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# THE HINDU

## **US to support fellowship in agriculture, allied sciences in India**

United States of America's Ambassador to India, Richard R. Verma, on Monday presented some good news to the students of the Tamil Nadu Agricultural University. He said his country would support fellowship in India in agriculture and allied disciplines.

Interacting with the students at the University, he said that the fellowship was to explore animal health, post-harvest treatment, biological control, biotechnology and agricultural marketing.

## **Global food security**

This was necessary because the U.S. and India, as two of the world's largest agriculture producers, should collaborate not only on the research front but to also ensure global food security and prosperity to the rest of the world.

As for research in agriculture, the countries needed to acknowledge the importance of agriculture biotechnology; in particular, the importance of genetically modified crops in boosting production.

“While some still question the value of genetically modified crops, we believe it is one of the tools necessary to overcome the global challenge of feeding, clothing, and sheltering people as our land and resource base is increasingly constrained,” said Mr. Verma.

Such a collaboration and research was necessary because by 2050 the world population would touch 9.1 billion, to feed which the production should go up by 70 per cent from the present level. This would require significant investment in agriculture research.

## **Seamless merger of tradition with science**

*An integrated farm stands as a model for how traditional practices can be applied in a scientific manner to obtain optimum results.*

The farm of P. Sennakesavan, former member of Research and Extension Education Council, Tamil Nadu Agricultural University, stands out as an oasis in Chinnamalaikundru village of Ettayapuram taluk in Tuticorin district. Trees of uniform height, including some exotic varieties, could be seen from a distance. The integrated farm is a model for how traditional practices can be applied in a scientific manner to obtain optimum results.



P. Sennakesavan feeding goats at his integrated farm in Chinnamalaikundru of Ettayapuram Taluk in Tuticorin District.



P. Sennakesavan inspecting a bunch of drumstick in his farm at Chinnamalaikundru near Ettayapuram in Tuticorin District of Tamilnadu.

Mr. Sennakesavan, a school dropout, calls his farming as ‘Low External Inputs, Sustainable Agriculture’ (LESA). His method is based on harvesting sunlight, rain and wind for sustaining the soil’s health and richness. The boundaries of the 150-acre farm are lined with high-grown trees, which serve as a wind barrier. “Wind forces flowers to shed their pollen and damages trees. It also affects the top soil. The double row of trees regulates wind and provides fodder for the cattle,” says Mr. Sennakesavan.

Rain harvesting is done in a traditional way in the farm. “The idea is to make ‘running’ water ‘walk;’ ‘walking’ water to ‘stand;’ ‘standing’ water to ‘sit’ and ‘sitting’ water to ‘sleep,’” Mr. Sennakesavan explains. Multipurpose check dams on the waterway check the unrestrained flow of water. The runoff water is collected in a huge percolation pond, which facilitates recharging of groundwater table. Sunlight is directly taken by the trees and plants. “We do not allow sunlight to touch the earth as it will affect the bacteria in the soil. The trees harvest sunlight,” he says.

The farm has neem, Indian Tree of Heaven, white teak, coconut and moringa. The neem trees have a unique texture and their tap root runs straight. “Neem trees with a straight tap root are drought-resistant.”

He does not plant neem saplings and the trees grow from seeds. Here he adopts a traditional method to choose the right seeds. “I sit in the grove during summer to collect neem seeds in crow’s faeces. When the crow eats the neem fruit, the seed undergoes a process in its digestive system similar to chemical enrichment, which makes it ideal for planting,” Mr. Sennakesavan says. He keeps water and grains as food for birds during summer and nurses an ambition of growing trees over 50 feet in height over a short period of time.

Organic pesticides are sprayed only once after sowing, on the eighth and ninth days (Ashtami/Navami) after the new moon (Amavasai). “A scientific explanation for the practice is that breeding of pests that are harmful to the plants takes place on new moon’s day and the larvae come out on the eighth day. Spraying of bio-pesticides ensures annihilation of harmful pests at one go,” Mr. Sennakesavan says. The Dean of Agricultural College and Research Institute, K. Velayudham, explains that such traditional practices are time-tested and rooted in science.

Mr. Sennakesavan uses organic manure to enrich the soil and does not use a tractor for ploughing. De-weeding is not done in the farm as the “weeds get converted as milk and meat” by allowing the cattle to graze. At present, the major source of income for the farmer is through moringa and neem trees. “The powder of drumstick leaves improves the immune system,” says Mr. Sennakesavan, who sells the hand-pounded powder to a German agency through a Singapore-based trader.

The powder of moringa leaves is used to fight malnutrition in African countries, especially Somalia. The farmer has plans to market drumstick powder in different varieties by adding dhal, coriander and other ingredients. He also exports drumstick seeds for oil extraction to South Korea. “Drumstick seeds have high protein content than even spirulina. They are good for sportspersons,” says Mr. Sennakesavan.

Mr. Sennakesavan can be contacted at Chinnamalaikundru, Ettayapuram taluk, Tirunelveli district, 628902. Phone: 9842348915.

## **Cotton crop in Punjab comes under whitefly attack**

Cotton plantations in Punjab have come under a major 'Whitefly' attack, triggering fears of a massive yield loss in the Kharif crop in the State.

With cotton growing areas witnessing the "worst" attack of whiteflies in past five years, experts are blaming humid weather conditions for the widespread attack.

"Whitefly attack has hit cotton crop in several areas of the state, which will impact the overall yield of the crop," Punjab Agriculture Minister Tota Singh said here on Monday.

"Because of the whitefly attack, cotton growers are going to suffer heavy losses," he added.

The Minister said he has written to the Chief Minister Parkash Singh Badal to conduct special crop loss assessment of the affected areas for compensating the farmers. Total area under cotton crop in Punjab is about 4.5 lakh hectares and is mainly grown in Fazilka, Bathinda, Mansa, Muktsar and Abohar.

The state government has deputed a team of experts including farm scientists of Punjab Agricultural University to give a report on the impact of whitefly attack and suggest measures to be taken by growers to minimise their losses.

"Whitefly attack is seen in cotton fields near areas where other crop like paddy, moong (pulses), vegetables like okra and orchards has also been sown. Its impact has also been seen on early sown variety crop," the minister said while adding that humid weather conditions were mainly responsible for the spread of the disease.

Whitefly sucks sap from the leaves of cotton, thus hitting the growth of the plant.

Experts have also blamed the use of unrecommended varieties of cotton seed by farmers.

Notably, Punjab government has been encouraging growers to bring more area under cotton crop as part of its plans to decrease area under paddy crop.

Area under cotton in Punjab this season failed to reach the targeted acreage of 5.25 lakh hectares set by the state government because of "lesser" prices fetched by growers last year. - PTI

## ‘Red sanders can be grown like any other crop’



It is not necessary to inform the Forest Department before going in for red sanders plantation.

Farmers and private planters, by paying a user charge of Rs. 10 or 20, can grow red sanders and sell them at any price of their choice to anyone anywhere. P.V. Chalapathi Rao, Chief Conservator of Forests, Tirupati Wildlife Circle

The Forest Department has embarked on a massive plan of action to remove the “meaningless” phobia of red sanders plantation among farmers and planters.

Speaking to *The Hindu*, Chief Conservator of Forests (Tirupati Wildlife Circle), Mr. P.V. Chalapathi Rao said there were so many fallacies among the public about the commercial exploitation of red sanders plantations.

“They have formulated wrong opinions over the years that growing red sanders is a crime, or its trade is prohibited and involves criminal action by police and forest departments. Farmers and private planters should realise that just by paying a user charge of Rs. 10 or 20, they can grow red sanders and sell them at any price of their choice to anyone anywhere. It will be like growing any other agriculture crop,” he said.

The official said there was no need for planters to inform the Forest Department before going in for red sanders plantation. “Whenever they want to cut the trees and sell them, all they have to do is to get transit permits from the Forest Department. This is for the safety of their own material during transportation,” Mr Rao added.

The officer said though the Forest Department encouraged private plantation of red sanders, “virtually, no farmer is coming forward to openly say that he is interested.”

According to him, though there are some private plantations in Chittoor district, particularly in the western zone close to Karnataka and within the purview of the Tirupati Wildlife Circle, no steps have been initiated yet for their assessment.

### **Efforts on to remove phobia among public**

“Only recently, we hit upon the idea of surveying such private plantations, though their owners have not furnished details to the department so far.

“We also do not know at what price they are selling the produce and to whom and how. We will get into the details soon only to remove the public phobia about the trade and to encourage it,” Mr. Rao said.

He added that those who owned private red sanders plantations need not pay fee to the department for raising them, and they needed no official permission. However, he clarified that the government would not provide subsidy to plantations, and that planters should take care of the security of their plantations in view of the mind-blowing demand for red sanders in the international market.

*Farmers and private planters, by paying a user charge of Rs. 10 or 20, can grow red sanders and sell them at any price of their choice to anyone anywhere.*

*P.V. Chalapathi Rao*

*Chief Conservator of Forests*

*Tirupati Wildlife Circle*

### **Madhya Pradesh schools to go green**

*New scheme 'Nakshatra Vatikas' to be launched*

Keen to educate students about constellations and properties of trees, the Madhya Pradesh government will develop 'Nakshatra Vatikas' in government schools.

The state government has directed divisional and district officers of School Education Department to develop 'Nakshatra Vatikas' in open premises, a Public Relation Department official said. The government has directed to complete works in this regard by August 30. They have been asked to seek cooperation of officers of Forest and Agriculture departments in this work, the official said.

Directives have also been given to avail guidance from botany department of local college about soil, fertilisers and insecticides for 'Nakshatra Vatika' (gardens based on the theme of constellation).

The planted saplings will be nurtured by "Children's Cabinet". 'Nakshatra Vatikas' will be developed on the premises of such schools at district level where classes from primary to higher secondary are conducted and schools with open space and boundary wall are being selected, the official said.PTI

### **Rooftop solar solution is the future**

*Response to the three-day APEPDCL exhibition encouraging*



A vendor displays a solar power solution for domestic RO water purifier at the APEPDCL exhibition that concluded in Visakhapatnam on Monday.- Photo: C.V. Subrahmanyam

A space measuring about 25 sft on the rooftop is sufficient to install two 125 watts solar panels, which can light-up at least two lights and run two fans for a minimum of four hours. Installation would cost about Rs. 38,000, but it can reduce the electricity bill by about Rs. 200 on a monthly basis. And, more importantly, solar is green energy and it reduces the carbon dioxide emission into the atmosphere. These apart, the life of each solar solution, be it domestic or agriculture, is about 20 to 25 years.

Rooftop solar solution is the future. It will not only reduce the load on the central grid but also lessen the financial burden on domestic consumers.

This was the theme at the three-day solar expo organised here by the Andhra Pradesh Eastern Power distribution Corporation Limited in association with NREDCAP.

Both the Central and State governments have laid huge emphasis on rooftop solar solution, and the country's target is to generate 40,000 MW by 2022. "For Andhra Pradesh, the target is 2,000 MW, of which the share of the APEPDCL is 750 MW and that of APSPDCL 1,300 MW," CMD of APEPDCL R. Mutyala Raju told *The Hindu* .

The exhibition was organised to create awareness among people and the response appeared to be rewarding. In the last few years, the APEPDCL had given 28 connections, resulting in the generation of 413 KW across the five coastal districts.

Whereas, in the last three days, the discom has received about 120 applications, with the generation capacity being about 574 KW.

"Our target for this year is 3.5 MW for the five districts, for Visakhapatnam alone it is 1 MW. In the exhibition, we have already achieved 0.5 MW," said Chief General Manager (Commercial) of APEDPCL B. Ramesh Prasad.

To keep the campaign going, the Discom plans to hold the exhibition in all the five districts and approach government hospitals and offices for rooftop solar solutions.

### **Agri solution**

The APEPDCL has installed solar solution to 600 farmers across the five coastal districts. Of them, 500 are 5 hp motors and 100 are 3 hp motors. It has set a target of 2,000 agri pumps this year. For 3 hp pumps, a 3 KW solar plant has to be installed and the space required for setting it up is about 300 sft.

The total consumption for 3 hp pump, if it runs for seven hours per day, is about 460 units a month. By installing a solar-run pump-set, a farmer can save about Rs. 4,000 per month. The total cost of installation will be about Rs. 3 lakh, which can be recovered in about five years, says the APEPDCL CMD.

### **Water released for irrigation**

Water for 'samba' cultivation was released at Agaramangudi regulator near here on Monday. About 1,812 acres will be irrigated using the waters.

M. Chandracasu, Minister for Agriculture, released the water by operating the keys of the regulator. He said that farmers of Nedungadu and Melakasakudi would benefit in a big way.



Collector E. Vallavan urged the farmers to ensure judicious use of water. V. Shanmugasundaram, Executive Engineer, Public Works Department, was present. Farmers felt the discharge was timely to raise the samba crop. Natarajan, president of 'Pasumai Padai' and Somu Elangovan, president of Melakasakudi Farmers Association, who were present, said a majority of farmers was fully prepared to raise the 'samba' crop in anticipation of discharge of water from the Cauvery. The Collector said that Vanjiyar was a major river catering to needs of farmers of Karaikal district.

### **Kuruvai harvest in full swing**



Harvest of 'kuruvai' crop has been in full swing in parts of the district, thanks to the special package scheme implemented by the state government in coordination with the Agriculture, Agricultural Engineering, Cooperation departments.

Harvest has been completed in about 30 per cent of the 87,392 acres in the district and there has been scramble for mechanical harvesters.

In fact, there was a lull in harvest on Sunday following moderate showers in parts of Kutthalam and Mayiladuthurai and Vedaranyam experienced.

According to official sources, the district's achievement last year was 71,575 acres but an additional 15,817 acres was covered this year, taking the total area to 87,392 acres. A

majority of farmers has raised 'ADT 45' paddy, a short-duration variety, which was best suitable for the 'kuruvai' season.

The harvest of 'kuruvai' has been in full swing and the paddy was being marketed at the direct procurement centres opened by the Tamil Nadu Civil Supplies Corporation.

Apart from ADT 45, a cluster of paddy farmers in Mayiladuthurai, Sembanarkovil and Kutthalam have raised 'TKM 9' paddy variety. As a special case, the Tamil Nadu Civil Supplies Corporation procured the paddy, the official told *The Hindu* on Monday.

Harvest has been brisk in Mayiladuthurai and Kutthalam blocks in the district. Farmers of Perenzhundur, Atthikadu, Vanathirajapuram, Melaiyur, Kadakkam, Agaram Adhanur and Perunchedi have been registering a good yield.

The average yield was about 6.5 tonnes a hectare.

Farmers have resorted to 'thaladi' crop in a few villages in the district where the 'kuruvai' cultivation has been completed.

### **Encourage Ramanathapuram farmers to continue farming, says MP**

*Expresses concern over conversion of farmlands into plots*

Expressing concern over dwindling farming activities and conversion of farmlands into housing plots, local Member of Parliament A. Anwar Raja has called upon officials and farm experts to infuse fresh hopes in the minds of farmers to continue farming.

The farmers should be rest assured that they would not burn their fingers by taking up farming and the officials in the Department of Agriculture should ensure that the benefits of the findings by the research centres reached the farmers in every village, the MP said after inaugurating a Pre-Kharif Awareness Programme here on Monday.

Many farmers were forced to quit farming and sell their lands for housing plots as they burnt their fingers after cultivating different crops due to lack of technical expertise.

“Farming, if not a profitable proposition, should not spell doom to the farmers,” the MP said.

The officials should sow the seeds of hope in the minds of the farmers in the district, who suffered due to drought and excess rains, by introducing, besides expertise, short-term, drought-resistant and high-yielding crops, Mr. Raja said, adding the development of science and technology in the field of agriculture should help the farmers renew their hopes for better prospects.

Exhorting the farmers to do farming with a sense of involvement and social responsibility, the MP said that they should derive immense satisfaction that a grain of rice produced by them helped alleviate hunger.

The MP released a handbook for the farmers and launched Reliance Foundation’s voice SMS covering 40,000 farmers in the district. The Indian Council of Agriculture Research (ICAR) and the district Krishi Vigyan Kendra (KVK) jointly organised the programme and established stalls for the benefit of the farmers.

The programme was aimed at educating the farmers on soil, crops and animal health management and use of modern machinery for sustainable production, said I. Seegan Paul, Programme Coordinator, KVK.

The monsoon this year would be good with 5 to 10 per cent shortfall, Harivasan, Personal Assistant to Collector (Agriculture), said quoting the Meteorological Department.

### **Officials to meet in Bengaluru to review drought situation**

*DC asked to complete survey on extent of damage to kharif crops due to failure of monsoon*

Minister for Municipal Administration Qamarul Islam has said that the State government has convened a meeting of deputy commissioners and chief executive officers of zilla panchayats in Bengaluru on September 1 to take stock of the drought situation and finalise a road map to tackle it.



Attending a Karnataka Development Programme review meeting here on Monday, he directed Deputy Commissioner Vipul Bansal to complete the ongoing survey on the extent of damage to kharif crops due to the failure of the monsoon and submit it at the meeting in Bengaluru.

Mr. Qamarul said that the assessment made by the district administration on crop loss should be final so that the government could take a decision on the quantum of compensation.

Mr. Bansal said as per a preliminary report submitted to the government, crops on more than three lakh hectares had been damaged. If the government had to pay compensation as per the new norms of the national Disaster Response Fund, the district might require between Rs. 150 crore and Rs. 175 crore. Mohammad Jilani Mokashi, Joint Director of Agriculture, said that the deficiency in rainfall had been 46 per cent after the onset of South West Monsoon.

Even in August, it was more than 40 per cent. Only 73 per cent of the targeted area of sowing had been covered for the kharif season.

### **Moisture stress**

The condition of sown crops was bad due to moisture stress too. Afzalpur taluk was one of the worst affected followed by Aland, Kalaburagi and Jewargi. Only in Chincholi and Sedam, 100 per cent sowing had been reported.

Rain in August had helped revive crops in a few areas and also helped the farmers take up sowing of sunflower in Afzalpur and Aland taluks.

Sowing for rabi season is expected to begin in the first week of September.

### **Water shortage**

The meeting was also told that Rs. 20.95 crore was required to tackle the drinking water shortage in rural areas, which included Rs. 10.7 crore required for drilling 200 borewells, digging 35 open wells, and supplying of drinking water through tankers to about 43 villages in the coming months.

Another Rs. 5.25 crore was required for recharging high yielding open wells and laying pipelines and another Rs. 4 crore for fixing motors for the purpose.

### **A unique jatra which highlights the importance of organic farming**



Farmers looking at various organic products displayed at the stalls during the agriculture fair at Kolhar town in Vijayapura district on Monday.— PHOTO: RAJENDRA SINGH HAJERI

For the last five years, Kolhar town of Basavanabagewadi taluk is witnessing a unique type of jatra. During the fair, an association of progressive farmers arranges a Krishi Mela (agriculture fair) for educating the farming community about the importance of organic farming.

“It is a one-of-its-kind event which is purely by the farmers, of the farmers and for the farmers. Unlike any other agriculture fair which organised by government, here, only the farmers contribute to the event,” said Siddu Balagonda.

The progressive farmer who is behind the unique event says that for the last five years he has been organising the fair with the help of other farmers in the town during the Uppashappa temple fair. He said that they noticed that during the annual religious fair, hundreds of people, mostly farmers were arriving to the temple.

“We thought of using the opportunity to hold an event which could help the farming community.

Thus, we chose to organise an agriculture fair on the issue of organic farming as it has become the need of the hour,” Mr. Balagonda said.

Winner of ‘Krishi Pandit’ and a recipient of many such awards, he said that owing to excess and unabated use of chemical fertilizer, the soil is losing fertility and commodities are becoming unhealthy.

### **‘Save soil’**

“The best way out to save soil and have healthy food is to switch over to organic farming.


“The fair essentially focuses on this critical aspect where every year we call the experts and progressive farmers to make farmers aware of its significance for the present and future generation,” he said.

To a question, he said that the farmers have contributed around Rs. 7 lakh for holding the event.

### **Scientific community sounds warning bell**

Organic farming appears to be the popular mantra in the State as it is planned to be transformed into a fully organic farming State by 2016. But sceptics, dubbed as advocates of the State’s ‘agricultural bureaucracy and technical science,’ sound a note caution.

The subtext of what they call organic farming propaganda is that the Green Revolution has wreaked havoc on the ecology and society in India in general and Kerala in particular.

<b>HEALTH OR HYPE?</b>		
	<p><b>Cancer and aging</b></p> <ul style="list-style-type: none"> <li>▪ Kerala's rate of cancer incidence 130 per 1 lakh population</li> <li>▪ Kerala's aged population 11.2% (as against 6.9% in India)</li> <li>▪ Life expectancy in Kerala 75 years (as against 64 in India)</li> <li>▪ Cancer incidence in developed nations 300 per 1 lakh population</li> </ul>	
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;"> <p>→ Some <b>9,000 organic farmers</b> in State</p> </td> <td style="width: 50%; text-align: center;"> <p>→ State to go <b>fully organic</b> by 2016</p> </td> </tr> </table>	<p>→ Some <b>9,000 organic farmers</b> in State</p>
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<p><b>🔴 The expansion of organic farming will decrease the yield when the emphasis should be on increasing it as the population is rising.</b></p> <p style="text-align: center;"><b>C. GEORGE THOMAS</b> Professor Kerala Agricultural University</p>	<p><b>🔴 It is scientific farming practices that increased rice productivity from 550 kg/ha five decades ago to 2,250 kg/ha today.</b></p> <p style="text-align: center;"><b>K.M. SREEKUMAR</b> College of Agriculture, Padannakkad</p>	

According to the sceptics, organic farming that appears in catchy labels such as ‘do nothing’ farming, zero-budget natural farming, biodynamic farming, permaculture, or homa farming, is promoted by triggering fears that diseases such as cancer are on the rise in the State because of the use of chemical inputs in agriculture. Kerala being an aging society, the correlation between longevity and cancer is often ignored.

### Impact on yield

“Organic farming will imperil our food security and therefore it is a movement against the poor,” says C. George Thomas, Professor, Kerala Agricultural University (KAU). He says that the expansion of organic farming will decrease the yield when the emphasis should be on increasing it as population is rising.

Observing that the concept is not based on scientific experiments, Prof. Thomas says it reflects an increasing hostility to science, exemplified in opposition to vaccines and modern medicine.

Back in 2008, the Teachers’ Association of the KAU released a rebuttal to the organic farming propaganda. The document, titled ‘Can organic agriculture replace conventional agriculture?’, captures the concerns of the agricultural scientific community.

“Low yield and uncertainty in cultivation of crops are the major problems of the traditional agricultural practices before scientific methods such as integrated nutrient and diseases and pest management systems were,” says K.M. Sreekumar, Professor at the KAU’s College of Agriculture at Padannakkad, Kasaragod.

The revival of the traditional practices will also revive these problems, he points out. It is the scientific farming practices that, for example, increased rice productivity from 550 kg/ha five decades ago to 2,250 kg/ha today, Prof. Sreekumar says.

Agriculture scientists say that the government had better identify some sectors such as cultivation of pepper, summer vegetables for organic practices instead of planning to bring the entire agriculture under organic farming.

### **CPI(M)'s organic veg initiative bears fruit**



CPI(M) Kottayam district secretary V.N. Vasavan at the vegetable store opened by the local primary cooperative bank at Pallickathode as part of the party's initiative in organic vegetable farming and marketing.

The initiative of the Communist Party of India (Marxist) in raising organic vegetables for Onam will make an impact on the vegetable demand in rural areas, says party district secretary V.N. Vasavan.

The venture, part of an initiative being taken up Statewide, has been a learning experience for the CPI(M) leadership. The first phase of the campaign commenced last March when party members were asked to take up vegetable cultivation on the stretches of land owned by them, in the backyard of houses in towns and on terrace. A technical committee, comprising retired Agriculture Department officers and farm experts, oversaw the first phase and came out with a more effective protocol, says Mr. Vasavan.

In the second phase, in addition to encouraging individuals to take up vegetable cultivation, the party sought the services of various cooperative banks and took nearly 30 acres of land on lease. "Land has been taken on lease, in certain cases by cooperative banks and in others, by party leaders," he says.



Cultivation on leased land has been taken up at Parathode, Vaikom, Manjoor, Elikkulam, and Cheeranchira, near Changanassery.

The party itself provided seeds and fertilizers. In addition to traditional Kerala vegetables, cultivation of plantain and tapioca has also been taken up. The process has been monitored by a ward-level committee.

That the campaign is a success has been proved by the fact that instead of 50 outlets the party planned, 55 have been opened already. “There is great demand from the people,” he says adding this would not end up as a one-shot campaign aimed at this Onam. “Once we taste the vegetables untainted by chemical pesticides, we will get hooked by them. That itself is the biggest gain from the campaign,” Mr. Vasavan adds.

### **Back-ended subsidy for mechanised transplantation**

*To increase productivity and improve profit margins*

To help paddy farmers increase yield and improve profit margins, the Department of Agriculture is set to extend back-ended subsidy for raising paddy over an expanse of 1,300 hectares using mechanised transplantation methodology.

“This is the first time that the mechanised transplantation method is to be used in a large commercial scale in Tirupur district,” Joint Director of Agriculture R. Kanagasabai told *The Hindu*.

### **Areas identified**

The acreage identified for the project falls under Kangayam, Vellakoil, Udumalpet, Madathukulam and Dharapuram blocks. In mechanised transplantation method, the saplings are first raised in mat nurseries adjacent to the respective main fields and then re-planted in main area using mechanised transplanter.

Mr. Kanagasabai said that the method could reduce labour requirements considerably, apart from ensuring correct spacing between the seedlings.

“By giving adequate spacing, instead of cluttering the field with saplings as done in traditional manual method, there will be at least 25 per cent more yield from unit area vis-à-vis conventional method. Weed management will be easier,” he added.

Agriculture officials also pointed out that the spacing pattern followed in mechanised transplantation method means very less quantity of seeds need to be used.

“It is found that just 8 kg of seeds are needed for one hectare when mechanised transplantation mode is adopted whereas 60 kg of seeds are required in the older method,” pointed out Mr. Kanagasabhai.

### **Approach MeeSeva centres, farmers told**

Aqua farmers from East Godavari district must apply online through MeeSeva centres to obtain permissions for undertaking aquaculture, according to District Collector H. Arun Kumar.

Addressing a meeting with district officials here on Monday, Mr. Arun Kumar said as the State government was keen on computerising the administration and offering various services online, permissions from the Fisheries Department too had been made online.

“This is for the convenience of aqua farmers, who need not visit the offices of the Fisheries Department time and again to obtain permissions,” he added. He said services, including permissions for the fertilizer shops, were available online.

### **Here’s a golden chance for aquaculturists to revive ponds**



A grower sprinkling feed in an aqua pond at Ravivaripalem of Prakasam district.

Vannamei shrimp culture has come as a boon for aquaculturists in Prakasam district who were hit hard following the outbreak of the White Spot Disease in tiger shrimp farms, leading to abandoning of ponds in large tracts.

The growers are a worried lot now, with the price of Vannamei for 30-count plummeting to around Rs. 400 a kg after touching a high of Rs. 750 in 2013 in the wake of the outbreak of the Early Mortality Syndrome in China.

In this scenario, the Fisheries Department had chalked out an action plan to fully tap the potential of the district by focusing on revival of brackish water aquaculture in abandoned ponds on the one hand and cutting costs through supply of subsidised seed and feed.

Estimating that aquaculture is currently in vogue in around 3,000 hectares, the district administration has fixed an ambitious target of doubling it to 6,000 hectares in the district over a period.

Speaking to *The Hindu*, Fisheries Assistant Director said the State government had identified aquaculture as a growth engine and had come out with schemes for the revival of abandoned ponds, besides those for providing subsidy for inputs and mechanisation of aqua ponds to ensure sustainable shrimp farming.

Aquaculturists, according to an estimate, have abandoned aqua-ponds in over 500 hectares in the district.

“We want to see that aquaculture is revived in at least 100 hectares during the year, he said, adding that selected players would be offered a subsidy of Rs. 2 lakh per hectare for specific pathogen-free seed, feed and chemicals.

### **Subsidy scheme**

The department has also come out with a scheme to provide Rs. 5 lakh as subsidy for the Rs. 10-lakh mobile lab to test soil, water and shrimps right at aqua ponds for disease surveillance, Fisheries Development Officer K. Lakshminarayana said. The growers can also avail 50 per cent subsidy on purchase of solar pump-sets, iron rods, fans, paddle and aerators to ensure sustainable shrimp farming.

Farmers going for Tilapia culture in ponds are eligible for 50 per cent subsidy for a two-hectare unit costing Rs. 2 lakh to grow exotic species imported from Africa to augment their income, they add.

***Growers are worried lot with the price of Vannamei for 30-count plummeting to around Rs. 400 a kg after touching a high of Rs. 750 in 2013***

### **Start your own kitchen garden**

S. Alageswari has made it her mission to spread awareness on 'organic' lifestyles. Here, she guides a student of Panchayat Union School, Kurumbapalayam on how to grow and look after a kitchen garden.

Alageswari tucks a tiny sapling into place and pats the soil down tenderly. A half smile plays on her lips. It is as if she is sharing a secret joke with the spinach. She probably is.



Because she loves plants, especially vegetables and she has made it her business to move around teaching whoever wants to learn, how to grow their own veggies. That is why she is at the Panchayat Union Middle School at Kurumbapalayam – to teach kids gardening. Students Dilip and Priyavardhan run up to her and tell her how the cucumber seeds she gave them to plant back home has already borne fruit. “This is the reason I love to teach children; they are receptive and enthusiastic,” says Alageswari.

The idea for a kitchen garden at school was born when school authorities asked CRI Pumps if it could help with some extra vegetables to go with the midday meal. It would add variety to the kids’ diet not to mention, make it more nutritious. (The Kurumbampalayam school is one of the 10 government schools that CRI looks after as part of its CSR initiative). Says S. Raja, Manager CSR, CRI Pumps, “Along with the headmistress, S. Rachel and other teachers of the school we decided on a long term solution – a kitchen garden. So, we invited Alageswari to help us.”

Alageswari has also created kitchen gardens at the Gandhi Maa Nagar Government School in the city, besides many more institutions in Uthukuli, Gobi, etc.

Before she gets the kids and teachers to prepare the soil and plant the seeds, she speaks to them about an ‘organic’ lifestyle.

“I was converted when I first heard Nammalvar,” she says of the messiah of organic farming. “He had such an impact on me that I left my job and decided to spread his word.”

Real learning is in the teaching believes Alageswari who only in the last year and a half has taken up her passion as a profession. Before that she did it for free. “I educate people on how they can enrich their soil, grow healthy vegetables and fruits, recharge the water table and do all this at nominal cost. You don’t need labour, ploughing, excess water or even time. Once you have sown the seeds, the plant will do the rest.”

In a recent initiative in Karumbukadai in the city, a garbage dump was cleared and turned into a recreational park.

Alageswari's next assignment is to create a vegetable garden there and the produce will be shared amongst the residents nearby.

If you want to start a vegetable garden, call Alageswari at 91 9942118080 or email her at [itsme.alagu@gmail.com](mailto:itsme.alagu@gmail.com)

*Before she gets the kids and teachers to prepare the soil and plant the seeds, she speaks to them about an 'organic' lifestyle.*

### **Farmer-friendly Kadambur jackals make a comeback**

Spotting of a jackal, recorded in a camera trap, in the hilly Kadambur forest area in Erode district has enthused wildlife watchers here.

#### **Ideal habitat**

The spotting, WWF sources said, has been recorded after a long time. The forest areas adjoining fields on the Kadambur hills constitute an ideal habitat for jackals that feed on hares, rodents, and snakes.

The image captured in the camera trap shows the jackal walking on the fringes of a field.

The jackals are territorial in nature like the bigger predators tigers and leopards. The difference is that jackals live in pairs and hunt in packs.

According to farmers, the presence of jackals is beneficial since they effectively control the population of rodents that cause heavy damage to crops.

According to WWF representatives, the jackals were earlier killed by farmers since they killed fowls.

#### **Increase**

But, after augmentation of the forest surveillance personnel with more number of anti-poaching watchers, thanks to declaration of Sathyamangalam forest area as a tiger reserve in 2013, the number of jackals has increased.

Jackals do not attack humans and prefer to stay away from habitations. Being omnivores, they easily adapt to the living environment by feeding on fruits as well, wildlife experts said.

The Sathyamangalam Tiger Reserve is the largest reserve spread over about 1,400 sq.km.

The core area of 790 sq. km., and buffer area of 610 sq. km. are also home to elephants, gaurs, black bucks, four-horned antelopes, muggers, white backed vultures, sloth bears, and a variety of deer, civets, birds, reptiles and amphibians.

### **Link**

The Kadambur forest area forms a crucial link between the Western and Eastern Ghats.

The location of STR is advantageous for animal diversity.

It is surrounded by Biligiri Rangaswamy and Bandipur Tiger Reserves of Karnataka, Nilgiri North, Erode and Coimbatore Forest Divisions

### **Training for maize farmers**

Farmers in Kolathur were trained to weed out purple nut (Khoodai Kizhangu) in maize fields here recently.

At a training programme organised by the Salem branch of Dhanuka Agritech, farmers were explained the importance of maize crop that was called the Queen of Cereals. Due to purple nut (*Cyperus Rotundus*), also called as world's worst weed, the crop is completely damaged resulting in heavy yield loss. The training programme was organised in the farm belonging to R. Sundaresan and S. Munusamy at Periyathanda village in Kolathur. In the fields, farmers were shown the complete drying and death of the weed in 20 to 25 days after spraying Sempra Herbicide at 36 g per acre. Also, the participants were explained the mode of action, stages of application, other crops recommended, rain fastness and effect on succeeding crops, said S. Ganesan, senior development manager.

# DECCAN Chronicle

## As Onam nears, it is shopping for Kerala bananas now

**Chennai:** As the harvest festival of Kerala, Onam, arrives, Malayalees across the city are out shopping for the popular ‘Nenthrapazham’, a traditionally favorite banana variety available at a nominal price at special stalls for the occasion.



“Coming to an Onachandha and buying these local delicacies is more about meeting of minds and to obtain a feel like that of our native places where we get to see all these products in larger quantities. Moreover, by selling the products at reduced prices is a reprieve for customers like me who have to spend large amounts for these in the city shops,” said T.Kamalam, a teacher who has come to be a part of the festival at the Onachandha, organised at the Kerala Samajam office on EVR Periyar Salai here.

Nenthrapazham, which is sold at over Rs 80 per kg. is available at Onachandha for Rs 57 per kg. Banana chips sold in the city at over Rs 300 per kg is available at Rs 200. Jaggery coated chips, popularly known as ‘Sharkkara upperi’ among Keralites is sold at Rs 180 per kg.

It’s not just the banana, an array of banana products such as ‘Palakkad banana chips’, ‘sweet banana chips’, ‘jaggery coated chips’, pazha pradaman’, are been sold like hot cakes at ‘Onachandha’,

The chips varieties that are made in places like Chittoor and Mannarkaad are made out of the nenthrapazham which is grown extensively in these areas. “These banana chips are so tasty as it is fried in coconut oil, the usual practice in Kerala, and it feels like I am at home,” said S.Sumesh, a final year arts student at Loyola College who will be in the city for the first time to be part of the festival.

Shopkeepers at Onachandha said compared to 2014, the arrival of Nenthrapazham has gone up by 30 to 40 percent this year. “Last year, during the same time five tonnes of banana arrived; this time it has gone up to eight tonnes. Moreover, by 5 pm for the last two days we are running short of the nenthrapazham,” said T.Sashi, a vendor who has been part of the festival in the city for the past 10 years.

Kerala Samajam, a welfare organisation that has been undertaking the Onam fest for the past 18 years, has put up 20 such stalls this time. However, Unnikrishnan Kumbalangad, samajam secretary, says this time around the sweet yellow banana variety, which has been arriving from Kerala, has crowned the Onachandha, as there is a huge demand for it.

## THE FINANCIAL EXPRESS

### **Climate change: Tropical forests almost the size of India set to be axed by 2050**

Tropical forests covering an area the nearly the size of India are set to be destroyed in the next 35 years, a faster rate of deforestation than previously thought, a study warned on Monday.

The Washington-based Center for Global Development, using satellite imagery and data from 100 countries, predicted 289 million hectares (714 million acres) of tropical forests would be felled by 2050. The results will have dangerous implications for accelerating climate change, the center’s study said.

Deforestation contributes to climate change as forests store carbon while acting as a filter taking the heat-trapping carbon dioxide gas out of the atmosphere.



If current trends continue, tropical deforestation will add 169 billion tons of carbon dioxide into the atmosphere by 2050, the equivalent of running 44,000 coal-fired power plants for a year, the study's lead author said.

“Reducing tropical deforestation is a cheap way to fight climate change,” environmental economist Jonah Busch told the Thomson Reuters Foundation.

He recommended taxing carbon emissions to push countries to protect their forests.

U.N. climate change experts estimate that the world can only burn one trillion tons of carbon in order to keep global temperature rises below 2 degrees, the maximum possible increase to avert catastrophic climate change.

If trends continue, the amount of carbon burned as a result of clearing tropical forests is equal to roughly one sixth of the entire global carbon dioxide allotment, Busch said.

“The biggest driver of tropical deforestation by far is industrial agriculture to produce globally-traded commodities, including soy and palm oil,” he said.

The study predicted the rate of deforestation will climb through 2020 and 2030 and accelerate around the year 2040 if changes aren't made.

There have been some success stories where countries reduced tropical deforestation without compromising economic growth or food production, the study said.

Brazil decreased deforestation in the [Amazon](#) rainforest by 80 percent over a decade through the use of satellite monitoring and increased law enforcement, even as cattle and soy production rose, the study said.

**Soybeans edge up, but near 6-year low on China fears**



Wheat extended two-day gains to nearly 2 percent despite the US Department of Agriculture pegging the progress of the spring wheat harvest above market expectations. (Reuters)

US soybeans edged higher on Tuesday, rebounding off a more than six-year low, although fears of a rapidly cooling economy in China, the world's largest buyer of the oilseed, kept gains in check. Corn rose 1 percent as prices hit a near two-week high, supported by forecasts for smaller than expected U.S. production.

Wheat extended two-day gains to nearly 2 percent despite the U.S. Department of Agriculture pegging the progress of the spring wheat harvest above market expectations.

Chicago Board of Trade November soybeans rose 0.5 percent to \$8.78-1/4 a bushel, having closed down 1.7 percent in the previous session when prices hit a contract low.

Front-month soybeans rose 0.4 percent to \$8.96-1/2 a bushel, having closed down 1.3 percent in the previous session when prices hit a low of \$8.74 a bushel – the lowest since March 2009.

“Ultimately we are seeing a reaction to the losses overnight,” said Andrew Woodhouse, grains analyst at Advance Trading Australasia. “The market must realise that China will still need grain.”

Analysts also noted some support from a supply disruption in South America. Argentine farmers started a five-day crop sales strike on Monday, part of an election-year push in the world’s No. 3 soybean exporter to change policies that they say have killed profits under outgoing President Cristina Fernandez.

The USDA pegged 63 percent of the soybean crop at good to excellent condition, matching analyst expectations. December corn rose 1 percent to \$3.84-1/2 a bushel, after gaining 0.7 percent the session before.

The four-day Pro Farmer Midwest crop tour forecast an average U.S. corn yield of 164.3 bushels per acre, enough to produce a 13.323 billion-bushel crop, the third-largest ever. The forecast was below USDA’s Aug. 12 estimate of 13.686 billion bushels, with average yield projected at 168.8 bushels per acre.

The USDA says 69 percent of the corn crop is good to excellent, in line with market forecasts. December wheat rose 1 percent to \$5.13-1/4 a bushel, having closed up 0.8 percent on Monday.

The harvest of the U.S. spring wheat crop is 75 percent complete, the USDA said, 7-percent higher than analyst forecasts.

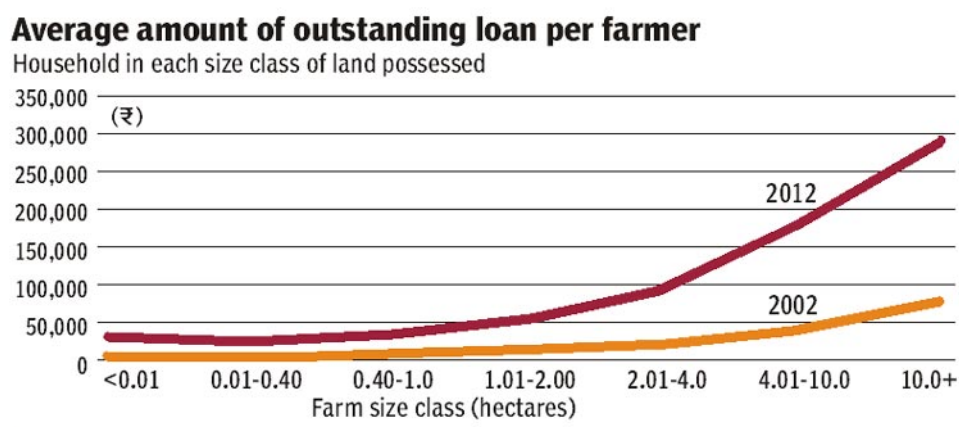
## Credit for agricultural households: Growing inequity

Over the last decade, following reports of growing agrarian indebtedness to informal sources and the related distress, there was an emphasis on reviving the supply of agricultural credit. Indeed, the period 2000 onwards has seen maximum policy and institutional interventions such as the announcement of a comprehensive credit policy in 2004 to double the volume of credit to agriculture over a period of three years.

Close on its heels came the debt waiver scheme in 2008 to address the issue of indebtedness of farmers covering 3.69 crore small and marginal farmers and 0.6 crore other farmers; introduction of an interest rate subvention scheme; financial literacy and inclusion drive; recapitalisation of cooperatives and regional rural banks and so on.

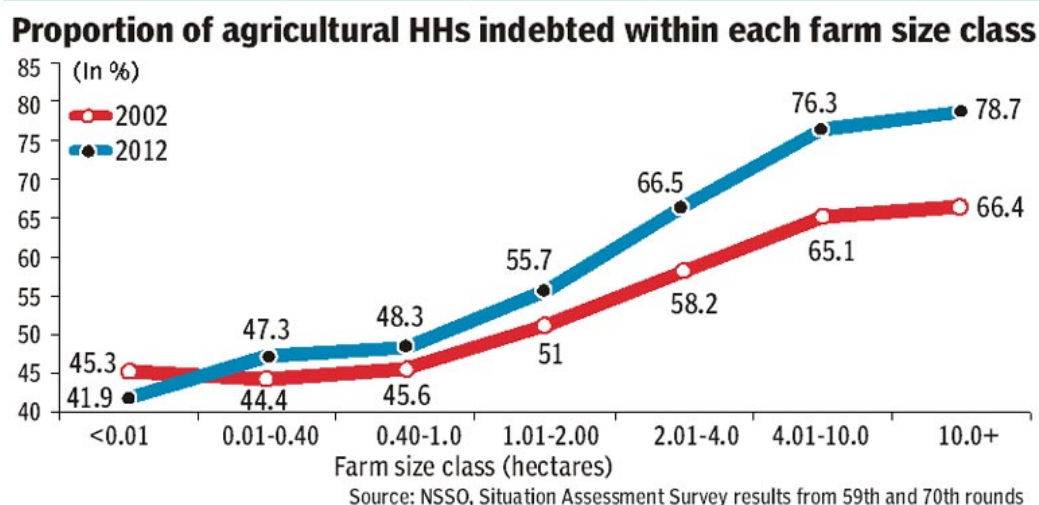
All these efforts have contributed, both explicitly and implicitly, to the reversal of the slowdown trend in agricultural credit in the period after 2000.

Between 2002 and 2011, agricultural credit from commercial banks grew by 17.6% per annum, which was significantly higher than the growth rate recorded for the 1990s. Similarly, there was also a significant increase in the number of rural branches of commercial banks after 2006.



Despite the slew of measures taken to improve access of farmers to institutional credit, the latest situation assessment survey of farmers shows that, in 2012, about 51.9% of agricultural households were able to borrow from one agency or the other. In other words, about 48% of agricultural households could not borrow. Compared to this, in 2002, the proportion of

agricultural households who could avail the credit was 48.6%. Therefore, there was only a slight decrease in the proportion of cultivator households who could not obtain any loan between 2002 and 2012.



The data on extent of indebtedness across farm size classes further reveals that the proportion of borrowing of agricultural households increases (chart 1) as one moves from small and marginal land holdings (i.e. having land not more than 2 hectares) to large size holdings (i.e. more than 10 hectares of land). For instance, in 2012, in the category of marginal and small farm size agricultural households (constituting around 87% of total agricultural households), only 48% were able to avail the loan from one source or the other, whereas in the category of medium and large size farmers (having land more than 4 hectares), more than 76% were able to borrow.

Besides these disquieting trends, inequality across farm size classes with respect to proportion of households able to borrow has also widened between 2002 and 2012, indicating that policy and institutional interventions during the period turned out to be more favourable to large farmers as compared to small and marginal farmers.

Regarding the source of credit flow, the latest All India Debt and Investment Survey by the NSSO shows that non-institutional agencies still accounted for as much as 36% of outstanding dues in 2012-13, an increase from 33.7% in 1990-91. Upsetting further, between

2002 and 2012, institutional sources have become major sources of finance for large size farmers (more than 10 hectares of land) and met around 79% of their credit requirement in 2012—this diversion occurred mainly at the cost of near landless/tiny holdings whose 85% of credit requirements are now being met by non-institutional sources, mainly by professional moneylenders.

The rates of interest charged by non-institutional sources are much higher than those charged by institutional sources. As much as 74% of the outstanding dues from non-institutional sources attracted interest rates of more than 15% in 2012, whereas the corresponding figure for institutional sources was only 10%.

Further, outstanding debt at rates above 30% was as much as 34.1% for non-institutional sources and only 1% for institutional sources.

The survey result shows that the average loan outstanding per cultivator in 2012 is Rs 47,000 ranging from Rs 31,100 for landless farmers to Rs 2,90,300 for farmers having 10 hectares or more of land. Although at the aggregate level the average loan outstanding has increased by over three-and-a-half times from Rs 12,585 in 2002, nonetheless the credit outstanding per account for big farmers increased at a much higher rate compared to near landless and marginal farmers—resulting in increase in divergence in credit outstanding per account of big cultivators and marginal cultivators in 2012 (chart 2). The observed pattern indicates that there has been an expansion of credit supplied to big cultivators/farmers.

The information on finance to farmers according to size of holdings by [RBI](#) confirms the above findings of situation assessment surveys. The analysis of the share of loan accounts held by marginal, small and big cultivators under direct finance during 1980-81 to 2011-12 shows a decline in the share of loan accounts held by marginal cultivators in the 1990s, a trend that more or less continued up to 2010. On the other hand, the share of loan accounts held by big farmers rose from about 25.4% in 1991 to 30% in 2001 and further 35.9% in 2010.

Therefore, the policy and institutional interventions during the period 2002 to 2012 turned out to be far more favourable for large farmers as compared to small and marginal farmers, which resulted in further widening the inequality across the farm size classes with respect to access to credit as well as financial institutions.



## THE TIMES OF INDIA

### Onions, pulses prices likely to come down in 2-3 weeks, says Centre

NEW DELHI: The government on Monday said that there will be some relief to consumers in the next 2-3 weeks from spiraling onion and pulses prices. While first tranche of onion import out of the estimated 10,000 tonnes is likely to reach India by September 10, government hopes about 1,000 tonnes of imported arhar dal will reach JNPT in the next one week.

Moreover, the tenders for importing 5,000 tonnes of urad dal will be opened on Tuesday and it will be finalized so that import can start. Government has already approved the tenders for importing 5,000 tonnes of arhar dal to tame prices.

"These steps will improve the availability of key kitchen items. We expect the states to take pro-active steps so that the imported items reach the consumers at affordable prices," said a consumer affairs department official. The department secretary C Viswanath held a review meeting with different government agencies and representatives of organizations that are importing both onions and pulses.

Viswanath said that there is also a view to assess whether there is need to continue importing onion till the fresh produce reach mandis. "We have also decided to hold meetings twice a week to take stock of the situation and for follow up action," he told reporters.

In an official release, the consumer affairs department said, "It was decided that a core team consisting of officials of consumer affairs, agriculture, MMTC, SFAC and NAFED would be video conferencing with the states, once the tenders were opened to ascertain requirements of the states and also the modalities of reaching the stocks to the states and the mechanism of retail distribution."

## **As onion prices soar, potato and tomato prices crash**

NEW DELHI: While spiraling onion prices is hitting consumers hard, potato and tomato growers are in trouble as prices at the farm gate have crashed below production cost. Farmers across Uttar Pradesh, Punjab and Rajasthan are getting only Rs 4-6 per kg for potato and tomato growers are getting only Rs 9 per kg in Bangalore.

Sources said that the agriculture ministry has carried out an assessment of the falling potato and tomato prices to project how farmers are in a state of distress. They added potato price at Agra is around Rs 5.50 per kg and in Jalandhar the commodity is selling at Rs 6.25. These are the two major potato growing states. Even in Jaipur, prices are around Rs 4.20 per kg.

Agriculture secretary Siraj Hussain said that the solution to both exceptional price rise and unsustainable crash in prices lies in creating a national agriculture market where all farm produce can cross states without any barriers.

## **Wholesale onion prices slide to 65 a kg**

KOLHAPUR: The wholesale price of onion dipped marginally from Rs 70 per kg a couple of days ago to Rs 65 in the city on Monday.

Though the wholesale price has declined by Rs 5, the retail prices are still hovering between Rs 65 and Rs 70 per kg across various markets. The marginal dip has been attributed to increase in the supply from the areas such as Ahmednagar and Pune. Two days ago, the supply of onion was 150 tonnes, which has now reached to 250 tonnes.

Rahul Suryawanshi, an official of the Agriculture Produce Market Committee (APMC), said, "The prices of onion have remained volatile since the last few months, even as the rates soared on most of the days. The dip in the prices is marginal and will not sustain for longer period, as the onions harvested in the last two months will be out of stock by the end of August. A significant decline in the prices will be recorded only after mid-September month when the new produce will start arriving in the market."



The price of poor grade onion is Rs 30 per kg, while that of second grade onion, which is mostly used for domestic purpose, is between Rs 45 and Rs 55 a kg.

Top grade onions, which are mostly used by hoteliers, are available for Rs 65-67 per kg.

City-based traders import onion primarily from Ahmednagar and Pune districts, while the produce from Pandharpur in Solapur district and Bengaluru arrives during late August. On any normal day, the supply of onion is around 300 tonnes. However, it was reduced to 150 tonnes when the price reached Rs 70 per kg, the highest in the last few years.

Onion is cultivated in three seasons. At present, onion cultivated during May to June can be found in the markets, while the crop harvested in late kharif season will start arriving next month. "Earlier during rabi season, the crop was destroyed in hailstorm. The farmers distanced themselves from the crop during the kharif season owing to deficit rainfall. Hoarding by the farmers and, to some extent, by the traders in hopw of maximum profit has resulted in soaring prices," Suryawanshi said.

The central government's decision to import 10,000 tonnes of onion to ease domestic prices may have led to the tendency among hoarders of selling onions before its prices start falling, officials said.

### **ABUVM sells onions at cheaper prices**

Onion prices up by 30%State feels the onion pinchBJP playing onion politics: AAPOnion

Mission to check price in OdishaOnion sold at 45/kg in Bhubaneswar

KANPUR: With the onion prices touching Rs 70-80 per kg, Akhil Bharatiya Udyog Vyapar Mandal (ABUVM) has announced to provide the vegetable at Rs 44 per kg. Several stalls put up in Ghantaghar area of the city by the Vyapar Mandal attracted buyers on Monday.

Gyanesh Mishra, ABUVM general secretary claimed that onions have been made available at Rs 44 per kg against the market rate of around Rs 70-80 per kg. Nearly 12 quintals of onion was sold from the stalls and each buyer was allowed to buy only 1-2-kg of onions, he informed.

"We are concerned about the rising prices of onions and that is why we have made available onion at reasonable rates at these outlets," he said. The ABUVM would sell the vegetable at 'no profit no loss' basis for the next few days from similar outlets across the city, he added.

Mishra said that the supply of onions and potatoes had been affected in several onion producing states due to heavy rains causing price rise. He said that the ABUVM leaders in a letter sent to the Central government demanded availability of onions to the people at reasonable rates. "We have also urged the government to come down heavily on hoarders and blackmarketeers in the onion producing states", he informed.

"It is strange seeing people queuing up for onions at the onion stalls. But there is nothing new in it. Earlier also, we had faced the same problem, but then also the government did not take any concrete action to find out any solution to it. The prices of onions touching the sky itself speak volumes on the apathy of the government. The amount which we used to spent on buying the whole grocery is now being spent on buying onions only," rued Rushali, a housewife.

Vaibhavi, another housewife complained, "I really feel pity for this country where I saw people making queues for onion at stalls. The government should do something in this regard without any further delay. Due high onion prices I am preferring cooking meals sans onion. But the reality is that nobody enjoys food without onion. It is really hard to spend Rs 70-80 on just onions."

Vimal, a vegetable vendor said, "Knowing about the situation we had already stocked onion crop in bulk. But it seems to be tough to maintain the stock as half of the stock has already been sold but the prices do not seem to come down. We too are bearing the brunt of the high onion prices as we too have to pay heavy amount to get them."

### **Niti Aayog plans to create model for land leasing law to help states**

NEW DELHI: Niti Aayog will appoint a committee of experts to prepare a model land leasing law that the states can adapt to suit their local needs. The move comes after the BJP government felt that land related issues such as land leasing, updating and digitization of land records, and land titling need a fresh look.

It was noticed that though most of the states enacted land-leasing laws in the decades following independence, these laws heavily discouraged leasing and sub-leasing of land and in the longer run and ended up affecting both landowners and tenants adversely.

The Aayog felt that tenants lack security of tenure, which discourages him or her from making long-term investments in land and he or she is also deprived of access to institutional credit and likely benefits of crop insurance, relief in event of natural calamity and potential direct benefit of transfer of subsidies.

Also, the landowner feels a sense of insecurity when leasing land so that she often chooses to leave her land fallow rather than lease it. "A transparent land leasing law would allow the potential tenant or sharecropper to engage in enforceable contracts with the landowner, which would benefit both," said an official statement.

The states will also be helped by the Aayog, in consultation with the department of land resources in moving forward with updating and digitizing land records in accordance with best practices. The statement said land ownership in the country is presumptive and can be challenged in the court and several experts have argued that a move to a system of conclusive land titles would greatly improve incentives for land improvements and farmers' access to credit.

However, to achieve this, it is necessary to computerize and integrate land records and registration, update surveys and settlement records," it said.

### **Govt signs MoUs worth Rs25k crore with Adani to develop 2 projects**

New chairman and managing director of PMPML likely to join this week  
SAIF Partners appoints former FreeCharge CEO Alok Goel as managing di...  
Bastar will become Naxal-free soon: Raman Singh  
Raman Singh promises to remove regional disparities in Chhattisgarh  
Tamilisai seeks report on Tamil Nadu's power deal with Adani group  
RAIPUR: Chhattisgarh government signed two MOUs on Monday surging more investments in state with Adani Group to develop two projects. The MoU is for coal to poly-generation (CTP) project and rice bran solvent extraction plant.

Signed in the presence of chief minister Raman Singh, industry minister Amar Agrawal and Adani MD Rajesh Adani, the . The two projects comprise of a Coal to Poly-generation (CTP) Project and a Rice Bran Solvent Extraction Plant & Refinery. The MOUs were signed by Secretary Commerce & Industries, Govt of Chhattisgarh, Subodh Kumar Singh and Rajesh Jha and Mr. KS Varshney from the Adani Group. The

project cost for both is estimated to be around Rs 25,200 crore.

Speaking on the occasion, Raman Singh said, "We are delighted that Adani group has chosen Chhattisgarh for this project. This is one of the biggest and strategic investments in state which would ensure value addition in coal and will ensure adequate supply of urea to farmers."

Leveraging state's core strengths -coal and rice, Adani group would be producing urea, substitute natural gas (SNG), sulphur, thermal power and rice bran oil which would diversify the core industry segment. It would promote gas based industrial projects with more investment and employment opportunities.

The first project to be set up is a Coal to Poly-generation (CTP) Project consisting of Ammonia/Urea and Substitute Natural Gas (SNG) Complex via gasification of Indian high ash coal sourced from within the state. The project cost is estimated to be more than Rs 25,000 crore and includes Coal to Urea, Coal to SNG Plant and Coal based Thermal Power

Plant.

The CTP project has the potential to generate 10,000 direct and indirect jobs as well as substantial revenue for state. In addition to this, the project will strengthen the overall socio-economic status of Chhattisgarh.

The Proposed CTP Project of Adani Enterprises Ltd. (AEL) is a unique Project, being set up for the first time in India, based on Coal to Synthetic Energy. Based on the various studies, Adani Enterprises Ltd. believes that the CTP, project would add significant value to the Indian economy. The project will help ensuring energy security for India as well as drive macroeconomic growth through the coal based fuel.

The second project envisages rice bran solvent extraction and physical refinery of the oil in order to manufacture refined oil. Adani Group manufactures Fortune oil.

Plants set up under the project will extract 3.3 lakh tonne rice bran solvent per annum and refine 66,000 tonne extracted material annually. Capital expenditure for the project is Rs 200 crore and 200 direct and 400 indirect employment opportunities are expected to be generated. The project is proposed to be commissioned in Rajnandgaon and will take two years to start production.

S K Behar, OSD, Kartikeya Goel Director Industries and Sunil Mishra, Managing Director, CSIDC and M.K. Thapar and Vaibhav Alshi from Adani Enterprises Limited were also present on the occasion.

# THE HINDU BusinessLine

## **Soya-daal in the offing for aam admi**

Can be fortified with vitamins easily; cooking time may be halved for daal-analogue



With prices of pulses ruling at historic highs, the soya industry says the bean can offer a cheaper yet better alternative.

Being referred to as daal analogue in industry circles, the product is already in use in mid-day schemes implemented by Akshaypatra and Naandi Foundation in several States. The daal analogue is made of edible grade defatted soya flour, wheat flour and turmeric.

Unlike daal that takes long time to cook, the soya daal analogue can be cooked in 20 minutes saving fuel. The alternative is cheaper by 35 per cent than the regular daal.

### **Technical hurdles**

Though the industry is talking about the advantages of daal analogue in the last few years, the prohibitive cost of the machinery is keeping the entrepreneurs away from production.

An industry expert says the country has got only two machines so far that can make the alternative. “We are working with the University of Illinois to develop a low-cost machine that costs around Rs. 50 lakh. We are expecting it to be ready in six months,” Suresh Itapu, Director (Technical) of Assocom Institute of Bakery Technology and Management, told *BusinessLine*.

As of now, the country is producing 50,000 tonnes of daal analogue.

## **Production details**

“There is a lot of scope to increase production. Besides protein, the additional advantage of soya-made daal is, you can fortify with vitamins easily,” he said.

Though the project is meant for use in Bangladesh, the Indian soya industry says the country can benefit from this technology. “We have been asking the Government to give subsidies for the import of the machines that cost Rs. 20 crore a piece. If we could bring in 25 machines with lower import duty, we can attract more players to produce daal,” Suresh, who is also Chief Executive Officer of NutriTech Consulting Services Private Limited, said.

The soya industry is asking the government to do away with VAT of 14 per cent on the products to make it more affordable for consumers.

## **Renewed buying sweetens sugar**

Sugar prices on the Vashi market rebounded on renewed festivals demand amid firm domestic futures.

Prices increased by Rs. 15-20 a quintal while at *naka* level it ruled unchanged. Mill tender rates were steady except fair variety which was sold at Rs. 10-15 lower.

Arrivals and local dispatches were at par. Freight rates were steady. Inventory at Vashi market remain about 115-120 truck loads.

Arrivals at Vashi market were 61-62 truck loads while local dispatches were 60-61 truck loads.

On Saturday evening, hardly 11-12 mills offered tenders and sold 18,000-20,000 bags at Rs. 2,260-2,360 (2,280-2,380) for S-grade and Rs. 2,400-2,470 (2,400-2,480) for M-grade.

The Bombay Sugar Merchants Association’s spot rates: S-grade Rs. 2,362-2,470 (2,350-2,462) and M-grade Rs. 2,456-2,552 (2,430-2,552).

*Naka delivery rates: S-grade Rs. 2,330-2,400 (2,330-2,400) and M-grade Rs. 2,440-2,600 (2,440-2,600).*

## **Cardamom loses aroma as arrivals rise**

Small cardamom market was easier last week on heavy arrivals at auctions held in Kerala and Tamil Nadu.

Second round of harvesting is over and as the crop this year is better than that of last year, the arrivals showed an upsurge during the week. However, the entire volume was absorbed by the market. Domestic and export buyers were covering probably on the apprehension of a decline in supply in the coming days due to the erratic weather conditions prevailing in the growing regions, market sources claimed.



Exporters have bought an estimated 120 tonnes. The arrivals last week stood at 802 tonnes against 300 tonnes at this time of the previous season.

Short supply last year has pushed up the prices and the average price was at around Rs. 855 a kg in the corresponding week last year, whereas, during the last week it was at around Rs. 650.

“Good north Indian buying coupled with export covering has limited the decline to around Rs. 20 a kg from the previous week prices despite the heavy arrivals,” PC Punnoose, General Manager, CPMC, told *BusinessLine*.

The individual auction average vacillated between Rs. 600 and Rs. 645 a kg. Around 30 per cent of the arrivals comprised 8 mm bold capsules. Hence, bulk is being sold at Rs. 605-640 a kg.

Total arrivals during the season up to August 22 stood at 2,203 tonnes (761 tonnes). Sales were at 2,169 tonnes and 743 tonnes respectively. The auction average was at Rs. 650 a kg (Rs. 856).

Prices of graded varieties (Rs. /kg): 8 mm bold good colour 860-920; 7-8 mm 710-750; 6-7 mm 600-630; below 6 mm: 560-600.

**Delayed planting, poor rain may hurt rice yield**



Delayed planting and poor rainfall distribution can play a spoiler in production of rice for 2015-16 even if acreage in Kharif, the main season for the cereal, continues to edge up than last year with 86 per cent of sowing completed.

As on August 21, rice had been planted on about 333.7 lakh hectares (lh), about half a percentage point greater than the 332.1 lh during the corresponding period last year.

<b>Steady rice acreage</b>				
State	Normal Area	2015-16	2014-15	2013-14
Uttar Pradesh	57.06	58.96	57.87	59.08
Chhattisgarh	37.47	35.36	34.62	33.95
West Bengal	40.86	33.22	36.99	37.63
Biher	30.70	31.0	27.72	25.67
Punjab	28.29	28.43	28.76	27.73
Odisha	38.86	28.14	31.47	30.84
Madhya Pradesh	17.05	19.22	21.19	17.35
Assam	21.21	19.31	18.71	18.98
Jharkhand	11.68	15.63	13.79	8.97
Haryana	12.26	12.24	11.34	11.38
<b>Total</b>	<b>388.31</b>	<b>333.65</b>	<b>332.89</b>	<b>333.8</b>

Area in lakh hectares

Source: Ministry of Agriculture, data up to August 21, 2015

While sowing in Uttar Pradesh has touched 59 lh, beyond the normal area of 57.1 lh, acreage has declined in major producing States such as West Bengal and Odisha. Coverage of rice in the former State has slipped by almost 5 lh to 33.2 lh, while planting in Odisha has fallen by 3 lh to 28.1 lh – the lowest at this stage in the last five years.

“Absolute rainfall may look good but distribution and frequency is important since sufficient water availability is important for paddy cultivation. In Odisha and West Bengal, the distribution has been poor in many districts,” said Trilochan Mohapatra, Director, Central Rice Research Institute (CRRI), adding that rainfall in September will determine productivity.

An El Nino-hit South-West monsoon has resulted in 10 per cent deficient rainfall between June 1 and August 24.

### Rainfall distribution

While precipitation in Gangetic West Bengal and Odisha are excess and normal, respectively, distribution has been an issue, said experts. The Indian Meteorological Department has estimated a 11 per cent deficit in precipitation in August after a 16 per cent surplus in June and a 17 per cent shortfall in July.

Mohapatra said that transplanting was still going on and the delay was a concern as it would affect productivity . While there is no estimate of how much area has been sown late, he said that choosing the right varieties at this stage was crucial to prevent a drop in yield.

“High yield will be a problem if long duration varieties are picked. It’s too early to quantify any possible drop in production, assuming there is one, maybe one or two per cent on account of delayed planting. Sowing will continue till September 1,” he added.

### **Scenario in AP**

Paddy sowings have been severely hit due to the erratic monsoon in Andhra. Though the Godavari Delta area is relatively better off with 60-70 per cent sowings, the Krishna Delta area that depends on the Srisailem and Nagarjunasagar Reservoirs fared very bad. “Farmers in the Krishna delta generally grow paddy on 12 lakh acres. But they could go for sowing in only 25 per cent. That the area received only one rain during June 18 to August 18 shows the gravity of the situation,” Yerneni Nagendranath, President of Andhra Pradesh Rytaanga Samaakhya . The situation in Telangana is no different.

BV Krishna Rao, Managing Director of Kakinada-based Pattabhi Agro Foods, expected a clearer picture to emerge in a few weeks and did not expect a significant production drop.

“Deficient rains in Andhra Pradesh, Telangana and parts of Karnataka could have some impact on the crop prospects. However, it should not be a big concern as some other States like Chhattisgarh have seen an increase in acreage and that could make up for the shortfall,” he said. .

### **Global rice picture**

The El Nino phenomenon is likely to affect production in Thailand and Vietnam, which along with India accounts for almost 70 per cent of global rice trade. “A drop in production in other major exporters will benefit Indian exporters. However, traders are unlikely to enter into contracts with the slide in the rupee and will wait till the rupee-dollar balance stabilises,” said Tejinder Narang, a grains trade analyst.

(With inputs from our Bengaluru, Hyderabad bureaus)

### **Monsoon in a lull phase over North-West India**

Western end of monsoon trough, the main meteorological feature that sets up rainfall over North India, has shifted close to the foothills of the Himalayas, signalling a weak monsoon.

Rains will be confined to around these regions and also parts of East India and the East Coast until the trough shifts back to its normal southerly alignment.

It can happen only with formation of a low-pressure area in the Bay of Bengal. A preparatory cyclonic circulation has set up a perch over the region, an India Met Department update said on Monday.

### **Preparatory ‘low’**

It expects a ‘low’ to pop up here over the next two days, but at least one international model suspects that it may not show up until at least September 3.

The European Centre for Medium-Range Weather Forecasts sees the ‘low’ being delayed well past the month-end.

The US National Centres for Environmental Prediction seemed to agree with India Met and projects the ‘low’ weaving in along a westerly and north-westerly track within East India.

The strong north-westerly flows from the opposite side could force it to weaken and trace back its track towards the Bay.

### **Deficit at new high**

This means that Central and North-West India would continue to undergo a dry spell as will the larger South Peninsula.

On Monday, the overall rain deficit for the country as a whole went up a notch to 11 per cent.

With no significant rain forecast during the rest of August, normally the second rainiest after July, the deficit could soon grow past the 12 per cent-mark set by India Met for entire season.

Monsoon starts withdrawing from Rajasthan from September 1 to begin a month-long retreat before it signs out over southwest peninsular by September 30.

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### **Salem turmeric garners demand**

Spot prices of the Salem Turmeric increased on Monday at Erode markets on high demand.

“The price of the turmeric was down ₹200-500 a quintal due to arrival of poor quality turmeric. Traders quoted ₹8,500 a quintal for the Salem variety and purchased all the 80 bags of finger and 20 bags of root turmeric, as the quality of the same was very fine. All the 100 bags of Salem Turmeric arrived were sold. Regarding the local turmeric, of the arrival of 4,900 bags, only 3,000 were sold,” said RKV Ravishankar, President, Erode Turmeric Merchants Association.

At the Erode Turmeric Merchants Association sales yard, the finger variety was sold at ₹5,129-7,544 a quintal; the root variety ₹4,899-7,085. Of the arrival of 1,456 bags, 560 were sold.

At the Regulated Market Committee, the finger turmeric fetched ₹6,484-7,310 and the root variety ₹6,099-6,989. 907 bags were sold against the arrival of 1,104 bags.

At the Erode Cooperative Marketing Society, the finger turmeric was sold at ₹6,369-7,409; the root variety ₹6,169-7,002. Of the 940 bags offered, 903 were traded.

# Business Standard

**Imports from Afghanistan reach North India, but shipments seem insufficient in West**



With [onion prices](#) showing little signs of moderation, the Centre on Monday decided to crack the whip on hoarders and black marketers. The government will form joint surveillance teams of Departmental Consumer Affairs and Departmental Agriculture to inspect onion distribution centres in Delhi to check the commodity's quality, quantity and price.

Wholesale onion price at [Lasalgaon](#) in Maharashtra (Asia's largest onion market) has touched Rs 60 a kg, against Rs 15-16 a kg in the year-ago period, while retail onion prices have risen to Rs 80 a kg in many parts of the country.

The government has also decided to expedite the import of 10,000 tonnes of onions and directed all state governments to take strict action against those who have illegally stored the commodity to take advantage of the sudden spike in prices.

“It has also been decided that a core team consisting of officials of Consumer Affairs, Agriculture, MMTC, SFAC (Small Farmers' Agri-Business Consortium) and [NAFED](#) would be video-conferencing with the states, once the tenders were opened to ascertain their requirements and also the modalities of reaching the stocks to the states and the mechanism of retail distribution,” said an official statement released after Food and Consumer Affairs Minister [Ramvilas Paswan](#) chaired a high-level meeting on Monday.

The secretary in the department of consumer affairs also held a meeting with officials from the departments of agriculture, commerce, the Government of Delhi as well as representatives of SFAC, NAFED and Mother Dairy, among others, to review the availability and price situation of onion.

“We have written to the Maharashtra chief secretary expressing concern over the rising prices. We have asked to send officials to Lasalgaon to check onion availability and take adequate measures against hoarders,” Consumer Affairs Secretary C Vishwanath told reporters. A similar direction has been issued to other state governments as well.

Paswan also blamed the [Delhi government](#) for not taking adequate action against hoarders . “Last year, adequate measures were taken against hoarders but this time the state government has not taken enough steps.”

When onion prices had risen during the 2014 monsoon season, when Delhi was under President's rule, being governed by Lieutenant Governor Najeeb Jung.

Terming the inflation in onion prices a temporary phenomenon, Paswan said there is no shortage of the commodity but hoarders are trying to take advantage of the situation.

"There is a production shortfall of only 500,000 tonnes. Hoarders get active when there is production fall. The state governments should take action against hoarders to control prices," Paswan said told reporters.

Highlighting the measures taken to boost domestic onion supply, the minister said MMTC has floated a tender to import 10,000 tonnes of onion and the tender will be opened on

The minimum export price of onion has also been increased to \$700 a tonne from \$425 a tonne to restrict exports and the state government has been asked to impose stock-holding limits on traders, he added.

Total onion production is estimated at 18.9 million tonnes in 2014-15 crop year (July-June), slightly lower than 19.4 million tonnes a year ago.

That apart, SFAC and Nafed are supplying onions at subsidised rate in Delhi markets below Rs 40 a kg.

Meanwhile, reports from Mumbai said onion prices might rise by another 10 per cent in the next few days due to tight supplies.

"The situation is going to be more critical in future and we expect the price will go up by another 10 per cent in the coming days because the current crop, which is expected to hit the market next month, might be affected due to scanty rainfall," a PTI report quoted Bombay APMC director Ashok Valunj as saying.

Onions imported from Pakistan are already in the market and the lot from Egypt would hit the market next week, he said, adding this would not help much in bringing down the prices.

"The 100-200 containers, 30 tonnes each, of onions imported will be distributed in the entire country. Mumbai itself needs 80-100 trucks daily, each containing 12 tonnes. Moreover, our domestic stock is also depleting fast. So imports will not be able to bring down the prices," he said.

In Chandigarh, though, onions imported from [Afghanistan](#) has picked up pace, which could ease the supply crunch in northern India in the next few days.

"Against 2-4 trucks a day initially, now minimum 6-7 trucks carrying onion are crossing over to India via Attari-Wagah land route (in Punjab) from Afghanistan," said Amritsar-based trader Anil Mehra. Traders said the supply of onions from Afghanistan might increase in the days to come.

Uttarakhand Chief Minister Harish Rawat said on Monday that prices could be brought down to Rs 60 a kg through public distribution system and wholesale markets.