme with the objective of increasing milk production in cows and increasing weight gain in goats and sheep provided under the scheme.

The Collector said besides the beneficiaries of the free distribution scheme, other farmers could also avail the benefits of the camp by getting their animals checked.

### **Flower farmers reap it rich in festive season**

*Huge demand for marigold and roses ahead of Onam and Varalakshmi festival*



Flowers in demand as Onam and Varalakshmi festival fall on the same day.— Photo: N.Bashkaran.

The Western region largely hinges on the supply of flowers from Hosur. However, this year, a series of factors has come together to marginally undercut this supply chain.

With Onam and Varalakshmi festivals falling on the same day, the demand for flowers has gone up, not just in Tamil Nadu, but also in Karnataka, Andhra Pradesh, and Kerala and even in West Asian countries. But, the supply has not met with the demand, observe retailers and major producers here.

This year, there has been a 20 per cent fall in production locally. Poor rainfall in May, when the fields are prepared for cultivation, has had an impact on production. Hosur gets its supply from the interiors of Denkanikottai, and Thally here and Anekal and Hoskote across the border. Labour shortage has also affected production, say retailers.

There is major demand from Coimbatore, with a reckonable Malayali population, followed by Madurai and Chennai.

While the four days preceding the Onam festival have witnessed hybrid marigold fetching Rs.250 per kilogram and normal marigold fetching Rs.70 to Rs.90 per kilogram, the preceding week has seen prices as low as Rs.15 per kilogram, says Siva Prasad, president of Hosur Small Farmers' Federation.

Major rose exporters usually turn domestic during such seasons. However, this time, with both festivals falling on the same day, rose exporters could not divert much to the domestic market, what with large Malayali population in the West Asian countries.

Siva Prasad, who had just sent his final consignment to the western countries on Tuesday, has also diverted his flowers directly to Thrissur and Ernakulam in Kerala. There has been a supply diversion to Karnataka and Andhra Pradesh too.

Karnataka has turned lucrative for the suppliers from Hosur area as it is a major consumer of flowers for Varalakshmi Vratham. Similarly, button roses are being sold at Rs.300 per kilogram in Hyderabad, which has pushed retailers there to source it from here in Hosur.

“Karnataka is big on Varalakshmi festival, so it makes sense for the local producers to tap on the neighbouring market,” says Mr. Siva Prasad.

Also, the prompt payment by retailers from Karnataka makes them attractive for the bulk suppliers here.

### **Poultry scheme extended to cover native chicken rearing**

Tamil Nadu Poultry Development Scheme, which is being implemented in Virudhunagar district since 2012-13, is to be extended this year to cover native chicken rearing.

According to a press release from V. Rajaraman, Collector, it has been planned to start 107 farms to rear native breeds of chicken.

A farm could be started to rear 250 birds with an investment of Rs 1.29 lakh, with 25 per cent incentive-linked subsidy from the State government.

Farmers and entrepreneurs, with or without experience in poultry farming, could apply for the scheme.

They should own a minimum land of one square foot per chicken. Training in poultry farming would be given to beneficiaries.

Those rearing broiler chicken under the scheme were not eligible to apply.

Interested persons may contact the nearest veterinary clinic or office of the Regional Joint Director of Animal Husbandry for more details.

### **Paddy cultivation hit due to power deficit**

*Farmers not able to complete transplantation of crop*





Recently transplanted paddy facing moisture stress in Sirguppa taluk of Ballari district due to lack of power.

When there was power there was no water in the Tungabhadra and the Vedavati (popularly known as Hagari) due to deficit rain. Now there is water in both the rivers but no power.

The erratic supply of power during the past fortnight has severely hampered paddy cultivation using lift irrigation.

“By the end of August, the standing paddy crop should have been one to one-and-a-half months old and we should have used two rounds of chemical fertilizers and also should have taken up spraying. But in this kharif season, the transplantation of paddy has been severely affected in around 10,000 hectares, depending upon lift and borewell irrigation, mainly due to erratic supply of power,” Basavaraj Swamy, a farmer, narrated the plight of paddy cultivators to *The Hindu*.

In Sirguppa taluk, 42,963 hectares (ha) is covered under irrigation — 23,100 ha through the canals of the Tungabhadra reservoir, around 6,000 ha through lift and another 4,000 ha with the help of borewells.

Transplantation of paddy is almost complete in the command areas served by canals.

But the transplantation of paddy in the other 10,000 ha, irrigated through lift and borewells, has been limping for want of uninterrupted power.

“Power is supplied only for about six hours in the day, with frequent power cuts and so we are unable to take up the transplantation of paddy. The delay in transplantation of paddy would affect the yield as winter would set in at the time of harvest, which is another cause of worry,” he added.

Meanwhile, farmers from Kooriganur, Booduguppa, Magasugur staged a dharna in front of the Gescom office at Siruguppa and another group of farmers from Oolur, Konchageri, Dasapur, Byrapur, Hoshalli, Hagalur, Darur, Karur, Shanavasapur, Talur and the surrounding villages laid siege to the 33 kv sub station near Sirigeri cross to protest against the erratic supply of power.

They have threatened to intensify their agitation if no steps are taken to ensure uninterrupted power supply for about nine hours daily.

### **Chandy urges Centre to help rubber farmers**

Chief Minister Oommen Chandy has urged the Central government to take up the responsibility of helping rubber farmers in Kerala through the Rubber Board.

Inaugurating the distribution of subsidy to farmers under the rubber production incentive scheme, he called on the Centre to provide financial support if it wanted the State to shoulder the burden of helping rubber farmers. “The Union government benefits from the sector, including the revenue from rubber cess. But there has been no response to pleas from the State. It is in this context that the Government of Kerala has taken up the responsibility,” he said.

Mr. Chandy said he would meet the Prime Minister and Union Ministers for Finance and Commerce with the demand for financial assistance for the scheme. He added that the price stabilisation fund for rubber would be continued after exhausting the outlay of Rs.300 crore.

Presiding over the function, Finance Minister K.M. Mani said the price stabilisation fund was launched when the price of rubber had fallen to Rs.130 per kg. “Now that the price has further dropped to Rs.108, the scheme would require an additional allocation of at least Rs.700 crore,” he said.

Additional Chief Secretary K.M. Abraham and Rubber Board chairman A. Jayatilak were among those who participated.

### **Home-grown veggies find many takers**



Locally produced organic vegetables have received a rockstar welcome with many of the hundreds of temporary vending points being sold out within hours of their opening on Wednesday.

“Sales have been brisk and the entire quantum of vegetable cowpea and bittergourd were sold out within hours”, said P.R. Sathyan of the CPI (M) who was one of the volunteers manning an outlet in Vyttila.

“Some of our volunteers have not gone home last night as sales were on until 1.30 a.m.” on Wednesday, said the secretary of Palliakkal Service Cooperative Bank M.P. Vijayan.

The service cooperative bank has been on the vanguard of the organic vegetable cultivation initiative in the district after bringing around 400 acres under different vegetables.

M. M. Abbas of Organic Kerala Charitable Trust said that the Trust had procured only from farmers who grew vegetables and fruits organically.

The farmers are paid 30 per cent premium over the wholesale price, he said.

The district units of the CPI (M) have opened 164 outlets while another 50 vending points are operating under different service cooperative societies. The principle adopted is that only 20 per cent price should be increased over the procurement price to meet transport, service and damage costs.

The popularity of the locally-grown vegetables has sunk the price of vegetables imported from outside the State. While organic vegetables like vegetable cowpea sold for Rs. 120 a kg, its imported counterpart fetched between Rs. 60 and Rs. 65.

“This is just a demonstration and reminder to the people that they should eat poison-free vegetables”, said P. Balachandran Nair of Gandhi Research Institute, a voluntary body, which has opened a temporary outlet near Vyttila junction.

**Veggies from other States pesticide-free: Minister**

The government has claimed that the import of pesticide-contaminated vegetables from neighbouring States had come down drastically following the stringent inspections by Food Safety officials at border check-posts.

Citing laboratory results, Health Minister V.S. Sivakumar said only permissible levels of pesticide residue were detected in vegetables arriving from other States.

He said neighbouring States had begun sensitising farmers after the government of Kerala initiated a series of measures to ensure the safety of imported vegetables and fruits. Food safety licensing had also become stringent.

A pressnote quoting Mr. Sivakumar said the government intervention had helped to augment domestic production of vegetables for the Onam season.

Food Safety officials had carried out 1,516 inspections since August 6 and 264 samples were given for testing.

As many as nine outlets were closed down for selling substandard products and notices were issued to 330 traders.

### ***Inspections at border check-posts yield results***



### **Whitefly attack: Farmers protest, 'gift' damaged cotton crop to govt**

Hundreds of farmers sat on a dharna in Abohar to protest against widespread damage to cotton crop due to an attack from the whitefly pest.

They received the backing of CLP leader Sunil Jakhar, who joined them. Protesters presented damaged cotton plants to the government through SDM Rajpal Singh.

“While officials are blaming humidity for the attack, the fact is that the irrigation department did not release water at the right time for sowing of cotton seed. The cleaning of canals was delayed by a month resulting in delayed wheat harvesting. This is why the crop has been damaged,” Jakhar said.

The [Congress](#) leader claimed that the farmers had suffered damages to the tune of Rs 193 crore and sought immediate compensation for them from the Disaster Relief Fund.

The protesting farmers, who had come from villages in Abohar and Fazilka, said they had been instructed to buy a particular brand of insecticide, for which the government allegedly provided a 50 per cent subsidy.

The CLP leader alleged that this was a scam and urged the agriculture department to probe the matter.

Jakhar further accused the Punjab government of having done nothing for farmers.

He said the state government had on March 25 requested the Centre to provide Rs 717 crore as compensation to farmers who were affected by untimely rain in February but no funds have been received so far as, Jakhar said, the state government did not plead its case well.

# DECCAN Chronicle

**Invasive weeds killing ecology**





At least half a dozen districts in the state are suffering ecological disaster due to weed infestation.

**Chennai:** At least half a dozen districts in the state are suffering ecological disaster due to weed infestation. The situation is serious in Ramanathapuram, the Nilgiris, Vellore, Dharmapuri, Tiruchy and Coimbatore districts, said wildlife biologist A. Kumaraguru of Biodiversity Conservation Foundation.

Invasive tree species absorb surface stormwater. Their strong dispersal of seeds has also adversely eliminated Shola trees endemic to Tamil Nadu forests and this will lead to reduced rainfall. The situation is even worse along Cauvery river banks. Invasive species like Ipomea and water hyacinth have removed native species. This means there is no filter in preventing the agricultural contaminants entering the river, Kumaraguru said.

Sensing trouble in ecology, Vellore Institute of Technology has now cleared the Juliflora (Vellikathan) along the Palar river basin for five kilometers. “VIT has been periodically engaging environmentalists to study the ecological changes in Vellore and suitable recommendations are followed. Last year, the nearby hills were adopted in coordination with the state forest department. Indigenous tree saplings are planted. To ensure that they survive in arid condition, watering is done through drip irrigation,” said G.V. Selvam, vice president, VIT.

Removal of Juliflora has been completed for five kilometres and there are plans to clear the entire Palar stretch from invasive species and debris so that the run off water during monsoon percolates along the Palar river basin benefiting Vellore, he added.

Removal of invasive species is a long pending issue. Water hyacinth is another bigger threat affecting the quality of lakes and water bodies in TN. There is a need for removal of all foreign plants, so that ecological benefits like rainfall, vegetation and soil fertility can be enhanced, explained D. Narasimhan, Professor of botany, Centre for Floristic Research, Department of plant biology, Madras Christian College.

“Most of the invasive species started spreading during early colonial period and they started spreading during 1980s and 1990s when the forests were cleared for development,” said Mr K. V. R. K. Thirunaranan, founder, the Nature Trust. For instance, invasive plant *Parthenium hysterophorus* is a major menace in Hosur, Dharmapuri and Palani areas. Most of the invasive species were introduced during colonial period and no major effort was made to de-weed them for several decades, added Thirunaranan.

### **Plea in Assembly to remove weeds**

Farmers in the state are suffering due to weed infestation as surface water is absorbed exorbitantly by invasive plant species which dominate arid districts such as Thoothukudi, Ramanathapuram and Dharmapuri, former minister and Tiruvadanai MLA Suba Thangavelan told the State Assembly on Wednesday.

He sought immediate action against *Prosopis juliflora* (Velikathan in Tamil). It absorbs moisture in the atmosphere adding to the arid condition. Farmers are unable to return to irrigation because of weeds, he said.

With monsoon being a failure, the situation in Ramanathapuram is becoming bad to worse as invasive species make these regions more arid. He also alleged that 14 lakh coconut trees in western and arid districts of Tamil Nadu withered due to pest attack.

Responding, agriculture and housing minister C. Vaithilingam said the issue would be studied and taken up with the Chief Minister for necessary action. A senior forest department official said that through the Tamil Nadu Biodiversity Conservation and Greening Project, for the past three years invasive species are being removed periodically. Several hectares of

invasive species like Lantana camara and Polithenium have been cleared in Kodaikanal, Anamalai and The Nilgiris wildlife divisions, but in the case of revenue and poromboke lands, the forest department cannot clear the weeds as the land belongs to other government departments, the official said.

“Not only Juliflora, there are at least a dozen invasive species threatening the biodiversity of Tamil Nadu and these plants also have the capacity to reduce the water catchment of river banks”, said forest department biologist G. Kamaraj.

All the invasive species are certainly a threat to ground water table on a long term basis. For instance, Ipomea grows along the Cauvery River depleting the surface water.

Similarly, Eucalyptus and Wattle trees have been a disaster to the ecology of Kodaikanal and Nilgiris hill stations draining ground water, he explained. Initially, these species were considered a boon to farmers as they provided livelihood, when agriculture failed. But now its time to weed them out so that the ecology can be restored as an effective anti-drought mechanism, Kamaraj added.

### Waiting in queues dent income of labourers



**Khammam:** Daily wage labourers are losing their wages to stand in long queues for onions being sold by the government at Rythu Bazaars at the rate of Rs 20 per kg. Men and women working in the construction industry, loading and unloading, kirana shops, vendors and hotels have been lamenting loss of wages.

P. Mallamma, a fruit vendor said that she is unable to go for her regular work due to the two to four hours wait for onions. “I was forced to stand in the queue when the onion prices in the open market touched `70. The government is distributing two kilo onions to each person in the Rythu Bazaars. Many people stopped buying the onions in the open market fearing the huge burden on their pocket. People who feel they cannot cook without onions have been standing in the queues for two kg.”

C. Koteswara Rao, a carpenter said, “I stood for two-and-a-half hours to get two kg onions and my work will be hit with the delay. My boss will not allow me to work today.” K. Padma, a teacher, explaining the importance of onions in the kitchen said onions are basic to Indian cooking for taste and flavour much like salt.”

### Farmers allege graft in tank plan



**Hyderabad:** Farmers from Mahbubnagar submitted a petition at Institution of Lokayukta of Andhra Pradesh regarding alleged corruption of officials. Farmers from Choutabetla village of Kollapur mandal from Mahbubnagar district approached the Lokayukta with a complaint about the ongoing works under Mission Kakatiya under which restoration of minor irrigation tanks is being taken up.

“Officials endowed with the responsibility of restoration works of the Nagireddy Tank have indulged in corruption to the tune of lakhs and we demand inquiry into the same,” wrote the

farmers in their petition. The Lokayukta has initiated inquiry and called for reports about minor irrigation EE of Nagar Kurnool and Mahbubnagar minor irrigation SE.



### **Pulses' price may further go up as acreage shrinks in Maharashtra**

Pulses' prices are likely to rise further with the acreage in Maharashtra dropping down to 17 lakh hectares this kharif season from 25 lakh hectares in the previous year.

According to senior officials of the State Agriculture Department, pulses have been sown on 17 lakh-odd hectares.

The production is likely to reduce this year as there have been pest attacks on the crop leading to its wilting in the state, they said.

According to a recent Assocham report, increase in prices of pulses may register highest growth this year due to untimely rains which have severely affected 2.28 million tonne (MT) of rabi crop and widened the gap between demand and supply to the extent of 6 million tonne. "Currently, pulses' prices are heading for a two-year high and the unseasonal rain in north India is resulting in humongous crop losses," the study said.

As against recommended daily requirement of 50-60 gram, current availability of pulses is less than 30 gram per day.

Madhya Pradesh is the largest producer of pulses in the country, followed by Maharashtra, Rajasthan and Uttar Pradesh. Indicatively, trade sources estimate kharif pulses' production at 5.3 million tonne and rabi pulses at 2.2 million tonne which add up to 7.5 million tonne for the crop year 2014-15, a decline of 2.28 million tonne over last year. Sumer Singh Rajput, official in charge of pulses at the Agriculture Research Centre, Jalgaon, says the late sowing and poor rains are likely to affect productivity.



As per data available with the Agriculture Department, in the kharif season, usually around 22,46 lakh hectares come under pulse production. This year too a target of 25 lakh hectares was set. However, around 17 lakh hectares came under cultivation and resowing operations also have not been very successful, officials said.

The area under tur dal has gone down by 15%, urad dal by 45% and moong dal by 32%. Jalgaon, Dhule and Nandurbar districts has 60% area coming under pulses. Marathawada, Latur, Osmanabad regions have 67% area under pulses.

Officials said productivity could also drop to less than 20 kg per acre for moong dal. Less productivity is expected for tur dal as well. At present, the prices of tur dal have touched Rs 9,000 per quintal while both urad and moong have touched figures of Rs 100 per kg.



## THE TIMES OF INDIA

### **Onion stabilizes at Rs 4,850 a quintal**

The average wholesale onion prices at Lasalgaon Agriculture Produce Market Committee (APMC) has stabilised at Rs 4,850 a quintal, down from Saturday's all-time high at Rs 5,700 a quintal.

There was, however, not much relief in the retail market as onions continued to be sold in the range of Rs 70 to 80 a kg despite the 15% decline in the wholesale price.

Since Tuesday, the average wholesale onion prices at the country's largest APMC was recorded at Rs 4,850 a quintal. The minimum and maximum prices were recorded at Rs 2,500 and Rs 5,586 a quintal, respectively. Around 5,600 quintals of onions were auctioned at Lasalgaon on Wednesday.

A Lasalgaon APMC official said, "The supply has not increased much, but to some extent from previous 3,000 quintals to 5,500 quintals a day. This led to the decline in the average wholesale onion prices from Rs 5,700 a quintal. After the inspection of stocks of onion traders by the state government on Saturday, the supply has also increased to some extent. Farmers, who have been storing onions, have also started bringing their produce to the

market."

A National Horticultural Research and Development official said, "Most traders have already started importing onions from Afghanistan and Egypt. The consignments have already started landing in Delhi and Mumbai. Moreover, the government has started inspecting the stocks of onion traders. This has created a sort of panic among them and they have started clearing their stocks, leading to a rise in supply in the market and marginal decline in prices."

He added, "Besides, the import of 10,000 tonnes from the MMTC Ltd, the country's largest foreign trading company, is expected in the next few days. As a result, the average wholesale onion prices are expected to decline further."

The average wholesale onion prices at Pimpalgaon, another major market of onions, was recorded at Rs 4,900 a quintal on Wednesday as against Rs 4,850 a quintal on Tuesday. The minimum and maximum prices were recorded at Rs 3,231 and Rs 5,823 a quintal, respectively. Around 5,000 quintals of onions were auctioned at Pimpalgaon on Wednesday.

### **Lasalgaon onion prices dip, stabilize at Rs 4,850 a quintal**

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### **Low rainfall critical for kharif crops**

The 40% rainfall in the district till the last week of the third month of monsoon has started taking a toll on the kharif agricultural activities. According to a report from the district agriculture department, crops like paddy, groundnuts and soybean are going to be affected. Sowing in the district has already gone down to 88.75% - from 2.76 lakh hectares to 2.45 lakh hectares.

Major tehsils like Panhala, Bhudargad, Shahuwadi, Ajara and Chandgad are known for paddy production. The total area under paddy cultivation in the district is 1,03,156 hectares as against the average 1,11,610 hectares. The decline is mainly because of late arrival of monsoon, followed by low intensity of the showers. Except in June third week, the district has not received satisfactory spells and some farmers have refrained from paddy cultivation.

Showers are important for the growth of paddy. Those who have cultivated paddy are now waiting for good showers. They might have to shift to well water or river water for irrigation, increasing the cost of production.

Groundnut is the second-largest kharif crop in the district. The average area under cultivation is 57,825 hectares but it has gone down to 48,212 hectares mainly due to lower sowing in Hatkanangale, Kagal, Radhanagari and Karvir tehsils. Though, the other tehsils like

Chandgad, Gadhinglaj and Shirol have reported more than average sowing, the overall figures are less than the average cultivation.

In case of soyabean also, the area under cultivation has gone down - from 56,460 hectares to 42,899 hectares.

Ragi is another kharif crop in the district having 22,900 hectares average cultivable land. The low rainfall has reduced the area to 20,575 hectares. Shahuwadi, Radhanagari and Gaganbavda tehsils have reported significant drop in ragi cultivation this year, though all these tehsils are known for higher rainfall.

Sugarcane being a cash crop, the total area under cultivation has increased to 1,47,469 hectares, while the average area is 1,17,125 hectares.

Raju Shetti, farmers' leader and MP said, "Kolhapur shares border with Karnataka, where significant number of sugar factories are operating. Sugarcane cultivators are free to sell their crop to any factory, even outside the state; hence they are in anticipation of good returns from sugarcane. This is the reason behind farmers going after sugarcane crop."

At Rs 2,000 per tonne purchase price and 100 tonnes per hectare output, the cultivator would earn Rs 2 lakh from one acre, he said.

"Compared to foodgrains or oil seeds, returns from sugarcane are higher. But the crop takes at least nine months to mature. So, marginal and small farmers or those who are located in the mountain areas prefer kharif and rabi crops that get matured in four months.

### **Roof gardens help homes beat the heat: Study**

COIMBATORE: Having a kitchen garden on your roof may not just provide you with a decent supply of organic vegetables, but a natural cooling effect as well.

Though a lot has been spoken about how a terrace garden reduces the heat on the building, a

study has now scientifically proved that a green roof can reduce the extreme thermal effect in urban environments.

A recently completed study by two researchers in Tamil Nadu Agricultural University's (TNAU) Soil and Water Conservation Engineering department titled 'Mitigating urban heat island effect with an extensive green roof in Coimbatore climate' has found proof for this widely-held belief.

The study found that having a vegetative layer on your terrace, otherwise called a "green roof", can bring down temperatures by an average of 0.4 deg C from maximum temperatures and 0.2 deg C from the minimum temperature.

"Temperatures were measured in the bottom layer of the root systems of the marigold plants, used for the study, the roof slab underneath it and a roof slab of a normal reference roof during the study period," stated the study.

The researchers J Jayabharathi and S V Kottiswaran say they found that "the green roof protected the roof slab and water proofing membrane from extreme temperature effects that occurred on the roof surface."

They said that during the study period temperature fluctuations were recorded in both the green roof and reference roof, but in the green roof they were kept at a minimum.

The scientific explanation according to the study is that the surface temperatures on the terrace decreases due to evaporation of moisture from the soil.

People who have been maintaining kitchen gardens in their terraces vouch for the findings. "You definitely notice a change in temperature immediately," says Kapil Dev, who has a terrace garden of around 400 plants above his office in Ramanathapuram.

"We have given the employees an accommodations in the floors between the terrace and the ground floor office. A lot of employees say they have noticed a definite cooling effect in their rooms since setting up of the garden six month back," said Dev.

Kitchen garden owners also say they find a direct correlation between increasing the number of plants and green covered area and the reduction in temperature. "When we first set up our kitchen garden four years ago we had only around 150 to 200 plants. And even then being on the top-most floor we found it cooler than other apartments in our complex," said Kanakaraj Thangavel, who has been maintaining a kitchen garden above his house for the past four years.



"We only switch on the air-conditioner for two months in a year. Once we increased the to garden to 500 plants, we have not had to use the air-conditioner at all," he said.

### **NDRI scientists use donor cell to clone buffalo calf**

A team of scientists of the National Dairy Research Institute (NDRI), Karnal, has cloned a female buffalo calf using the donor cell from the ear of an adult buffalo.

The calf has been named "Swarupa" was delivered using the "hand-guided cloning technique", stated NDRI director A K Srivastava on Wednesday. It is the 14th calf cloned by NDRI scientists.

Srivastava said that another female calf was delivered using the same technique on August 1. He said that "Swarupa" was produced after taking the donor cell from adult buffalo "Karan Kirti" of NDRI farm. "Karan Kirti" yielded 4,425kg of milk in its first lactation period of 427 days. Its peak yield of 25.1kg was the highest daily yield of a buffalo recorded in the history of the institute.

The team of scientists involved in birth of the cloned calf included S K Singla, M S Chauhan, R S Manik, P Palta, S S Lathwal and Anuj K Raja. They are of the opinion that clone calves produced from adult animals could bring revolution by copying the proven genetics manifolds. Earlier, "Purnima", a clone of "Karan Kirti" was born on September 6, 2013, which could survive only for 19 days. TNN

He said although the world's largest population of buffaloes was in India, which contribute about 55% of total milk production in the country, but the percentage of elite animals was very low and there was an urgent need to enhance their population.

S Ayyappan, director general, Indian Council of Agricultural Research (ICAR), congratulated the NDRI team and said that advancement in technology of "hand-guided cloning" of buffaloes would facilitate faster multiplication of elite germplasm and help face challenges of increasing demands of milk due to growing human population.

### **It's city's driest monsoon in 10 yrs**

It's turning out to be one of the driest monsoons in the district this year with total rainfall 44% below normal in the period from June 1 till August 25, posing threat of drought.

A comparison shows rains this year in three monsoon months out of four have been lowest, in at least past 10 years. Monthly break-up of rainfall shows that in July, total rains were lowest in five years and in August, lowest in nine years. A threat of drought looms large if situation persisted for next 10-15 days. Met officials, however, are hopeful of improvement in situation.

According to state Met department, Lucknow recorded 308mm rainfall from June 1 till August 25, which is 44% below normal 545mm set for the period. In comparison, state on the whole received 33% below normal rains in the same period, which means total rainfall in Lucknow has been lower than the per-district average rains in UP. Total rainfall in east UP has been 36% below normal, while in west UP it stands at 30% below normal. Monsoon arrived in Lucknow this year on June 25, a week behind normal date and since then it has been generally weak with a few wet spells in between.

Maximum temperature on Wednesday was 35.5 degrees Celsius and the minimum temperature was 26.5 degrees Celsius, both were two degrees above normal. The relative humidity levels were also high—between 60% and 80%. High temperature and relative humidity made weather sultry and uncomfortable.

As sultry weather conditions continued on Wednesday, Met officials said light rains are expected on the weekend due to formation of low pressure area in the Bay of Bengal. The monsoon trough line is passing from terai region of the UP bordering Nepal. Low pressure area would provide some moisture, which is expected to cause rains at several places in east UP and isolated places in the West from August 28-31. Lucknow may also receive light rainfall during this period, said state Met director.

State Met director J P Gupta said district has received deficient rains so far. But, there are five days left in August, besides the entire September. Favourable conditions might revive monsoon and compensate for the loss in coming days. "Though the quantity of rainfall has been low, rains have occurred at regular intervals, which took care of crops to some extent, hence so far we can't say from agriculture point of view that there is a drought-like situation. But, if the dry spell continued, we may face difficult times," he added.

## **US Ambassador calls for joint efforts to ensure global food security**

Interacts with students of TNfarm varsity



US Ambassador Richard Verma has called for joint efforts to create a holistic framework to ensure economic security and global food security.

“The United States and India can address many of the challenges that we face by investing in agriculture, working together and harnessing our unique strengths,” he told the students of Tamil Nadu Agricultural University here on Monday.

During his brief interaction with the students of the farm varsity, the envoy said institutions such as TNAU create opportunities that will pay dividends for generations to come.

“Let’s therefore work together and ensure that these opportunities continue to expand,” he said, citing the TNAU-Cornell University partnership in agricultural biotechnology and agribusiness management.

From next year, the US will support fellowships that explore plant and animal health, post-harvest treatment, biological control, biotechnology and agricultural marketing in India, he said.

## **Monsoon deficit touches 12% as rains dry up**



The overall rain deficit for the country touched 12 per cent on Wednesday to match the quantum forecast for the entire monsoon this year by India Met Department.

With exactly 35 days to go before the monsoon signs off from entire landmass, there are no signs of a major reversal of the trend, given that it starts withdrawing from Northwest India from September 1.

### **Rain dries up**

Indications are that the stage may have been already set for the withdrawal with rains keeping off over most parts of Rajasthan and neighbourhood for sometime now.

On Tuesday, individual deficits in four main geographical regions were 20 per cent in South Peninsula; 14 per cent in Central India; 7 per cent in East and North-East India; and 5 per cent in North-West India.

A low-pressure area has formed over west-central Bay of Bengal on Wednesday, which will be closely tracked over the next few days for its capacity to generate rainfall over land.

An India Met outlook valid for next seven days (until September 2) said that rains may lash East and North-East India, adjoining Central India as well as parts of the West Coast.

### **Contra winds**

Opposing dry north-westerly winds dictating prevailing weak monsoon conditions would not allow the 'low' to settle and decide a track of its own to push rain deep into north or north-west India.

Instead, it will be guided towards the South Odisha-North Coastal Andhra Pradesh coast from where it will be driven straight into the foothills of Eastern Himalayas (hills of Bihar and east Uttar Pradesh).

On rebound, it will come under the influence of the north-westerlies for a second time and be pushed back towards into the Bay to the north of its place origin.

The south-easterly to southerly winds associated with the system will mop up a lot of moisture from the Bay and blow it into the hills to trigger localised heavy rain over the region, floods or even landslides.

### **Passing showers**

Meanwhile, the US Climate Prediction Centre said that most parts of north-west India and some parts of Central India will continue to run dry until September 7.

The withdrawal of the monsoon from Rajasthan and adjoining north-west India would likely have begun in right earnest during this phase.

Parts of West Madhya Pradesh and adjoining Gujarat are expected to get some passing showers as will southern parts of the West Coast.

According to the US centre's prediction, below-normal rainfall is the outlook for the northern stretch of the West Coast, including Konkan-Mumbai. Northern parts of Kerala and Coastal and South Tamil Nadu may also benefit to some extent.

### **India to scour new markets for its surplus sugar**





Desperate to find international buyers for the rising stock of sugar in the country, India is planning to go on an aggressive marketing drive by sending trade delegations to potential markets to work out possible deals. Following Prime Minister Narendra Modi's instructions to senior ministers earlier this month that export markets must be found for surplus sugar, the Commerce Ministry is preparing to explore opportunities in Malaysia, China, Bangladesh, Sri Lanka and Egypt.

“With the Indonesian sugar market taken over by cheaper exports from Brazil and Australia, we want to aggressively explore other possible markets for our sugar. Our trade delegations to identified countries would hold direct talks with importers and try to work out the best possible deal,” a Government official told *BusinessLine*.

### **Price comparison**

Sugarcane farmers in the country are in distress as the millers owe them about ₹ 14,000 crore in arrears.

Sugar millers have asked the government to help them clear the arrears as they have taken a hit by the sharp dip in domestic sugar prices.

Ex-mill price of sugar in Uttar Pradesh is around ₹ 24/kg and roughly ₹ 22/kg in Maharashtra, against an estimated production cost of ₹ 30, as surplus stocks are expected to cross 10 million tonnes this season.

It is, however, not an easy task to export as international sugar prices are ruling much below domestic prices.

Lowering of freight costs is helping Brazil sell higher volumes of sugar to Indonesia, industry watchers say.

“Brazil is selling white crystal sugar in Indonesia at \$290-295/tonne (FOB) while in India the total price of export works out to about \$370. There is no comparison,” pointed out Kiran Wadhwana, Director, New Delhi-based broker Comdex India Ltd.

The government is open to export sugar through any means. “We want to export sugar under the barter system against import of agricultural commodities like edible oils,” Food Minister Ram Vilas Paswan had said at an industry event earlier this month. However, this is possible only with a handful of countries such as Indonesia and Malaysia.

### **Sops for white sugar**

The Commerce Ministry has already alerted Indian embassies in the identified markets to prepare for the visit of the trade delegations and identify possible importers, the official said.

The Food Ministry is also contemplating sops for white sugar to push exports. “Export contracts in June till early August were decent since domestic prices were down to ₹ 18-19/kg. It has now gone up to ₹ 22-23 which makes it unviable even with a weaker rupee,” an industry official said.

### **New technique to double mango yields**



Two corporate firms have joined hands to help mango farmers in the South increase yields. Over 25,000 farmers on Tamil Nadu, Andhra Pradesh and Karnataka will get mentorship

from Project Unnati in going for Ultra High Density Mango Plantation (UHDP). The UHDP technique can increase mango yields by two folds.

Jain Irrigation Systems (JISL) and Hindustan Coca-Cola Beverages will invest Rs. 50 crore in Project Unnati by 2024.

Though India is the largest producer of mangoes in the world, its yield is very low. It is lower than Bangladesh, Brazil and Pakistan. The mango productivity in India is put at six tonnes a hectare as against 16 tonnes in Brazil.

“UHDP can improve yields significantly. It has the potential to increase yields twice. Project Unnati is aimed at increasing UHDP technology in the country significantly. It will cover end-to-end fruit supply chain and optimise delivery,” a press release has said here on Wednesday.

### **IFFCO forms agrochem JV with Mitsubishi Corp**

The Indian Farmers Fertiliser Cooperative Ltd. (IFFCO), the country's largest producer of fertilisers, has formally launched a joint venture with Japan's Mitsubishi Corporation for the manufacture of agrochemicals in India.

According to an IFFCO statement on Wednesday, it will hold 51 per cent stake in the company that will be known as 'IFFCO-MC Crop Science Ltd.', while the rest will be held by Mitsubishi Corporation.

“As a cooperative for farmers, we were getting continuous demand from farmers across the country to make available good quality insecticides, fungicides and weedicides, apart from quality fertilisers, which IFFCO is supplying through cooperative societies,” said BS Nakai, Chairman, IFFCO.

IFFCO has a strong presence in the fertiliser market and Mitsubishi Corporation, which has expertise in agrochemical business internationally, are going to have a synergy to make available quality agrochemicals at reasonable price to Indian farmers even in far-flung areas, he added.

# Business Standard

## **ADAMA India sets up a new formulations lab in Hyderabad**



"The new formulation lab is an important and a very strategic investment for ADAMA. With this new lab, our efforts at delivering farmer-centric crop-protection solutions to the Indian farmer is further strengthened, as we would now be able to cater to local market needs quicker than before" [Ilan Levanon](#) president and chief executive officer of ADAMA India, said.

ADAMA Agricultural Solutions Limited is an off-patent crop protection solutions company providing a comprehensive range of high-quality, differentiated and effective herbicides, insecticides and fungicides.

It sells its products in over 120 countries with revenues of over \$3 billion in 2013. This new lab would now complete the end-to-end R&D cycle in India and will support both global market needs as well as domestic needs, according to the company.

The company has strategic plans to launch several new products tailor made for the Indian market as well as the global market during 2016-2020. The Indian formulation team is currently working closely with the global formulation team, field trial, registration and quality control teams to develop and introduce new products to the market at the earliest, the company said in a statement.

