

### Only a ready seed market can help conserve traditional crops



Cultivation of traditional crop varieties is decreasing day by day, the major reason being low productivity compared to the high yielding varieties (HYV). The only way to encourage farmers to grow these is to create a market for them and make consumers aware about the speciality and nutritional aspects of these crops. "Take the case of Wayanad. There were about 105 traditional rice varieties cultivated here as per early records. But today this has dropped to 35 out of which less than 10 are now extensively cultivated in the district." If the situation continues it will take only a few more years for the erosion of this vast genetic wealth," says Dr. Anil Kumar, Director, MSSRF, Kalpetta.

### C4 model

Accordingly the institute devised an approach called the C4 model, which was found to be highly suitable for conserving the traditional varieties. "To conserve an indigenous variety we have to ensure its cultivation, consumption and commerce. All these stages were addressed in the seed village programme developed by us," says Dr. Joseph John, scientist at the institute. MSSRF team mobilised rice farmers from ten villages, clustered them into seed villages, mainly serving as seed, grain and gene banks. Over the past two years the institute worked on community mobilisation, clustering farmers in to groups, awareness generation on the importance of the traditional varieties, purity maintenance and management of seed and gene banks. Each of the seed villages had two to eight traditional varieties cultivated, conserved and consumed among its residents. To overcome the issue of seed contamination, two acres of paddy land were leased out and utilised for growing ten selected varieties like *Chennellu*, *Chenthadi*, *Chomala*, *Jeerakasala*, *Gandakasala*, *Mullan kaima*, *Thondi*, *Adukkan*, *Veliyan*, *Kalladiyaryan* and the seeds were supplied to growers for cultivation.

### **Training**

The seeds thus produced were supplied to other farmers across the district and outside. Training was provided on purification techniques, seed and grain management, mechanisation etc for helping the community in its efforts to conserve. Enquiries for seed availability were linked to the seed bank management committee at the village level which supplies the seeds at a premium rate fixed by the centralised unit of "seed care," a grass root institution (GRI) of traditional seed growers of Malabar.

### **Marketing**

Farmers could sell additional quantities of rice after consumption to traders for a better price. Some villages have even identified niche markets for their produce, according to Dr. Joseph. Previously, farmers in the seed villages used to sell traditional paddy seeds at Rs. 14/kg before the intervention. Now they sell at Rs. 35 – 40 /kg. Aromatic rice varieties are now being sold at Rs. 50/kg and enjoy a good demand among consumers. In a year, the farmers could sell two and half tones of traditional varieties and presently the area under traditional varieties is 71 acres since the major seed buyers are those who were cultivating hybrids. The project intends to purify the seeds of traditional varieties consecutively for three generations, supply it to the villages and link them up with farmers and institutions interested in rice cultivation. This proves that only a good and ready market can fetch the traditional rice "cultivators a premium price for their produce and only a good price can encourage more farmers to cultivate traditional varieties.

### **Impact**

"Mere rhetoric on steps to save indigenous varieties or seminars or workshops to save and conserve native seeds will never have an impact unless and until there is a market to buy it from the producer", stresses Dr. Anil Kumar.For more information on these traditional varieties conservation interested farmers can contact Dr. Joseph John, MSSRF, Puthoorvayal, Kalpetta, Pin- 673577, email: josephcabc@gmail.com and mobile 09388020650.Keywords: traditional crops, native seeds, traditional crop varieties conservation

### Rubber dam for sustainable production

Checkdams are mainly used for soil and water conservation in watersheds. In India, several types of these are being used for regulating water supply in watersheds which in turn help in assured water supply to vegetation. Generally check dams are made up of cement base and are inelastic in nature. To give more flexibility in release and control of water flow across the streams, research efforts were made at the Directorate of Water Management, Bhubaneswar to fabricate rubber sheets instead of cement material.

#### **Five locations**

As a result, five rubber dams were installed at different locations of Khurda district, Odisha. These are the first indigenous rubber dams in the country. As an innovative hydraulic structure, the rubber dam consists of four parts: i) a rubberised fabric dam body; ii) a concrete foundation; iii) a control room housing mechanical and electrical equipment, such as air blower/ water pump, automatic inflation and deflation mechanism; and iv) an inlet/outlet piping system. The dam height can be raised up to 1.5 m by filling water through inlet pipe (inflation mechanism) and it can be lowered to base level by releasing the water through outlet pipe (deflation mechanism).

### **Advantages**

Main advantages are better erosion and flood control during excess water flow. It also provides cushion as a reservoir for storing water during scanty rainfall and can be used during drought. The assured irrigation created by rubber dams helped in enhancing crop productivity at Baghamari and Chandeswar in Odisha. The average productivity of rice in kharif season at Baghamari was enhanced from 2.87 tonnes/ha to 4.67 tonnes/ha. The average productivity of green gram in rabi season at Baghamari was enhanced from 0.63 tonnes/ha to 0.92 tonnes/ha and the productivity of sunflower and cucumber in rabi season are 0.84 tonnes/ha and 4.3 tonnes/ha respectively. (S.K. Jena is Principal Scientist and P.S. Brahmanand, Senior Scientist (Agronomy), Directorate of Water Management (ICAR), Bhubaneswar, Email: psbanand@yahoo.com; Mob: 9776207101.)

### Address irrigation woes before executing Yettinahole project, say farmers



Expressing their anguish over the Yettinahole project envisaging diversion of the Nethravati, farmers in Dakshina Kannada on Tuesday urged the State government to first provide a comprehensive irrigation and drinking water scheme for the district. Speaking at a meeting here, Karnataka Rajya Raita Sangha leader Ravikiran Poonacha said farmers in the district would not allow to implement the project unless the government satisfied their requirements. "The district is bereft of any irrigation scheme and farmers are forced to spend a lot to irrigate plantations and paddy fields. In such a situation, there is no question of allowing the river diversion project," he said. Mr. Poonacha said farmers in the district were kept in the dark about the project even as no scientific study appeared to

have been carried out on the quantum of water available in the Nethravati during the monsoon and the summer. The Minister for Water Resources had promised to hold a dialogue with people in Dakshina Kannada before initiating the project, and there had been no meeting so far, he said. Another farmer wondered how the government could go ahead with the project in an eco-sensitive zone. He feared that the already existing mananimal conflict would only get intensified if the forest area in the Western Ghats was vandalised by the project. Mr. Poonacha also demanded setting up of a committee to plan comprehensive irrigation for the district. Deputy Commissioner A.B. Ibrahim, who was chairing the meeting, said the issue would be placed in the next Karnataka Development Programme review meeting, as the present meeting does not have experts from the field.Zilla panchayat chief executive officer Thulasi Maddineni said drinking water was being made available to all through a multi-village drinking water project. Farmers raised a host of other issues, ranging from crop loans to compensation to arecanut growers and from subsidy for agricultural equipment to destruction of paddy fields by unbridled real estate activities. They wanted a complete ban on conversion of paddy fields for nonagricultural purposes as farmers were serious in cultivating paddy. Ms. Maddineni asked farmers to raise their individual grievances before the monthly meetings being organised every month in zilla panchayats.

### Prices of low quality white arecanut go up



Bullish trend in the white arecanut market for the past six months has pushed the prices of not only the best quality but low quality as well. Prices of a low quality white arecanut called 'pathora' (arecanut with hairline cracks) has jumped by 56-64 per cent in the past six-and-half months. According to sources in Central Arecanut and Cocoa Marketing and Processing Cooperative (Campco) Ltd., the prices of 'pathora' have now gone up to Rs. 250-270 a kg from Rs. 160-165 a kg in January. It was an indication of scarcity of produce in the market, sources told *The Hindu*. The last highest price for 'pathora' was in August 2013 when it touched Rs. 90-100 a kg. Ramesh Kainthaje, an arecanut grower, said some farmers even sold 'pathora' for Rs. 290 a kg to private traders a few days ago. "I do not remember 'pathora' getting this high a price ever," he said. Sources said manufacturers of pan masala prefer blending 'pathora' with red variety of arecanut. As the red variety was costlier than best and low quality white arecanut, the manufactures have begun mixing 30-40 per cent of white arecanut with red variety, pushing the prices of all varieties of white arecanut irrespective of quality. Sources said that 'pathora' constituted usually five to 10 per cent of a quintal of arecanut harvested by growers here.

Manchi Srinivasa Achar, president, All India Areca Growers' Association, Puttur, said 'pathora' prices this year surpassed the prices of the best quality of arecanut last year.

### Farmers getting more income from dairy business: survey

On an average around 53.3 per cent of the total annual income to the milk producers comes from the dairy business with the Karimnagar Milk Producers Company limited, (the Karimnagar dairy), says a survey conducted by Hyderabad Central University economic student. These findings were revealed by a student of Hyderabad Central University Sritama Gangopadyay, who is doing a research on empowerment of milk producers of Karimnagar dairy as part of her study on the producers' organisation for the Nabard. Sritama had conducted a survey in Jagtial, Sundaragiri in Chigurumamidi mandal and Garjanapalli in Yellareddypet mandal recently to study the living conditions of milk producers of Karimnagar dairy. During the survey, the HCU student found that apart from agriculture, the dairy unit was providing more income to the milk producing farmers through dairy activities. She said that the dairy was the backbone of majority of families in the district. The survey also found that the income generated through dairy was used for further investment in the dairy units by the farmers.

### **Deficit rainfall hits farm operations**

SHRINKIN FARMS				(in hectares)	
6	Nort	nal cultivated area	Actual cultivated area		
Pa	ddy	1,63,574	9,122		
Mary Ma	aize	57,432	30,576		
Gr	een gram	6,287	2,716		
So	yabean	5,225	15,020	arsy a	
Co	tton	2,30,589	1,50,583	4	
Ch Ch	illies	4,512	213		

Even after completion of one month of kharif season, the sowing operations in Karimnagar district are yet to gather momentum due to deficit rainfall of 51.6 per cent this time. Against the normal rainfall of 312 mm, the district has received only 136.4 mm till date. The prevailing dry weather conditions are likely to shrink the area of cultivation in the district this season. Also, paddy cultivation is yet to begin in the district and many farmers have opted for the ID (irrigated dry) crops. Meanwhile, due to great demand for soyabean, farmers have undertaken its cultivation extensively in the district. Against the normal area of cultivation of 5,225 hectares, soyabean was cultivated in 15,020 hectares. But, cotton was cultivated only in 1,50,583 hectares against the normal area of 2,30,589 hectares. Similarly, maize was cultivated in 30,576 hectares against the normal 57,432 hectares. Green gram was cultivated in 2,719 hectares against 6,287 hectares and turmeric in 5,738 hectares compared to 15,714 hectares, earlier. According to agricultural officials, farmers were showing interest only for ID crops and expressed concern that the area of cultivation is likely to come down if the prevailing dry weather continues. In the last kharif season, cultivation was done in 5,61,049 hectares against the normal area of 5,18,349 hectares due to adequate rain. This time, cultivation was done only in 2,19,415 hectares till date.

### Huge subsidy for drip irrigation

The Horticulture Department will offer subsidy for farmers to introduce drip and sprinkler irrigation systems for horticulture crops on up to five hectares (ha) of land in a bid to conserve water as well as to improve the yield. While 90 per cent subsidy will be offered up to two ha, 50 per cent subsidy will be offered to the next three ha to all farmers in the district, said an official release. The subsidy would be provided to horticulture crops except coffee, tea and rubber. Fertigation, the process through which fertilizer is mixed in water before being dispensed to plants, was compulsory and part of the drip irrigation system, the department said. It said the fertigation would ensure availability of nutrients to plants without any wastage. It would also save expenditure on fertilizer by 20 to 40 per cent, and the cost on labour and electricity. Apart from fertilizer, light nutrients as well as plant protective chemicals too could be dispensed directly to the plants through fertigation, the release said. The horticulture plot for which subsidy is sought should be in the name of the farmer. In the event of joint-holding, the applicant should produce a no-objection certificate from co-owners. Those interested may approach the senior assistant director of the department in their respective taluks, the release added.

### People see red as tomato touches Rs. 80 a kg



Sixty-year-old Parvati Gomare found that there were no tomatoes in her refrigerator on Wednesday morning. She made her way to the Khar market but returned without them. She was not ready to pay Rs.80 per kg for something she paid Rs. 40 until the last month. The delayed rains are taking a toll on the kitchen staple with prices doubling in a month. Until last month, the wholesale rate for tomatoes was Rs. 20-Rs. 22. Last week, it was about Rs. 36-Rs. 40. Now the rates have shot up to Rs. 44-Rs. 48. In retail markets, the price ranges between Rs. 60 and Rs. 80. "Onions are expensive anyway but I was shocked to see the tomato prices. The cheaper ones did not look fresh enough so I did not buy any. I will wait for the prices to go down before I buy them. Vegetables are getting too expensive, especially if you are a family of five," said the retired homemaker. Vendors at the market said she was not the first person to turn away without buying tomatoes. "From the beginning of the month, tomato prices have been increasing gradually. In the last three days they have hit the roof. Many people enquire about tomatoes but return with only potatoes, cabbage and other such vegetables," said a vendor. He sells tomatoes for Rs. 60, 70 and 80 per kg. "The rates depend on freshness, size and quality," he said. The Agricultural Produce Market Committee at Navi Mumbai,

which receives vegetables and fruits before they make the commute to Mumbai's markets, has seen less vehicles carrying tomatoes. On an average, 65-70 vehicles with tomatoes arrive from Narayangaon in Pune and villages in Bangalore. However, this month, the number has fallen to 45-48 vehicles. Each vehicle carries 10 tonnes of tomatoes. The fewer number of vehicles just shows how low the supply is against the demand, said Shankar Pingle, a tomato trader and office-bearer of the APMC. The delayed monsoon has resulted in this condition. We are hoping that the rates fall by the end of this month, he added.

### Face challenges, students told

Eminent agriculture scientist M.S. Swaminathan on Wednesday asked students of the Tamil Nadu Agricultural University to rise to the challenges that lay ahead of them. Interacting with the students, he said the world required 50 per cent more food grain by 2030 than what was available today. The students should take steps that would stop the wastage of 1.3 billion tonnes food grains that were wasted every year. He then spoke about the challenges he had during the Green Revolution days. It was a revolution because between 1964 and 1968 the quantity of wheat produced was more than the preceding 4,000 years. And, it succeeded because there was synergy among technology, public policy and farmers' enthusiasm. The revolution saw not only the introduction of high-yielding varieties but also minimum support price, public procurement and public distribution system. The University Vice Chancellor K. Ramasamy welcomed the gathering.

### RBI gives conditional nod for rescheduling crop loans

The Reserve Bank of India has accorded in-principle nod to the proposals of Andhra Pradesh and Telangana governments to reschedule crop loans but sought detailed information from both the States on the quantum and the number of beneficiaries likely to be benefited by the moratorium. In principle, they have agreed for rescheduling and requested for additional information, official sources confirmed here on Wednesday. The Andhra Pradesh government has decided to send the details to RBI by Wednesday night itself, the sources indicated. It is learnt that the RBI in a letter addressed to respective Chief Secretaries sought to know the number of beneficiaries to be covered under the scheme to reschedule crop loans, the quantum of loans to be rescheduled and the number of such accounts. It is learnt that the RBI wanted to limit the repayment period to three years as against AP government demand for a moratorium of seven years.

### Farmers' grievances day meet

The district administration will conduct the farmers' grievances day meeting at the collectorate hall here at 11 a.m. on July 18, an official press release said.

### 9,871 cusecs released from KRS, farmers protest

Farmers across the district on Wednesday intensified their protests against the release of Cauvery waters from Krishnaraja Sagar (KRS) to Tamil Nadu.Staging a protest outside the office of the Cauvery Neeravari Nigam Ltd. (CNNL), near KRS, they shouted slogans against the CNNL officials. The Karnataka Rajya Raitha Sangha (KRRS) had organised the protest. The KRRS members urged the State government to stop releasing water to Tamil Nadu immediately. Speaking to *The Hindu*, KRRS leaders K.S. Nanjunde Gowda and Shambhunahalli Suresh said the CNNL's decision to release water to Tamil Nadu went against the interests of farmers in the Cauvery waters dependent districts of the State. Farmers also staged protests at Malavalli, Gejjalagere, Induwalu, Srirangapatna, Maddur and other places. Meanwhile, CNNL officials at KRS said the outflow from the reservoir had been increased by 1,819 cusecs in the past 24 hours. The outflow to Tamil Nadu was at the rate of 8,052 cusecs at 6.30 p.m. on Tuesday, and it rose to 9,871 cusecs at 6.30 p.m. on Wednesday, a senior CNN official said. Owing to the copious rainfall in the catchment areas of the Cauvery in Kodagu district, the water-level in KRS reached 90.40 ft. at 6.30 p.m. on Wednesday. The inflow was at the rate of 24,829 cusecs.

### Farmers trained to trap pests

The Agriculture Department has achieved a major breakthrough in containing damage caused to coconut trees by the destructive rhinoceros beetle and red palm weevil by popularising lure trap technology among farmers through farm schools. The department has organised farm schools at block levels through Agriculture Technology Management Agency (ATMA) and demonstrated the technology to destroy the insects by setting up pheromone traps that triggered synthetic female moth scent to attract male moths."After conducting the farm schools in the fields of 'achiever farmers' we have convinced more than 100 coconut farmers in the district to use the traps and destroy the insects," S.S. Shaiek Abdullah, Assistant Director of Agriculture (Quality Control) and Deputy Project Director, ATMA, said. The farmers donned the role of teachers in the farm schools and demonstrated their success to their colleagues by conducting 'classes' in their fields effectively, he said. Destruction of the insects had been a challenging task to the farmers as it attacked the crown of coconut trees and damaged the spindle and unopened tender leaves, drastically affecting the growth and the production of the trees. He said one trap each would be set up to lure the male moths of rhinoceros beetle and red palm weevil in an acre of coconut grove. The traps were tied to the trees and the synthetic lure could be changed once in three months, he said. Destruction of the male moths would affect breeding and help to contain the menace, he added. Coconut was cultivated on 9,000 hectares in the coastal blocks and the production was estimated at 35,000 nuts a year per hectare. In the farm schools, all agricultural technologies practised in major crops were demonstrated to the farmers, Joint Director of Agriculture and Project Director, ATMA, N.V. Krishnamurthy said.

### Fisheries university inks pact with farms



The Tamil Nadu Fisheries University has entered into a memorandum of understanding with a private fishing farm in Vaduvoor in Tiruvarur district on fresh water carps (kendai meen) to augment income for the fish farmers of Cauvery delta. The MoU aims at taking up research on triploid in fishes (all male population), growth-oriented procedure, and breeding and genetic research. The MoU was signed by G. Jayasekaran, director of Research of the Tamil Nadu Fisheries University, and S. Pugazhendhi, chairman, Chozha Fish Farm, Vaduvoor.G. Sukumar, Dean, Fisheries College and Research Institute, Tuticorin, handed over the MoU to Mr. Pugazhendhi, in the presence of Baskaran Manimaran, Vice-Chancellor of the university. Explaining the advantage of the MoU, Prof. Manimaran said it would help the students of fisheries college to have hands on training on the carps. It would benefit the internees of fisheries college and the university.

### Onion auction at Thuraiyur wipes tears of farmers

The Tiruchi District Market Committee has introduced weekly trading of small onions at the Thuraiyur Regulated Market to help farmers sell their produce without having to depend on intermediaries. Small onion growers have long been complaining over the poor procurement prices offered by intermediaries and traders for their produce. Farmers have been maintaining that they have not benefited even when the price of small onions shot up in the retail markets. Based on representations from farmers, District Collector Jayashree Muralidharan had directed the Department of Agri Business and Marketing to explore the possibilities of conducting auctions of small onions through regulated market. The introduction of auctioning at the market is expected to benefit farmers in Thuraiyur, Uppilliyapuram, and Thathaiyengarpet unions and other parts of Tiruchi and Perambalur districts.Perambalur and Tiruchi are major onion producing districts in the State. The crop is raised on over 8,000 hectares of land in Perambalur district and on about 4,000 hectares of land in Tiruchi district. On the first auction held on Wednesday, grade I quality small onions fetched a maximum of Rs.16 a kg. The average price at the auction was Rs.13 a kg, R.Chandrasekaran, Deputy Director, Agri Business and Marketing, told *The Hindu* after inspecting the auction at the market. Officials said normally farmers get an average of Rs. 7 a kg when traders procure their produce at the village and Rs. 8 or Rs. 9 a kg if they sell at the markets. The first auction saw a modest arrival of 1,352 kg for trading. However, officials are hopeful that arrivals would pick up as farmers come to know about the facility. "Many farmers visited the market to make enquiries and have

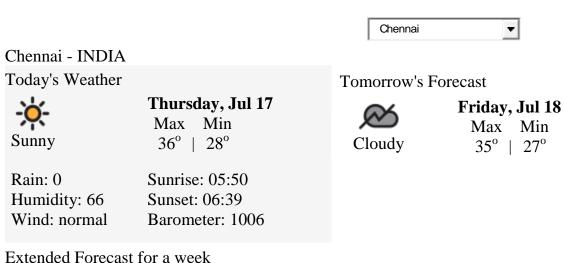
promised to bring their produce for auctions," Mr.Chandrasekaran said. The next auction would be held on Monday. However, subsequent weekly auctions would be held every Wednesday, Mr. Chandrasekaran said.

### Water level

### Mettur

The water level in the Mettur dam stood at 47.43 feet on Wednesday against its full level of 120 feet. The inflow was 958 cusecs and the discharge 800 cusecs.

## hindustantimes



Saturday <b>Jul 19</b>	Sunday Jul 20	Monday Jul 21	Tuesday <b>Jul 22</b>	Wednesday <b>Jul 23</b>
$\infty$	<b>∞</b>	$\infty$	Š	Š
35°   28° Cloudy	35°   27° Cloudy	34°   27° Cloudy	36°   27° Partly Cloudy	36°   27° Partly Cloudy

Airport Weather		Rain: 0	Sunrise: 05:34	
Delhi	<b>T</b> Delhi		Sunset: 07:20 Barometer: 999	F



### Volume continues to be high at Coonoor tea sale

Exporters who refrained from buying at the auctions of the Teaserve and Coonoor Tea Trade Association last week participated in the Teaserve auction on Wednesday deciding to 'wait-and-watch' the developments regarding their demand for changes in the billing pattern. Consequently, nearly 63 per cent of 6.78 lakh kg on offer at Teaserve auction on Wednesday was bought with prices averaging Rs. 55-59 a kg.Some exporters said that they would take this line of action at Sale No: 29 of CTTA auction on Thursday and Friday as well when 22.59 lakh kg has been catalogued. Brokers are also coming out with supplementary catalogues to reoffer teas remaining unsold in previous weeks.Of the 22.59 lakh kg, a volume of 15.74 lakh kg belongs to the leaf grades and 6.85 lakh kg belongs to the dust grades. As much as 21.18 lakh kg belongs to CTC variety and only 1.41 lakh kg, orthodox variety. In the leaf counter, only 91,000 kg belongs to orthodox while 14.83 lakh kg, CTC. Among the dusts, only 50,000 kg belongs to orthodox while 6.35 lakh kg, CTC.

### Cap on poppy seed import from Turkey, China

The Centre will permit imports of only 50 per cent of Turkey's poppyseed production every year and fix a ceiling on consignments from China and the Czech Republic. Also, the Government will allow an importer to bring in only 180 tonnes or 10 container loads of poppyseeds at a time from Turkey. These guidelines have been issued by the Department of Revenue on July 8 following an Allahabad High Court judgement on November 29, 2013 asking the Narcotics Commissioner to fix a ceiling on imports and register shipment contracts. According to the guidelines, poppy seeds imports from Turkey will provisionally be 50 per cent of the production as conveyed by Turkish authorities. Thereafter, once the actual production figures are available from Turkey in September, the final cap will be determined by a Committee comprising the Narcotics Commissioner, representative of the DGFT and Department of Revenue. The committee will consider the information provided by the Turkish authorities and other data on world trade made available to it. For imports from China and the Czech Republic country caps will be fixed straightaway by the Narcotics Commissioner on the basis of data supplied by those countries. After the caps are fixed, the quantity will be apportioned to various applicants by the Narcotics Commissioner on a first-come-first-served basis till the total limit is reached However, the maximum quantity which would be registered in respect of any particular applicant, in the first instance, would be 180 tonnes or 10 container loads.

If the total quantity contained in the applications received till the time of determination of country caps is less than the limit fixed for a country, then in the second round, request of applicants who have sought to import more than 180 tonnes, will be considered. It will again be on first-come-first-served basis, but not exceeding 180 tonnes. This process will repeated until the ceiling is reached, it said. But, the restriction of quantity for registration of import contracts will not apply for imports from China and Czech Republic. However, if there is a considerable increase in the number of applications from these countries at a later stage, then the 180 tonnes ceiling will apply for both these origins. Import contracts, registered by the Narcotics Commissioner against the 'provisional' country cap determined for Turkey, will be valid till October 31. However, import contracts registered once the final limit of imports from Turkey is fixed, will be valid for three months after that. Import contracts from China and the Czech Republic will be valid for four months.

### Rain-starved Gujarat opts to plant more fodder

In Gujarat, where rain deficit is increasing with every passing week, farmers are a worried lot for not just the crop but a bigger worry has emerged is about fodder availability. Considering the gravity of the situation, farmers have decided to prioritise sowing fodder over other cash crops. The State Government has asked farmers to opt for fodder sowing in the available arable land than taking any other cash crop. "In the whole of Gujarat, farmers are being told to take up fodder cultivation over other crops. With such measures we believe fodder availability will improve and there will be no instances of cattle migration," said a senior official of State Agriculture and Animal Husbandry Department. "It would be a blind bet for the cash crops because rains are uncertain and the crop may fail. In this situation at least we have to save our cattle by making adequate fodder available," said Maganbhai Patel, State President, Bhartiya Kisan Sangh (BKS), a farmers' body.BKS is encouraging farmers to take up fodder as well as coarse cereals such as bajra (millet), jowar and maize, which will serve dual purpose of foodgrain as well as fodder. A large number of farmers in Saurashtra, central Gujarat and north Gujarat have decided to take up fodder sowing. According to State Agriculture Department data, fodder has been planted on 1.37 lakh hectares against the normal three years average of 9.37 lakh hectares, an 85 per cent drop. Inadequate rains have also dampened the prospects for other crops mainly cotton and groundnut. As on July 15, cotton planting has been completed on 10.19 lakh hectares against the normal 27.17 lakh hectares, while groundnut sowing is 5.41 lakh hectares against the normal 14.39 lakh hectares in the State. Total area under cultivation is 11.25 lakh hectares against the normal 26 lakh hectares."Green fodder is not available. A delayed monsoon may brighten prospects for cash crops, but our cattle may not survive long without sufficient fodder and water," said Hasmukh Patel, a farmer in Dhandhuka taluka of Ahmedabad district.Rain deficit is felt severe in central Gujarat region with over 90 per cent departure from normal rainfall, while in Saurashtra and Kutch region the departure is around 82 per cent. The coastal region of the Saurashtra region had witnessed intermittent sporadic rains in past few days.

"The current rainfall is insufficient for sowing of cash crops because more moisture is required for the soil. But with such rains, fodder is an option for farmers to help their cattle survive," said Maganbhai Patel.

### Is there a turnaround in monsoon's fortunes?

The ongoing rain spell and the one that is expected to follow next week are suddenly engaging the attention of meteorologists in terms of whether the monsoon is seeking to announce a turnaroundNo one is willing to come on record, but there is a quiet belief that this could indeed be the case in the light of review of enabling conditions latest in the Pacific by the Australian Bureau of Meteorology. The agency had said on Tuesday said that the monsoon-unfriendly El Nino in the tropical Pacific had failed to elicit the required response from the atmosphere to grow as a full-fledged event. This has resulted in some cooling of the tropical Pacific Ocean which could undermine the strength of the El Nino that was earlier predicted to peak in August-September. The outlook for August plotted by the ensemble mean of the Predictive Ocean Atmosphere Model for Australia went as far as to suggest cooling of the Pacific to reach down to the level of a La Nina event. La Nina is the exact reverse of El Nino and is generally supportive of the Indian monsoon, even leading to surplus rainfall occasionally.

### **Important development**

Though refusing to draw an early conclusion, monsoon watchers attached enormous importance to the developments in the Pacific.The Australian Bureau's June outlook too had indicated that the El Nino would begin to weaken towards August. The weakening trend had now come about, it said in its latest update. "While the majority of climate models suggest El Nino remains likely, most have eased their predicted strength. If an El Nino were to occur, it is increasingly unlikely to be a strong event," the agency said. But the agency also sounded a warning about the prospect of a negative Indian Ocean Dipole developing in the equatorial and East Indian Ocean.

# **Business Standard**

### India Post might disseminate agri solutions

To ensure farmers have access to best practices in agriculture, the agriculture ministry is planning to tie up withIndia Post. Through this association, postmen will be used to share information relating to training, etc, between government officials and farmers. Officials in the know said it had been proposed the 150,000 post offices across the country would be used as Krishi Vigyan Kendras (KVKs). Currently, India has 630 KVKs but this number is woefully inadequate, considering about 55 per cent of the country's population is dependent on farming."Currently, a pilot project is underway in some districts to use postmen to deliver farm extension services in rural areas. But now,

we plan to launch the programme at a national level," said a senior official.India Post has 474,574 employees, of which about 260,000 are postmen serving in rural areas.Earlier, a working group on the 12th Five-Year Plan had suggested the government should appoint at least an extension worker for every 1,200 farmers.

### RBI to consider farm loan recast for 3-year period

The Reserve Bank of India (RBI) has written letters to Andhra Pradesh and Telangana governments indicating its willingness to consider a three-year relief for repayment of crop loansavailed only during the last kharif season by farmers of both the states, government sources said here today. The offer includes moratorium on payment in the first year and repayment of the entire loan along with interest in the remaining two years, according to the sources. When contacted, the representatives of local banks said they were yet to receive any information in this regard. According to officials engaged in the loan waiver/reschedulement exercise in both the states, the banking regulator also sought to know if the governments would be able to back this plan. The RBI also made it clear that the gold loans, even if taken for agriculture purpose, would not be considered under the scheme. The RBI's offer falls short of the AP government's demand for a five-seven-year reschedulement period for all the loan dues, including gold loans. The AP government is writing a letter to the RBI specifically asking for extending the relief to gold loans as well, the officials said. The response of Telangana government was not immediately known as the meeting of the state Cabinet, which intends to discuss the farm loan waiver among other things, was still on by the time of going to press today. In a subtle variance of approach towards the farm loan issue, the AP government was giving more stress on loan reschedulement owing to a much larger financial liability arising out of its loan waiver promise while the Telangana government was talking more of a waiver as it considers too much dependence on loan recast would mean more financial burden either on farmers or on the government. Short-term agriculture loans amounting to around Rs 9,000 crore are expected to be covered under the reschedulement programme in AP if the loans taken in the last kharif season alone are considered for the reschedulement, according to the officials. The banks, however, would have to reverse the interest booked on these loans. The fate of the balance loan dues would be known only after the governments come out with a clear eligibility criteria for their loan waiver promise, bankers said.

### Low rains, less sowing fuel price rise in pulses



Uneven distribution of monsoon rainfall, after a month of delay, has started affecting kharif crops, with the price of pulses up 11 per cent so far this month. Data from the Union ministry of food showed the price of moong dal in the wholesale Delhi market was Rs 80 a kg on Wednesday, compared with Rs 70 a kg on July 1. Urad dal was Rs 70 a kg from Rs 64 a kg in the period. Chana dal in the retail Delhi market was Rs 45.50 a kg on Wednesday from Rs 38 a kg on July 1. It is likely that with the rise in prices of vegetables, fruits and pulses in the wake of the monsoon's unsteadiness, theinflation data for July would differ substantially from June's pre-monsoon easing."The delay in monsoon rainfall affected sowing of pulses, with farmers' migration to other crops, including cotton and soybean," said Pravin Dongre, president of India Pulses and Grains Association (IPGA). According to the ministry of agriculture, the area under pulses declined this season to 0.75 million hectares as of July 4. The kharif season contributes around 30 per cent of India's total annual production of pulses. The ministry had set an ambitious target of seven million tonnes of production this kharif, of a total annual output estimate of 19.5 mt for 2014-15. Rainfall has been deficient by 41 per cent so far this season.

ON THE BOIL Prices in ₹/kg				
Variety	1 Jul	16 Jul	Change (%)	
Gram*	38.0	45.5	19.7	
Moong	72.0	80.0	11.1	
Urad	64.0	70.0	9.4	
Masoor*	65.0	70.0	7.7	
Note:Delhi wi Source: Minis	nolesale m	100000000000000000000000000000000000000	200.000 E	

"Pulses are sown until mid-August in India. So, the time has not lapsed for sowing. But, historically, the yield has been severely impacted in case of deficient or uneven distribution of rainfall, as witnessed in 2009," said Dongre, also chief executive officer of the India wing of multinational grain trader Glencore International. While some parts of the western states

have had heavy downpour in the past few days, other regions have remained dry, including major pulses' growing areas in Gujarat, Maharashtra, Madhya Pradesh and

Rajasthan. "There was (also) some delay in shipment of yellow peas from Canada, as rakes were not available there to transport the commodity from farm to port," said Bimal Kothari, vice-president of IPGA and owner of Pancham International, a city-based pulses trader. India imports around a million tonnes of yellow peas annually, from Canada, Australia and elsewhere.

### Monsoon revival might not make up for rainfall deficit

After playing truant for almost 45 days, the southwestmonsoon has started showing strong signs of revival in the critical western, central and northern parts of the country since Tuesday but this has not totally erased fears of droughtin some pockets. The weatherman says if the momentum generated by these showers is maintained in August, the drought fears will subside. According to the India Meteorological Department (IMD), the southwest monsoon has revived in parts of northwest and central India on Tuesday, bringing respite to people from heat and humidity. The rains, which have been caused by a low pressure area developed over the entire region, might remain so for the next threefour days, after which there can be brief lull."The revival in rains seen over the past one or two days is expected to remain so in the coming three-four days as well, and thereafter things need to be seen as monsoon patterns can change in 24-48 hours," D S Pai, director of Long Range Forecast at IMD, told Business Standard. Pai said though the showers have been better than expected, it might not be enough to wipe off the entire season deficiency, which presently stands at around 40 per cent as against 43 per cent last week. The Australian Weather Department's recent forecast, too, has fuelled the optimism wherein it said El Niño weather phenomenon that curtails July-September rains is unlikely to be intense this year.



The monsoon entered India in June after a delay of four days. Since then, its progress, too, has been rather patchy. In June, rainfall was almost 43 per cent deficient across the country, making the month one of the driest in the 100 years and triggering fear of a widespread drought.

The rains were 60-70 per cent below-normal in Rajasthan and Maharashtra, 70 per cent less in western Madhya Pradesh and

almost 80-90 per cent lower than normal in the Saurashtra and Kutch areas of Gujarat. The uneven progress of southwest monsoon coupled with its sub-normal forecast for the entire June-September season, triggered an alarm within the Narendra Modi-led government.It announced a contingency plan for around 500 districts and is also preparing a Cabinet note for granting 50 per cent subsidy on diesel and restructuring of short-term crop loans. Private weather forecasting agency Skymet also raised its drought probability percentage from 25 per cent in April to 60 per cent in June. "Yes, the rains have revived and the deficit might go down further by another four-five per cent from the existing 40 per cent but the showers won't be sufficient enough to wipe off the entire loss and erase fears of drought," said Mahesh Palawat, chief meteorologist, Skymet.He said the losses would also not go away as the current spell of rains is also not expected to be uniform across all stations and might not remain for long. "Like in Gujarat, we feel it will rain for the next two-three days and then it will again go dry," Palawat said, adding any realistic chance of drought fears to receding will depend on whether the current rainfall momentum is carried on in August as well. Nevertheless, the strong revival of rains has brightened prospects for kharif crops, whose acreage was almost 50 per cent less than last year till the first week of July."I feel farmers in central, western and northern India who have been waiting for their first bout of monsoon rains will immediately start planting and we might see a big jump in area coverage in oilseeds, pulses, cotton and coarse cereals this week as compared to the previous weeks," Union Agriculture Commissioner J S Sandhu told Business Standard.Sandhu said even if the next round of rains comes after a gap of 10-15 days, the moisture replenished by the current rains would stand good. "We are expecting an almost 15-20 per cent jump in sowing this week as compared to the previous week," Sandhu added.In the week ending July 11, kharif crops were sown on 25.66 million hectares — half of the area covered during the corresponding period last year. More important, the sowing was 35 per cent less than the normal area, which is the average area sown in the past five years.

### THE FINANCIAL EXPRESS

Tomato prices shoot up to Rs 60 per kg



As consumers wait for onion prices to cool down, retail prices of tomatoes have skyrocketed to Rs 60 per kg in the national capital. Mother Dairy's Safal outlets are selling tomatoes at Rs 44 per kg, double of Rs 20 per kg at which the staple was being sold a fortnight ago, while the local vendors are selling it for Rs 50-60 per kg depending upon the quality. According to traders at Azadpur Mandi, tomato prices in the wholesale market have risen to Rs 30 per kg from Rs 10 per kg at the start of this month." Supplies of tomatoes are under stress as the crop from nearby areas in Haryana have exhausted. Currently the supplies are coming mainly from Naryangaon in Maharashtra," Mother Dairy's Fruit and Vegetable Business Head Pradipta Sahoo told PTI. General Secretary, Tomato Merchants Association at Azadpur Mandi, Subhash Chuk said that in case of drought, production of tomatoes is estimated to be lower as it requires large amounts of water. Chuk also pointed that prices may remain high in the national capital as supplies from all the adjoining northern states have been exhausted. According to Department of Consumer Affairs data, average prices of tomato across the country was Rs 40 per kg. As per the data, the highest price of tomato was Rs 57 per kg in Chennai followed by Rs 54 per kg in Bengaluru and Rs 48 per kg in Puducherry. It showed that tomato prices were higher in southern and eastern parts of the country. Besides these, other cities which were also facing the heat of high tomato prices are Ahmedabad and Indore at Rs 45 per kg, while it was sold at Rs 40 per kg in Bhubaneshwar, Cuttack and Kolkata.

### Tomato prices surge, may rise further

After onions, the prices of tomatoes are causing heartburn for consumers, with the commodity retailing at Rs 50-60 per kg across different markets in the country. Black Spot disease brought on by scanty rainfall in parts of Maharashtra has affected the crop, impacting arrivals at the main markets. Shriram Gadhave, president, All India Vegetable Growers Association, has warned that prices could rise to R70-80 per kg in retail markets. "First there was no rain and then there was slight rain in the middle and this led

to the Black Spot disease. As against 1,500 crates per hectare, the yield this year has touched some 300 crates. Farmers are facing huge losses and have reduced planting," he said. Due to its specific climatic conditions, Narayangaon supplies more than 60% of tomatoes consumed in the country during the four months of the rainy season.

# THE TIMES OF INDIA

### Rs 10 crore scheme to boost black pepper cultivation

The crunchy Goan cashewnuts are almost synonymous with the state, their flavour was unmatched until now. The Goan black pepper is now set to give a tough competition to the cashewnuts' delicious flavour. The spice board of India, based in Cochin, recently inspected the black pepper, occasionally cultivated in Goa's arecanut and coconut plantations by farmers, and found them to be on par with international standards. The board will now offer 10 crore under a central government scheme to expand black pepper cultivation in Goa, in an area of 500 hectares over five years. Soon Goa's signature arecanut and coconut plantations will have the stems of the trees adorned with black pepper creepers. The project also accepted by the Goa government, and awaiting the central government nod for funds, will see 100 hectares of arecanut and coconut plantations being covered with black pepper each year between 2014-15 and 2018-19.As the black pepper creepers are used as an intercrop, they do not take up any additional space for cultivation and the plantation owners in Goa can expect substantial profits with black pepper priced at 1,000 per kilo in the open market and with the prices only skyrocketing within a short span. The spice board of India will provide the necessary market linkage to Goan cultivators of black pepper during the project and ensure that they get their share of profits devoid of middlemen." After Goan cashewnuts, black pepper is the only cultivated product in Goa found to be meeting global standards. Farmers will be trained by experts from Kerala where the spice is cultivated on a large scale and techniques like mechanized threshing will be introduced. The farmers will be assisted in setting up units for cleaning, grading and packaging the black pepper for value addition," a Goa official said. Goan farmers will also be taken on field visits outside the state to see the standard cultivation practices firsthand. The spice board of India will also set up office in Goa to closely monitor the project.

### Vegetable prices shoot up again in Visakhapatnam

After a brief lull, prices of various vegetables are headed northward again, burning a hole in the wallets of Vizagites. While tomato prices have jumped nearly 50% during the last month to a high of Rs 54 per kilo in the Port City, other vegetables like onions, green chillies, lady's finger (bhendi), ginger, cabbage and beetroot have also become dearer during the period. According to Rythu bazaar sources, tomato will continue to remain pricey till the second week of October, when the new crop comes into the market and brings the prices down. "We are getting tomatoes from Karnataka as of now but the crop

availability is quite low. Visakhapatnam has a demand for around 160 tonnes of tomato per day, but we got only around 36 tonnes on Wednesday. Karnataka is the major supplier of tomato throughout the country and as production has dropped, the prices have shot up," said a Rythu bazaar official. He pointed out that as the local tomato crop from areas such as Chittoor will be coming into the market only by around the second week of October, the prices are expected to drop below Rs 20 mark only by the end of October. Till then, prices will remain high, causing inconvenience to consumers. Talking about the high prices of other vegetables including onions, green chillies and lady's finger, another Rythu bazaar official said, "We are procuring onions directly from Maharastra state and so are able to sell them in the Rythu bazaar at around Rs 26, but in the open market it is selling above Rs 30." He also mentioned that the prices of green chillies, which are again procured from neighbouring Karnataka, have also been on the rise due to a drop in production of the crop. "We will be able to procure local chillies from Guntur and Vijayawada area in about one month after which the prices of the vegetables may decrease and bring some respite." The prices of lady's finger are also expected to decrease in another 20 days following the harvest of crop from various parts of Visakhapatnam district itself. Meanwhile, ginger prices continue to reign high at around Rs 115 per kilo as produce from the Araku area has dropped. Pointing out that increasing prices were playing havoc with household budgets, homemaker K Shyalaja, a resident of Peda Waltair said, "Almost all vegetables have become so costly that it is becoming difficult to manage my household budget. Tomatoes have become untouchables as they are going for Rs 50 a kg even in Rythu bazaars. As tomato is an essential vegetable that goes into most dishes in our house, it is becoming very difficult to manage. I hope the government will do something about the spiraling prices."

### Cage fish farming at sea catching up in coastal AP

At a time when fish stocks are declining globally due to various factors like climatic change and pollution, cage farming of fish on sea, an aquaculture technique, has thrown up an encouraging alternative that yields 10 times the fish catch as compared to fish reared in ponds or wild harvest in the sea. This technique has also been taken up to great success in Vizag and other coastal districts of AP on an experimental basis by scientists of the Visakhapatnam Regional Centre of the Central Marine Fisheries Research Institute (CMFRI). In Krishna district (Nagailanka) and Narsapuram (West Godavari), cage farming has been taken up in collaboration with fishermen, while in Vizag the cages in the sea along RK Beach are controlled by the CMFRI. There are six cages in Krishna, 10 in West Godavari and eight in Vizag district of AP. Plans are afoot to double the number of cages in Vizag soon given the good prospects, said CMFRI scientists. Though open sea

cage culture technology is a relatively recent activity in India, it is prevalent in other Asian countries. While lobster, Asian seabass, mullets, Cobia and Pearl Spot have been successfully harvested by CMFRI in various coastal waters in India, at present the Vizag centre of CMFRI is maintaining brood stocks of Orange Spotted Grouper, Indian Pompano, Snappers and Golden Trevally in cages that have all shown good growth and maturation, said scientists. Under this procedure, fish rearing is done in an enclosed area in a natural aquatic environment where the water continuously flows and debris doesn't accumulate, which is why there is no pollution or ammonia deposition as in the case of stagnant and low density water ponds. The young ones of fish and other aquatic species are kept, fed and grown to marketable size in these cages, which are of six metre diameter and made of high density polyethylene. "Cage farming is in an infancy stage now, but the prospects for commercial exploitation are so good that we are planning to double the number of cages soon as well as expand to other neighbouring areas. At the end of the culture period, which ranges from six to eight months, three to five tonnes of fish are produced just from one cage," said Subhadeep Ghosh, senior scientist and scientist-incharge at CMFRI. The biggest advantage of cage farming, according to Prof K Sujatha, chairperson, board of studies, department of marine living resources at AU, is that despite being a fish culture technique there is no need to change the waters as sea water continuously flows through the cages, there is some natural food easily available for the fish to feed on and there's no need to put up any time or space-consuming infrastructure except the cages. However, she pointed out that not all areas are suitable for cage farming. "There needs to be optimum depth of at least 10 metres from the shore, the sea should be more or less calm without high waves and currents where the cages are located. The salinity, pH, ammonia, nitrate should be all within permissible limits," she explained.

### IVRI sets about preparing farmers for drought

Scientists of the Indian Veterinary Research Institute (IVRI) are wasting no time - they have prepared a plan, and have set about educating farmers in case a drought-like situation prevails. Teams of scientists from IVRIcentres across the country are heading to villages to interact with farmers and prepare them for a drought-like situation, RK Singh, director of IVRI, told **TOI**. The IVRI is headquartered in Bareilly district, at Izatnagar. It has five centresacross the country - in Bangalore, Kolkata, Palampur in Himachal Pradesh, Mukhteshwar in Uttarakhand and Bhopal, MP. With scanty rainfall reported in many parts of the country as the monsoon first set in, the Indian Council of Agriculture Research (ICAR) had written to the IVRI to prepare a plan so that production is not affected, and farmers are provided the necessary support. "With probability of drought, a national-level action plan has been made to help farmers manage crop yield and animal

health. All centres of the IVRI have set up teams of scientists, and they have started visiting villages to help farmers. We are also sending voice messages with eight to 10 important bits of information to farmers," Singh said. He said this plan of action will continue for two months, and if the monsoon revives in the interim, it would be altered and the farmer advisory changed. Apart from spreading information on food crops, scientists are emphasizing the impact on livestock. "The drought-like condition poses a risk to the health of livestock. It can reduce the level of nutrition in animals, making their immune system weak, severely affecting milk production," the director said. "To protect animals from deficiency of proteins and vitamins, we are distributing blocks of ureamollasses developed by our scientists. The blocks, rich in minerals and other nutritional components, are given to animals for licking," he said, adding that a two-kilogram brick of urea-mollasses could suffice for one animal for about five to eight days. In time of drought, animals may suffer heatstroke, so farmers are advised to tether them in shade, and only allow them to graze in the early morning or late evening. Scientists say said that animals should avoid bathing in ponds and lakes, avoid infectious diseases. They also advise farmers to increase salt intake of the animals, and ensure that pregnant ones are properly fed. Farmers also receive inputs on alternative crops that need less water. "Crops such astil, green gram and black gram can be grown even with scarcity of water, and their market price is good. It will help farmers in fighting drought," a programme coordinator of the Krishi Vigyan Kendre of IVRI said. Drought-resistant fertilizer is also being distributed to farmers for use in paddy fields. Nepal Singh, a farmer in Harunagla village, said, "Deficit rainfall in June and July is adversely affecting the plantation of food crops. The scientists asked us to plant alternative crops which can endure water-scarcity."



# 90 per cent subsidy for use of drip irrigation in agri sector: Andhra Pradesh Chief Minister N Chandrababu Naidu

Andhra Pradesh Chief Minister N Chandrababu Naidu today announced that use of drip irrigation technology will be promoted in agriculture sector and a subsidy of 90 per cent will be given for the purpose. He also said that the government was planning to implement sophisticated technology in the sector to yield good results. "The government is preparing a permanent scheme for drought-hit farmers in the state. Drip irrigation technology will be used in agriculture sector with 90 per cent subsidy, which will save 50 to 60 per cent of water," Chandrababu said while interacting with farmers at Tadicherla in West Godavari district. Drip irrigation is a method that saves water and fertiliser by

allowing water to drip slowly to the roots of plants. The chief minister also urged farmers to accord priority to commercial crops. Stressing that power and agriculture sectors are inter-related, Chandrababu said that steps are being taken to ensure uninterrupted 24-hour electricity supply. He also alleged that newly-formed Telangana state was receiving more power than Andhra. "But the government is taking all necessary steps to fix the power deficit," Chandrababu said. Referring to Polavaram project, Chandrababu said that agricultural production will increase with the completion of the Central project. "The post of chief minister is like a crown of thorns and not a crown of gold for me. A blue print of 'Navya Andhra Pradesh' is in my heart and with the cooperation of all we will take the state forward to top position," he said. Earlier in the day, Chandrababu inaugurated solarpowered street lights at Dwarka Tirumala in West Godavari district and visited the famous Sri Venkatswara Swamy temple there. "A 500-bed government hospital will be in Dwaraka Tirumala if necessary," the chief minister said.