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# THE HINDU

Innovative methods in vegetable growing  
bring good yields



[Special Arrangement](#) Balaram Patidhar in his chilli field.

It is not what crops a farmer grows; it is the net profit he is able to get that is really important.

Be it cash crops or food crops, the bottom line is profit and this is what matters for any small farmer.

“Agriculture is a very big sector in this country. Soil, climate, labour — practically everything differs between states and regions. Even for the same crop variety yields vary for different soils. And the job for the researchers becomes all the more challenging to help and guide a farmer get a better profit under these situations,” Dr. I.S. Tomar, Programme Coordinator, Krishi Vigyan Kendra, Jhabua.

Take the case of Mr. Balaram Patidhar from Sarangi village in Petlawad district, Madhya Pradesh. The farmer is well known not only in his home state but also in the neighbouring states of Gujarat and Delhi.

### **Nothing exciting**

Some years back the farmer was growing the usual maize and wheat which were common in the region. There was nothing exciting in terms of revenue but once he switched to growing crops like tomatoes and chillies the income from his land increased.

The reason for this was his ability to get a very good yield of nearly a tonne of tomatoes and chilli compared to others growing the same crops (maize and wheat) from a hectare.

In fact, after hearing this news till date nearly 5,000 people have been visiting the farmer to know his formula for getting such a high yield.

“The average yield in the state from both these crops in the recent past has not been very appreciative. Prolonged dry spells and sudden downpours during monsoon have affected yield of many crops,” explains Dr. Tomar.

Apart from the yield, the farmer has been able to successfully market his produce in New Delhi, Ahmadabad, Mumbai, Indore markets and has been able to earn Rs.10-15 lakh a year.

### **Short term**

This is something big in vegetable cultivation. Because, being a short term crop (3-4 months), and having a lower shelf life, fast disposal is important for both growers and buyers.

In fact, with the money he earned from his crops, Mr. Patidar has bought additional lands (from an acre he has increased the land holding to about 4.5 acres) to try his success formula in an expanded area.

“I use all the scientific technologies such as seed treatment, integrated pest management, nutrient management and water conservation methods in my field. I have set up drip irrigation for all the crops and presently grow capsicum and papaya in addition to tomatoes and chillies,” says the farmer.

### **Bund maker**

Mr. Patidar is also credited with designing a tractor operated bund maker and fertilizer drill for making ridges in fields in which papaya, tomato, and chilli are cultivated.

The device consists of two (six feet long and 1.4 feet width) iron plates. One end of the plates are joined together in a “V” shape and fitted with a frame. A fertilizer drum with a pulley system is attached to this.

Adjustments are provided to suit the size and fertilizer application amount for farmers.

### **Cost**

The machine is priced at Rs. 8,000 and is quite popular among farmers who are used to growing papaya, tomatoes and chilli crops traditionally and this requires more labour and takes time.

“Never take decisions on an impulse to grow something. Always make it a point to visit and interact with successful growers before you embark on something,” is Mr. Patidar’s advice to other farmers.

Patience and a long study of the crop, its market and several interactions with the concerned people are all important aspects to be considered if one needs to get a good return, according to him.

### **Best Innovator**

The farmer was conferred the Best Innovator award by the Central Institute of Agricultural Engineering (CIAE), Bhopal, for his innovation and also the State Progressive Farmer award.

Interested farmers can contact Mr. Balaram Patidar, Sarangi village and post, Tahsil, Petlawad, Dist, Jhabua, Madhya Pradesh, mobile: 09977096087 and Dr. I.S. Tomar, Programme Coordinator, Krishi Vigyan Kendra, Near Rajgarh Naka, Jhabua-457661, Madhya Pradesh, phone: 07392-244367, Mobile: 09425188028.

## **Managing tobacco disease in cotton**

The low yield of Cotton in our country is due to crop diseases, insects and nutrients deficiency.

Important diseases are root rot, wilt, leaf spot, grey mildew, rust, anthracnose, bacterial leaf blight, leaf curl and tobacco streak virus.

### **Different stages**

These diseases occur almost regularly at different stages of the growth and cause heavy damage. Tobacco Streak virus is the most destructive.

Initially brickish red necrotic spots appear on the young leaves, spreading lesions on leaves, sometimes forming numerous diffuse ring spots.

Slowly the area of discoloration increases and the leaf may turn reddish and dry up completely. Infected leaves show alternating light green and red patches.

Bud and flower production get reduced. Infected plants mature late and are small in size. Early infection causes death of the plant before flower or bud set.

Diseased plants exhibit leaf curling and mosaic with stunted growth. Infection causes reduction in plant yield and quality of bolls. This disease is transmitted by thrips.

### **Management strategies**

Seed dressing with appropriate insecticide before sowing should be done.

Follow crop rotation and field sanitation. Grow suitable region-wise resistant varieties.

Remove affected leaves/plants from crop fields to avoid secondary spread.

Destroy host weeds such as parthenium, tridax and other weeds around the cotton crop, which will help limit the occurrence of this disease.

Inter crop with short duration non-host crops like sorghum, redgram, greengram, blackgram soyabean, pearl millet and maize.

Spray insecticides such as methyl demeton at 2.0 ml or thiomethoxam at 0.2 gm or monocrotophos at 1.6 ml or acetamiprid at 0.2 gm or acephate 1.5 gm /l at the initial stage of disease. Foliar sprays of Fipronil at 2ml/l also control the vector spread.

Barrier crop such as sorghum, maize etc., can be grown in 3 to 4 rows.

(Dr. Vijaya Bhaskar Rao is Scientist (Plant Pathology), email :av\_bhaskar12@yahoo.co.in, mobile: 098498 17896, Regional Agricultural Research Station ,Warangal and Professor Jayasankar is from Telangana State Agricultural University, Hyderabad, Telangana.)

## Workshop on agriculture management



Krushibhoomi Forum has organised a free workshop on agriculture management on November 10. The workshop will be held at Edigara Bhavana premises, opposite the metro Station, near Mantri Mall, Seshadripuram at 10.30 a.m. For details, call 740668999.

## Global agri meet, expo begins today

Kerala Global Agro Meet, showcasing Kerala's potential for agriculture and allied sectors as a destination for investment, will get under way at Karukutty, near Angamaly on Thursday.

Union Minister for Agriculture Radha Mohan Singh will inaugurate the two-day programme of seminars and discussions as well as the three-day international exhibition of organic produces, BIOFACH India 2014.

Chief Minister Oommen Chandy will preside at the inaugural, scheduled for 10 a. m. Minister for Agriculture K. P. Mohanan will be among those present.

A spokesman for the organisers said around 10,000 farmers from Kerala are expected to attend the exhibition. More than fifty academics will speak at nine sessions on Thursday and Friday. The seminar topics range from the case for India to become a global agricultural powerhouse to application of information technology in agriculture. Fisheries, plantations, animal husbandry, post-harvest infrastructure etc will be other topics covered. There is also session on Kerala agriculture and the way forward.

## **‘Highest-ever’ allocation to agriculture, irrigation**

Keeping in tune with its pre-poll promises, the TRS government appears to have made a good beginning towards making farming a profitable practice with the “highest-ever” allocations to agriculture and irrigation in 10 districts of the new State.

Though a lion’s share of Rs.7,099 crore allocation to the agriculture sector is covered by 25 per cent farm loan waiver (Rs.4,250 crore), reasonably good provisions for made for micro irrigation (Rs.250 crore), poly/greenhouses (Rs.250 crore) and farm mechanisation (Rs.100 crore) reflects the government’s sincerity in its approach towards the objective in the remaining period of the current fiscal.

The allocation of Rs. 400 crore for market intervention fund would help stabilise the support price of major crops.

The Rs.3,000 crore for power subsidy and Rs.4,879 crore for energy also sink well with the government intentions to resolve farmers' woes, apart from the provision of Rs.200 crore for solar pump-set programme.

One of the government's flagship schemes, restoration/revival of irrigation/chain-link tanks has been allocated Rs.2,000 crore. The allocation of Rs.1,986 crore to Pranahitha-Chevella project, considered Telangana's lifeline, appears high due to several pending clearances.

## Poor storage in tanks exposes chinks in system

*A profile of irrigation system being prepared*

The non-filling of tanks and ponds in spite of good rain in the initial period of northeast monsoon has exposed the ineffectiveness of inlet and linked canals in the district. It has subsequently forced the district administration to prepare a comprehensive profile of irrigation system.

Major part of Karur district is irrigated by the Cauvery. The Amaravathi, the Kodaganar and the Nanganjiyar are the important rivers irrigating the western part of the district and the Pungar irrigates the eastern part of the district.

As per a 2008 report of Central Ground Water Board, about 54709 hectares, which is about 18.89 per cent of the total geographical area of the district, is under irrigated agriculture. Dug wells are the major source of water for irrigation in the district, accounting for about 59.97



per cent of the total area irrigated in the district. Tube wells accounting for about 9.48 per cent of the total area irrigated in the district. Of the net area irrigated, the canal irrigated area is about 29.45 per cent. Although the area irrigated under tank is negligible, it is said that the tanks, ponds and river flow continued to be the sources for water percolation in dug and tube wells and others.

According to a report, there are about 108 minor irrigation tanks and 876 small ponds under the control of District Rural Development Agency. Similarly, the PWD is maintaining a few more tanks. The district received 192.7 mm against 137.2 mm up to October 29 from the start of North East monsoon. Though it was 40 per cent more than the normal, sources said that not many tanks and ponds have filled up to their maximum capacity. Just six minor tanks have filled up to 50 per cent and the rest up to 25 per cent of their capacities. In the small ponds category, just 43 have about 75 per cent storage.

Farmers claim that non-desilting of supply canals and encroachments are the reasons. Mahadhanapuram V. Rajaram, Working president, Cauvery Delta Farmers' Welfare Association, said that not much attention was paid to clear encroachments on waterways and desilting the canals over the years.

When her attention was drawn, Collector S. Jayandhi told *The Hindu* that there was a need to take the blue print of entire irrigation system in the district. The profile of the system had to be analysed in detail so as to find out solutions to improve the system. Officials concerned have been asked to chalk out a plan of action.

- ***Farmers blame it on non-desilting of supply canals, encroachments***
- ***Officials have been asked to chalk out a plan of action: Collector***

## District nearly erases deficit rainfall

*Dakshina Kannada got 15 per cent more showers than normal in Sept.-Oct.*

Early fears of deficient monsoon seem to be fading away with every cyclone-induced spell of rain in the district. With only the “normally” dry months of November and December remaining (considering that they account for less than three per cent of the annual rainfall), the district has recorded nearly 94 per cent of the average rainfall.

The “catching up” seems to have happened in September and October, when the district received 642 mm of rain, as against the normal of 556 mm. In other words, the rainfall over the past two months — that includes the late rush of the monsoons as well as rainfall from Nilofer and Hudhud cyclones — was more than 15 per cent above normal.

For Mangaluru city, Indian Meteorological Department (IMD) notes that at 310 mm of rainfall since October 1, the city has seen a 50 per cent above-normal rainfall in this period.

Over the course of the season, the “late” monsoon this year has steadily eroded the early deficits. While the deficit in June was hovering around 40 per cent, in July it was nearly 35 per cent. By September, it fell to 17.5 per cent.

Puttur taluk has received the highest rainfall in the district, at 4,014.6 mm, which is the average annual rainfall it receives. While receiving the least rainfall in the district with 2,995.8 mm, Sullia also faces a deficit of more than 14 per cent.

Belthangady, which traditionally receives the most rainfall in the district, lags behind by more than 10 per cent this year.

H. Kempe Gowda, Joint Director of Agriculture, Dakshina Kannada, said the late rainfall had seen just a marginal decrease in kharif paddy crop sown – from 30,500 hectares last year to 29,542 hectares this year. Moreover, even the late October rain had little impact on the sown crop, he said.

## Forecast

Though the clouds are expected to hover overhead for the next days, IMD predicts dry days up ahead. However, onshore winds are expected to remain strong, “occasionally” reaching 55 kmph along the coast, said IMD, adding that the coast will see a fall in minimum temperature.

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· *Mangaluru received 310 mm rain since October 1, 50 per cent above normal levels*

· *Puttur taluk received the highest rainfall in the district with 4,014.6 mm*

## Engagements for Thursday

Department of Agriculture; Kerala State Industrial Development Corporation: Global Agro meet, Union Agriculture Minister Radha Mohan Singh to inaugurate, Chief Minister Oommen Chandy to deliver presidential address, Finance Minister K.M. Mani, Industries Minister P.K. Kunhalikutty and Agriculture Minister K.P. Mohanan and other Ministers to participate, Adlux Convention and Exhibition Centre, Karukutty, Angamaly, 10 a.m.

## Turning crop waste into valuable chemicals



Ramesh Sharma

A new method converts lignin, a biomass waste product, into simple chemicals, an important step toward replacing petroleum-based fuels and chemicals with biorenewable materials.

## Inundated paddy starts germinating in Nellai

*We're on the verge of suffering a huge loss: farmers*



The kar paddy field inundated by rainwater at Keezha Thiruvenkatanathapuram near Tirunelveli on Wednesday.— Photo: A. SHAIKMOHIDEEN

The 'kar' paddy which is ready for harvest on over 5,000 acres near here has started germinating as the recent rains inundated the fields for a few days.

After the district suffered monsoon failures for the past five years, the farmers, with the available water, had cultivated paddy in the last 'kar' season after a long gap. Even as the paddy, cultivated and raised amidst water scarcity, was ready for harvest, the unexpected rains drenched the crop and inundated it for a few days.

Since the rains continued for a few more days, the agriculturists' efforts to drain rainwater from their fields did not succeed as it required the cooperation of all farmers in a particular area.

Consequently, the standing paddy on over 5,000 acres at Kunnaththur, Vilaagam, Keezha Thiruvankatanathapuram, Mela Thiruvankatanathapuram and the surroundings of Tirunelveli started germinating.

"When we wasted a few days in search of the harvesters, which were available only for Rs.2,600 per hour, the rain started to make things worse for us. Still, we're trying our level best to harvest the paddy with the harvesters at inflated charges. But we're not getting the right price," said S. Murugan of Kunnaththur.

Since only the harvesters fitted with chain alone can be used now in the wet fields as the machines fitted with tyre would get stuck in the slush, the harvester owners have increased the charges in unprecedented fashion. Moreover, a good number of harvesters have been shifted to Karnataka, where the owners get premium hiring charges, besides food and 'beverages' for the operator.

"When a team of revenue officials inspected the crop loss a couple of days ago, they said they could recommend for compensation only for the germinated crop and not for the inundated paddy. Anyway, we're on the verge of suffering a huge loss as all the inundated crop would

germinate in the next few days. Hence, all the farmers who could not harvest the 'kar' paddy should be given adequate compensation," said M. Sankarapandi of Palayamkottai.

*"Officials said they could recommend for compensation only for the germinated crop and not for the inundated paddy"*

## **'Promote responsible genetic engg. research'**

There is a need for political support across the spectrum for promoting safe and responsible genetic engineering research, said M. S. Swaminathan, chairman, M.S. Swaminathan Research Foundation.

He was addressing students at the 35 annual convocation of Anna University in the city on Wednesday.

Over one lakh students received their degrees in various specialities..

Mr. Swaminathan said that the present moratorium on field trials with recombinant DNA material was a serious handicap.

"Agriculture is a State subject and it is very important that agricultural universities and State departments of agriculture are involved in the design and implementation of field trials. It takes nearly 10 years for a new variety to be ready for recommendation to farmers; therefore, speed is of the essence in organising field trials and gathering reliable data on risks and benefits," he said.

He added that public sector research and development institutions should give high priority to the breeding of varieties which can help farmers minimise climate and market risks.


M. Rajaram, vice-chancellor of Anna University, said in addition to imparting education, the university is sensitive to the welfare of society.

“The unmanned aerial vehicle, ‘dhaksha’, designed and developed by the university, joined the rescue team at Moulivakkam,” he said.

## AMMAA markets to sell goods at half price

### WELFARE MEASURE IN THE MARKET PLACE

- Each market will have at least **200 outlets** in an area of 100 sq ft.
- 40000 outlets planned across the city with **adequate parking space** and CFL fittings
- Retail outlets will be permitted to operate on a **rotation basis** in each market
- Some **street vendors** will also get opportunity to operate in the markets
- A committee of officials from various departments will develop a system to find **alternative locations** for selling products that remain unsold on a particular day
- Farmers in 16564 village settlements in State likely to get **free bus services** to transport goods to AMMAA markets



- In addition to 1256 products made in the State, **goods from other parts of the country** and imported from other countries will be permitted in the markets

AMMAA markets, to be launched soon in Chennai, will sell products at 50 per cent of the retail price.

The products will range from groceries to vegetables, to fishing nets and earthen pots, tea cups and talcum powder.

Government officials have finalised a list of 1,256 products to be sold at 15 different locations in the first phase. The Chennai Corporation has already identified six locations on Poonamallee High Road in Arumbakkam, Saligramam, Arcot Road in Valasaravakkam, Rajiv Gandhi Salai near Tidel Park, Turnbolls Road in Nandanam and Mint for setting up the markets. A one-month trial run will begin shortly.

According to a preliminary study by the Corporation, residents of the Chennai Metropolitan Area spend Rs.10950 crore a year on procurement of food products. Sale of other products, including cosmetics, clothing, kitchen utensil and furniture, is estimated at Rs.3,600 crore a year. Most of such products are sold at 200 per cent of the cost of production because of the intermediaries, the study says.

At least 41 government departments and Corporations in the State will put in place a system at the district level to procure manufactured products for the AMMAA markets. The Corporation would take the products directly from manufacturer to buyer, bypassing at least five stages of middlemen, officials claimed.

Authorised farmers from 16,564 villages in the State are likely to get free bus passes to take the farm products to AMMAA markets. Farmers and village industries will be the major beneficiaries of the scheme. Products to be sold here are also likely to get commercial tax relaxation.



## French farmers dump rotten vegetables in Chartres



A group of more than 300 farmers dumped around 100 tonnes of manure and rotten vegetables in the centre of Chartres on Tuesday in protest at falling food prices.

Assisted by some 30 tractors, the farmers dumped the slurry and rotting food in front of the offices of the agriculture department and town hall. The protesters, from the FDSEA union, were "fed up" with the "increasingly crazy constraints and charges" faced by farmers, said union leader Jean-Michel Gouache.

He denounced the "collapsing prices of cereals, milk and vegetables, caused in part by the sanctions on Russia" as well as rising fertiliser prices.

Russia imposed a ban on agricultural products from the EU earlier this year in response to European sanctions over the Ukraine crisis.

The protest in Chartres, southwest of Paris, comes ahead of widespread farmer strikes due across the country.AFP

*The protesters, from the FDSEA union, were "fed up" with the "increasingly crazy constraints and charges" faced by farmers*

*The protesters were fed up with the increasingly crazy constraints and charges faced*

## **Online system for procurement of maize soon, says Deputy CM**

Deputy Chief Minister K.E. Krishna Murthy inaugurated a maize purchase centre at A. Lingapur in Kothapalli mandal of Kurnool district on Wednesday.

Speaking on the occasion, he said the maize purchase centres would be jointly operated by AP Markfed and Self-help Groups (SHG). The centres were opened following a complaint that farmers were resorting to distress sale at Rs. 900 per quintal in the absence of support from buyers.

He said middlemen would be avoided in the procurement process by introducing online system. Later, addressing a meeting at Kothapalli, the Minister said the government had deposited Rs. 5,000 crore with banks for the loan waiver scheme. After verification of data, the amounts would be credited to the loan accounts of farmers.

He said out of 28 schemes announced by the Chief Minister, nearly 10 schemes were grounded by now. The NTR Sujala Scheme was aimed providing safe drinking water at affordable cost.

He underscored the need for maintaining 854 ft level in the Srisailem reservoir to ensure water for Rayalaseema projects. ZP Chairman M. Rajasekhar, Collector Ch. Vijayamohan, Joint Collector K. Kannababu were present. Earlier, the Deputy Chief Minister inaugurated the Tahsildar building at Kothapalli.

## Poultry farmers asked to dry raw materials

Poultry farmers were asked to use the prevailing temperature and dry the high moisture raw materials procured for feed production. A weather advisory bulletin issued by Agromet Field Unit of Veterinary College and Research Institute and Regional Meteorological Centre, Chennai, said that the sky is expected to be cloudy with chance of rainfall at a few places. Reduced cloud cover may also increase the temperature in the coming days.

Hence, farmers are asked to dry the raw materials and use it. “

High moisture in the feed favour mycotoxin formation and hence farmers should add toxin binders to protect the birds from mycotoxicosis”, the bulletin said.

The bulletin asked farmers to make use of prevailing rainfall for direct sowing of paddy without nursery preparation using improved drum seeder. Around 10 to 15 kg seed is sufficient for an acre as sowing takes place in lines at 20 cm spacing and weeding operations can be carried out using cono-weeder. Farmers who are interested in using drum seeder can contact Krishi Vigyan Kendra, Namakkal at 04286-266345 and 266244.

## PM's climate change council recast

<b>NEW CLIMATE ADVISORY TEAM</b>		
GOVERNMENT RECONSTITUTES THE PRIME MINISTER'S COUNCIL ON CLIMATE CHANGE FORMED ON JUNE 5, 2007		
<b>COMPOSITION OF 18-MEMBER PANEL</b>	<b>CHAIRPERSON</b> Prime Minister	Government representatives <b>13</b>
<b>4 NON-GOVERNMENT MEMBERS</b>	<b>MEMBERS DROPPED FROM PANEL</b>	
 <ul style="list-style-type: none"> <li>▶ <b>R.K. Pachauri</b>, Chairperson, TERI</li> <li>▶ <b>Chandrasekar Dasgupta</b>, Retired diplomat</li> <li>▶ <b>J.M. Mauskar</b>, Former bureaucrat</li> <li>▶ <b>Nitin Desai</b>, Eminent economist</li> </ul>	 <ul style="list-style-type: none"> <li>▶ <b>Sunita Narain</b>, Director General, CSE</li> <li>▶ <b>Raj Chengappa</b>, Senior journalist</li> <li>▶ <b>R. Ramachandran</b>, Senior journalist</li> <li>▶ <b>Prodipto Ghosh</b>, Distinguished Fellow, TERI</li> <li>▶ <b>Ratan Tata</b>, Chairman Emeritus, Tata Sons</li> </ul>	

*R.K. Pachauri retained; Sunita Narain, Ratan Tata dropped*

The Union government reconstituted the Prime Minister's Council on Climate Change on Wednesday to coordinate the National Action Plan for Assessment, Adaptation and Mitigation of Climate Change.

The 18-member council retains R.K. Pachauri, Chairperson of the Inter-governmental Panel on Climate Change; Chandrashekhar Dasgupta, Distinguished Fellow, TERI; and Nitin Desai, economist. Raj Chengappa and R. Ramachandran, journalists; Sunita Narain, director-general of the Centre for Science and Environment; Ratan Tata, industrialist; and the former Environment Secretary Prodipto Ghosh have been dropped. It has re-nominated Ajay Mathur, head of the Bureau of Energy Efficiency, and included the Union Ministers for Coal and Power and Urban Development. The United Progressive Alliance (UPA) constituted the council first in 2007, but it had not met for over three years. Official sources said the attempt was to revive and streamline the council and set the agenda to deal with climate change.

The council has Ministers for External Affairs, Finance, Environment, Forests and Climate Change, Agriculture, Science and Technology, and Water Resources, River Development and Ganga Rejuvenation and the Cabinet Secretary, the Foreign Secretary, the Principal Secretary to the Prime Minister, who is the convener, and J.M. Mauskar, formerly with the Environment Ministry.

The new council will coordinate the action plan and advise the government on proactive measures that can be taken by India to deal with the challenge of climate change, an official statement said. It will facilitate inter-ministerial coordination and guide policy in relevant areas. The council will evolve a coordinated response to issues relating to climate change at the national level, provide oversight for formulation of action plans in the area of assessment, adaptation and mitigation of climate change and periodically monitor key policy

decisions. The Ministry of Environment, Forests and Climate Change will assist the Prime Minister's Office in facilitating the work of the council. In the previous council, the then Prime Minister Manmohan Singh included Montek Singh Ahluwalia, Deputy Chairperson of the Planning Commission; R. Chidambaram, the then Principal Scientific Adviser to the Prime Minister; V. Krishnamurthy, Chairperson, National Manufacturing Competitiveness Council; and C. Rangarajan, Chairman, Economic Advisory Council.

**The composition of the reconstituted Prime Minister's Council on Climate Change is as follows:**

Prime Minister

Minister for External Affairs

Finance Minister

Minister for Environment, Forests and Climate Change

Minister for Water Resources, River Development and Ganga Rejuvenation

Minister for Agriculture

Minister for Urban Development

Minister for Science and Technology

MoS (Power, Coal and NRE)

Cabinet Secretary

Foreign Secretary

Secretary, Ministry of Environment, Forests and Climate Change

Dr. R. K. Pachauri, Chairperson, TERI

Dr. Nitin Desai

Mr. Chandrasekar Dasgupta

Mr. Ajay Mathur, Chairperson, BEE

Mr. J.M. Mouskar

Principal Secretary to PM



weather

Chennai - INDIA

Today's Weather

Thursday, Nov 6

Partly Cloudy  
Max 34° | Min 22°

Rain: 0  
Humidity: 58  
Wind: normal  
Sunrise: 06:04  
Sunset: 05:40  
Barometer: 1012

Tomorrow's Forecast

Friday, Nov 7

Cloudy  
Max 32° | Min 23°

Extended Forecast for a week

Saturday Nov 8	Sunday Nov 9	Monday Nov 10	Tuesday Nov 11	Wednesday Nov 12
32°   24° Cloudy	31°   24° Partly Cloudy	30°   24° Partly Cloudy	30°   23° Sunny	30°   23° Partly Cloudy

## Signs that your blood sugar is on the higher side



*Signs that your blood sugar is on the higher side (Thinkstock Photos/Getty Images)*

*If you have a history of fluctuating sugar levels or diabetes in your family, it is best to go in for a simple blood sugar test twice a year. You also need to keep an eye out for these signs...*

- Do you feel thirsty all the time? Constant thirst and visiting the washroom repeatedly can indicate that there is a lot of sugar in your blood. This puts more pressure on your kidneys to remove the sugar and while doing that, they use fluids from your body's tissues. This, say experts, causes frequent urination. And when you're visiting the bathroom often, you also feel thirsty and end up drinking more water so that you don't get dehydrated.

- Another classic sign of too much blood sugar is feeling tired all the time. Too much sugar in your blood means that your cells aren't getting enough and that in turn affects your muscles. This is what causes fatigue.

Another sign of diabetes is swelling or numbness in the hands and feet. Get yourself checked by your doctor.

Regularly suffer from stomach problems? It could be that your blood sugar levels are on the higher side. Another indication is failing eyesight. High blood sugar can cause damage to your eyes and cause a change in your eye number. Do you suffer from blurred vision or see spots or lines in front of you? Time to get your blood and eye test done.

Unexplained weight loss is also a sign that something isn't right. Neither is the fact that any infection you catch takes time to go away or a cut takes time to heal.

## Is thin-fat India in trouble?

*We are the diabetes capital of the world. That makes us high-risk TB contractors. Is thin-fat India in trouble?*

First came the bad news: With 30 million Indians diagnosed with diabetes, this country holds the world's second largest population with the disease, and is likely to reach the top spot within 10 years. Add to this, India has the highest number of people with active tuberculosis (TB).

It doesn't get better.

Last week, a study commissioned by The Lancet, reported that the diabetes epidemic is closely linked with rising cases of TB. The study says diabetes is making an increasingly important contribution to India's TB epidemic, as it is in other diabetes prone nations. In the last three years, a 52 per cent increase in diabetes prevalence has been recorded in 22 countries with the highest number of TB cases.



What is it that links a non-communicable disease to a communicable one?

### **Immune crash**

Dr Manoj Chaddha, consultant endocrinologist and diabetologist at Khar's Hinduja Healthcare Surgical, says, "High blood sugar levels weaken a person's immune system. So, diabetics are at high risk for all sorts of infection. Which is why even a common cold takes longer to cure in a diabetic."

It doesn't help that mycobacterium tuberculosis, the causative agent of most TB, is an air-borne microbe as opposed to a water-borne microbe, thus leaving us always exposed to the infection. The Indian diet, high in starch, is not just making us prone to diabetes but also to TB, points out Dr Shashank R Joshi. "The Indian vegetarian diet, especially, is protein deficient. The TB microbe has been seen to thrive in a protein deficient environment," says the endocrinologist at Bandra's Lilavati Hospital, also the president of Association of Physicians of India.

Dr Joshi, who authored a 2009 study, along with Dr Tiyas Sen and Dr Zarir F Udawadia (both are consultant chest physicians at P D Hinduja Hospital and National Research Centre) titled, Tuberculosis and Diabetes Mellitus: Merging Epidemics, says that the lack of protein, a critical nutrient for a better immune system, also means that the body's muscle mass is low.

"This explains the high incidence of thin-fat Indians. It refers to someone who may appear lean, but his body mass percentage of fat is high, which makes him more susceptible to diabetes and thus, TB," Dr Joshi adds.

### **Reactivated TB**

The rule of 10 applies to the interlinking of the two diseases, he explains. Ten per cent of all patients with diabetes will have TB and 10 per cent of all patients with TB will suffer diabetes.

While how diabetes makes a patient prone to TB is evident, the reverse is unclear.

The 2009 article states: Studies conducted after the introduction of the glucose tolerance test in the 1950s, have shown high prevalence of impaired glucose tolerance test in patients with tuberculosis with rates ranging from two per cent to 41 per cent. Why this happens, however, is not clearly understood yet.

Dr Vikas Oswal, a TB and chest consultant at Shatabdi Hospital and a consultant at Sunrise Hospital, who also has a practice at Chembur, says the diabetic-patients-with-TB he sees come in with the same symptoms - lethargy, fever and cough for two weeks that anti-biotics haven't helped cure. Not all however, need to have been recently exposed to the TB bacteria.

"In many cases, patients who may have had TB earlier, and have seen the bacterium lay dormant after medication, could develop active TB if they are detected with diabetes. The immune system is now unable to suppress the bacteria," he explains. In India, Dr Oswal says, three lakh people die of TB every year and 1.9 million Indians develop the condition annually.

In a 2013 editorial for Thorax, a peerreviewed medical journal, which Dr Udwadia co-wrote, he said that in almost a fifth (19%) of all cases, re-infection occurred with a different genotype of TB, indicating spread of the disease, "possibly from attendance by diabetics at clinics with high local TB prevalence. This confirmed again that healthcare settings should be considered high-risk environments for disease spread for our vulnerable patients".

### **Tougher to treat**

Many physicians, Dr Oswal says, treat a patient for TB without confirming the diagnosis. "Only upon sputum examination should a patient be given TB medication. Otherwise, chances of the disease turning drug-resistant are high. Also, patients must complete the course without a break," he warns.

Dr Udhwadia says not only are diabetics more prone to TB, but "once they develop it, they also fight it off more slowly." And so, the WHO standardised four-drug treatment won't work in patients with the dual diseases. Dr Chaddha says, "The patient is getting less support from his own body. While a regular TB patient can be cured within six months, a diabetic could take anywhere between 10 to 18 months."

And before you sign off thinking that as an urban middle-class Indian, you aren't the target reader for this story, here's a clarification from Dr Joshi: "Just as diabetes is no longer the rich Indian's disease, TB is no longer the poor man's burden. There are no class boundaries to these ailments anymore."

# DECCAN Chronicle

## Why genetically modified crop ban: MSS



Picture for representational purpose.

**Chennai:** Agro scientist and M.S. Swaminathan Research Foundation (MSSRF) chairman Professor M.S. Swaminathan raised his concern about the ban imposed on field testing of GM crops as

the present moratorium on field trials with recombinant DNA material served as a serious handicap.

Delivering his address at Anna University's 35th convocation on Wednesday, Prof Swaminathan said that the present moratorium had become a disincentive in harnessing the benefits of the wide array of transgenic material, currently available with various public and private sector research organisations and universities.

He suggested that with the expiry of the validity of the Biotechnology Regulatory Authority Bill, the ICAR, DBT, ICMR, CSIR, UGC, ministry of environment and forests and other agencies had an opportunity to go through the text of the bill once again taking into account the comments, criticisms and suggestions which have been received, and get a new bill prepared for introduction in Parliament.

Reiterating that India should become a hunger-free country, Prof Swaminathan lamented that India had secured the 55th rank among 76 nations. "We still have hunger in our country, that's what the report says," he said.

Citing the National Family Health Survey, the eminent scientist said that 45 per cent of children in India below three years were stunted and undernourished. "One in three malnourished children live in India. The World Health Organisation has prescribed 2025 as the year for the world to become hunger-free. National leaders have agreed that this goal should be achieved sooner in India," he said.

Meritorious students received medals and degrees from Governor and University Chancellor Dr K.Rosaiah. This year, Dindigul-based PSNA College of Engineering and Technology topped the rank list with 159 rank holders followed by Sri Sairam Engineering College, Chennai (154) and Mepco Schlenk Engineering College, Sivakasi (153).

## ‘Ready to meet Mullaperiyar emergency’



**Thiruvananthapuram:** Revenue minister Adoor Prakash said that the state government was prepared to meet any emergencies that could be precipitated as a result of the rising water level of the Mullaperiyar dam.

During a meeting convened by the minister on Wednesday, Mr Prakash asked the Disaster Management Authority to offer necessary directions to the district administration to open 24-hour control rooms at the village level in areas near the dam.

The meeting also decided to seek the services of the State Disaster Relief Force under the Home Department. More streetlights will be installed in the safety stretches identified in the area.

# THE HINDU BusinessLine

## As cotton and paddy crops fail, over 300 Telangana farmers end life

Banks deny loans forcing growers to depend on private lenders

**Hyderabad, November 5:** Agrarian crisis has hit Telangana as poor cotton and paddy crops have landed farmers in the State in huge debts in the kharif season this year. Some 330 farmers have committed suicide in the last five months, unable to bear the financial burden. While rains played truant forcing growers to go for two-three sowings, they were forced to depend on private lenders as banks shut their doors on them.

Farmers could cover only two-thirds of the 1.20 lakh acre kharif area. And half of the cropped area of 80 lakh acres was damaged.

Farmers totally require Rs. 18,000-20,000 crore in the kharif season, with bulk of the funds going into cotton farming. But banks refused to give them loans as the deadlock over the loan waiver scheme continued almost till October-end.

“They borrowed heavily from private lenders with interest rates ranging from 40-50 per cent. Cotton farmers are the worst hit as the picking trends indicate yields of only 2-3 quintals an acre against 8-12 quintals,” Sarampally Malla Reddy, All India Vice-President of Kisan Sabha, told *BusinessLine* on Tuesday.

### Lower price

Worse still, they are getting a price of only Rs. 3,500 a quintal against Rs. 4,500 announced by the Centre. The State Government had put the cost of production at Rs. 5,800.

Figures show that the farmers are destined to end up in losses. Absence of rains impacted farmers in two ways. While they delayed the harvest, poor rains also hit hydel power production. The fact that the State faced a shortage of 20-30 million units every day in September and October reveals the gravity of the problem.

GV Ramanjaneyulu, Chief Executive Officer of Centre for Sustainable Agriculture, said that the Government was not even recognising the suicides. "For the last one decade, we have been witnessing farm suicides after October when the season ends. But this time, the number has already crossed the 300-mark. The underlying problem remains worrisome as the rabi season approaches," he said.

### **Loan waiver**

Visualising the impending scarcity for power and water in rabi, Chief Minister K Chandrasekhara Rao has asked the farmers to shun paddy and go for pulses and millets that consume less water.

The Government released Rs. 4,500 crore for loan waiver scheme, clearing a quarter of the loans. But it came too late as the loan requirements for the kharif season almost came to an end. "A good number of farmers took loans thrice, Rs. 10,000 each time, as they had to sow thrice, compounding the woes," Ramanjaneyulu said.

"The Government is in denial mode. It must first recognise the deaths and address the problem. We are holding dharnas in front of the district Collectorates with the kin of the deceased," Malla Reddy, who leads the CPM-affiliated farmers' organisation, said.

When contacted, Minister for Agriculture Pocharam Srinivasa Reddy said that the situation was serious. "We have appointed a committee to study the issue of suicides in particular and drought conditions in general. We will take measures to improve the situation after receiving the report and going through the recommendations," he said.

## Sugar offtake seen near 30 mt in 5 years: Assocham

**New Delhi, November 5:** Growing at a compounded annual growth rate (CAGR) of about two per cent, consumption of sugar in the country is likely to reach 29.35 million tonnes (mt) by 2019-20 from 26 mt currently, says a study by the Associated Chambers of Commerce and Industry of India (Assocham).

“With a share of over 15 per cent in global consumption, India has emerged as the biggest consumer of sugar in the world,” said the study titled ‘Indian Sugar Industry: The way forward’.

### Contributing factors

“Growing urbanisation, rising standard of living and changing food habits are certain key factors contributing to a rising trend in sugar usage, besides, industrial consumption of sugar is growing rapidly particularly in food processing sector,” said DS Rawat, Secretary-General, Assocham.

“In order to meet the projected sugar demand, we will need to undertake either farm side capacity expansion, improve mill efficiency or do both,” said the study. Farm capacities can be augmented by increasing the area under cane as well as enabling farm productivity improvements through increased yields along with increased sucrose content of cane, it added.

Sugar production has been 1.05 mt surplus in the 2013-14 season that ended last month. The area under cane increased from 4.41 million hectares to about 5.06 million hectares between 2001-02 and 2012-13, while sugarcane production rose from 297.2 mt to 336.15 mt during this period, the report said.



## Outlook turns bearish for edible oils on slack demand

**Mumbai, November 5:** Edible oils futures witnessed sharp drop while the bearish trend continued on the spot market on Wednesday on higher selling amid slack demand. NCDEX soya oil futures dropped over one-and-half per cent, tracking extended loss on Malaysian crude palm oil futures. In the spot market, volume in imported oils was scattered. Indigenous sunflower and rapeseed oil gained marginally. On the Bombay Commodity Exchange, palmolein declined by Rs. 5 for 10 kg, groundnut and cotton refined oil dropped by Rs. 5-10 each tracking bearish Saurashtra markets where groundnut oil eased by Rs. 25-30. Rapeseed and sunflower oil gained Rs. 5 each. Malaysian palm oil futures fell for a second day to a one-week low on Wednesday, tracking losses in overnight soya and crude oil markets. Weaker soya oil prices could diminish appetite for palm as price-sensitive buyers opt for the rival edible oil instead, market players said.

A Mumbai-based broker said weak overseas market affected the morale in spot and futures here. Speculators' aggressive reselling kept stockists away.

Only a few bought 100-150 tonnes of palmolein at Rs. 498-500 in isolated trade. Improved arrivals of indigenous oilseeds in producing centres weighed on groundnut and cotton oil. Soyabean arrivals were around 5.50 lakh bags at the national level.

At the end of the day, Liberty was quoting palmolein Rs. 512-514, super palmolein at Rs. 540 and soyabean refined oil at Rs. 615. Ruchi was quoting palmolein at Rs. 512, soyabean refined oil at Rs. 605 and sunflower refined oil at Rs. 631.

### Palmolein prices

Allana was quoting palmolein at Rs. 512, super palmolein at Rs. 555, soyabean refined oil at Rs. 612 and sunflower oil at Rs. 645. In Saurashtra – Rajkot Groundnut oil Tolia tin was Rs. 1,265 (Rs. 1,300) and Loose (10 kg) was Rs. 805 (Rs. 825).

Malaysia BMD crude palm oil's November contracts settled lower at MYR 2,228 (MYR 2,285), December at MYR 2,258 (MYR 2,315) and January at MYR 2,252 (MYR 2,308).

On The Bombay Commodity Exchange spot rates (Rs. /10 kg) were: groundnut oil 860 (870), soya refined oil 610 (610), sunflower exp. ref. 585 (580), sunflower ref. 635 (630), rapeseed ref. oil 733 (730), rapeseed expeller ref. 703 (700) cottonseed ref. oil 615 (620) and palmolein 505 (510).

## Pepper prices set to fall on higher output next year

**Kochi, November 5:** Pepper prices are likely to come under pressure next year from the record levels seen this year on the back of higher production.

At the 42nd session of the International Pepper Community (IPC) held in Ho Chi Minh City, Vietnam, the Spices Board pegged the Indian output in 2015 at 70,000 tonnes, consisting of 68,000 tonnes of black and 2,000 tonnes of white pepper.

According to the IPC data, global production this year is estimated at 3,36,000 tonnes against 3,79,300 tonnes last year. Carry forward stocks from last year have been projected at 84,706 tonnes. Global production projected for next year is 3,74,500 tonnes, some 5,000 tonnes lower than 2013. Carry forward stocks from next year to 2016 are estimated at 60,386 tonnes. This year, carry forward stocks are

estimated at 59,036 tonnes, S Kannan, Director, Spices Board, told *BusinessLine*. Kannan had taken part in the IPC.

Exports next year been projected at 2,78,305 tonnes against 2,68,755 tonnes. At the same time, domestic consumption in producing countries has been put at 1,38,270 tonnes against 1,45,540 tonnes this year.

He said domestic consumption figures of some of the producing countries, such as Cambodia, Madagascar, Thailand do not reflect in the aggregate figures.

The annual growth in global consumption is estimated at four per cent.

In Asian and developing countries, the growth is likely to be seven to eight per cent and two to three per cent in developed countries, Kannan said.

## **Camson to focus on eco-friendly fertilisers**

**Kochi, November 5:** Bangalore-based Camson Biotechnologies will focus on its zeroresidue farming practice, connecting private plantations, institutions and organisations associated with farmers.

Santosh Nair, CEO, Camson Biotechnologies Ltd, said that zero residue farming practice is a reliable and sustainable alternative to conventional usage of chemical farming methods. This is an initiative to address the growing health issues among farmer communities in the country. It leaves no residue in the air, soil or water.

### **Good for crops**

Besides providing the safest method for practising agriculture, it helps protect crops and enhances growth.

Nair, who was here for a seminar on safer farming practices, said that zero residue farming strictly focuses on safer produces and sustainable yields. The natural fertilisers act as a bio agents, which is beneficial to soil conditioning and improves plant physiology and produce. They mobilise the micronutrients in soil to maximise its utilisation by the growing plant.

The company has already taken up the initiative in Wayanad region for cardamom plantations in association with NGOs, he added.

## Coimbatore to host 4-day Horticulture Congress

Over 700 delegates have registered

**Coimbatore, November 5:** The 6 Indian Horticulture Congress 2014 will take place at the Codissia Trade Fair Complex in Coimbatore between November 6 and 9. The theme of the congress this year is “Horticulture for Inclusive Growth”.

Organised by the Horticultural Society of India (HSI), New Delhi in collaboration with the Tamil Nadu Agricultural University, this conference is to be inaugurated by the Governor of Tamil Nadu K Rosaiah. Over 700 delegates are said to have registered including State and Central Government officials, scientists, students, industry representatives, farmers, entrepreneurs, traders and other commercial ventures. HSI President and Chairman, National Organising Secretary of the Congress KL Chadha said the day (Nov 6) marks the 73<sup>rd</sup> Foundation day of the Society. Professor MS Swaminathan will deliver the Foundation Day Lecture on “Horticulture and Meeting the Zero Hunger Challenge”.

## Felicitations

The Society will honour several scientists, entrepreneurs, farmers and exporters for their achievements in their fields and confer Honorary Fellowships to those identified for lifetime contributions towards promotion of horticulture.

Recapping the horticulture scenario in India, Chadha said, "Horticulture production during 2013-14 surpassed food grain production by 4 million tonnes to touch 268.82 million tonnes. India's export of fresh fruits and vegetables was 2.9 million tonnes and estimated at over Rs. 8.76 lakhs. The present per day per capita availability of fruits and vegetables is about 280 gm and close to the WHO-recommended 300 gm. While we have achieved self sufficiency in production, the challenge before us is meeting the quality front under emerging challenges like increasing population, degrading soil and water quality, efficient resource use and fast changing climate. This congress would address and deliberate on such issues," he told *BusinessLine*.

The International Horti Index 2014 is being proposed as between November 7 and 9, organised by the Farm Varsity and State Department of Horticulture.

## Farmers may take keen interest in Rabi: Rallis chief

**Mumbai, November 5:** The recent cyclone in Andhra Pradesh has inundated a large portion of arable land, particularly when farmers were preparing for the rabi season.

Oilseed prices are inching closer to minimum support prices as farmers in Gujarat, Madhya Pradesh and Maharashtra are preparing for the kharif harvest.

Coping with the sudden change in climatic conditions has been a big challenge for the agriculture sector, says V Shankar, Managing Director and CEO, Rallis India, a Tata Group company that makes products for agriculture such as pesticides, seeds and fertilisers. In an interview with *Business Line*, he talks about the rabi season, and the performance of the company's new products, among other issues. Edited excerpts:

### **How do you see the rabi season?**

We are very hopeful after a difficult kharif. The reservoir levels are better at the 10-year average. We expect rabi to be normal as farmers may take keen interest.

Initial pick-up for rabi was very good. In fact, it was the peak season in Andhra Pradesh but the (Hudhud) cyclone has impacted the progress very badly, especially in Srikakulam, Vizianagaram and Visakhapatnam. We estimate about 200,000 acres were affected in the cyclone. We hope the rest of the acres will help make up for the losses. It is no denying that the cyclone was a setback for the good momentum witnessed initially. We only hope such interruption would not recur. West Bengal and Bihar may have a normal Rabi season.

### **Do you expect farmers to reduce spending after burning fingers during kharif?**

Since the kharif season was not that great for farmers, they will take up rabi with more vigour. Rabi is when farmers make more investment and not mind using value-added products. It's typically a more commercial season than kharif. We are looking forward to farmers doing well in rabi.

### **Will the unusually hot October suck the moisture and impact on the rabi season?**

I do not think so. We are also having thunderstorm at the other end. This kind of situation affects agriculture, putting farmers in a quandary. Like in Andhra Pradesh it was the peak season for pesticide spray.

In fact, rain and hot season are very conducive for pest build up. When this kind of cyclone comes and stops activity for two-three weeks, everything comes to a standstill.

Fortunately, the impact on paddy will be minimal as it can survive under water for few days, but farming activity has been delayed by a few weeks.

### **Will the rise in input prices hurt farmers?**

I believe farmers will look at the value. They would not cut down on spending if they consider a product is important. Since the general inflation has moved up, farmers may be very selective and look for quality products, particularly in the Rabi season as they will look up products that can improve yield.

### **What is the progress of your 'Grow More Pulses' programme?**

We have signed a memorandum of understanding with the Madhya Pradesh Government to roll out the 'Grow More Pulses' programme in the State.

We will be covering about one lakh hectares involving over 1,00,000 farmers over three to five years. We are already working in Maharashtra, Tamil Nadu and Karnataka.

It is progressing well, especially in Maharashtra. We have covered over 3,00,000 farmers. This year, we should be touching about 1,00,000 hectares. We got an invitation from the Jharkhand and Bihar Governments to roll out the programme in those States. We have

also started working to improve yield of chillies at Guntur in Andhra Pradesh. We also have a similar programme for grapes and pomegranate in Maharashtra.

### **How is the response for the new products?**

We have introduced two new interesting products, including Origin and Hunk. While Origin is the first ever combination of an insecticide and fungicide in India, Hunk is a good solution for sucking pest, especially in paddy. Initial response has been very good.

We have also introduced corn hybrid targeted at farmers in Andhra Pradesh and Bihar. This is a special hybrid, which requires more input management and the yields are very high. We are quite excited with all these interventions as all of them are quite new to Indian markets.

The non-pesticide portfolio was 35 per cent of the revenue in the first half. This is a good progress in line with our long term strategy of the company.

## **Online retailers breathe life into organic product biz**

Register significant increase in sales of fruit and vegetables

**Bangalore/Mumbai, November 5:** For Adi Naturals, the Bangalore-based aggregator and a vendor of organic food products, the sale of fruit and vegetables has seen an increase of 50 per cent over the last six months. This was after the company tied up with the online retailer Bigbasket.com.

Even for Bigbasket.com, which claims to have a large organic product range, the sales are increasing month-on-month. And so is the case with other retailers such as Natural Mantra or Ekstop.com.



## Growing demand

The proliferation of online retailing is seen giving a push to the sale of organic products that are grown without using chemicals and pesticides. More health conscious consumers are turning to the net to purchase such products, which are otherwise sold only through select outlets. Consumers are finding it relatively easy to source online.

“The number of people looking at organic goods — be it food, hair care, home care or clothing — has increased significantly in the past four years,” says Anand Agarwal, Chief Executive of Natural Mantra, a Mumbai-based online grocery portal, where over half the orders placed are for organic foods.

“The sales are rising by 40 per cent every month. We expect the company to earn a profit in two years and touch a revenue figure of Rs. 50 crore by 2016,” says Agarwal.

Vipul Parekh, Chief Financial Officer of Bigbasket.com, said response for organic products is very good. “About 20 per cent of our vegetable sales are organic and the share is growing month-on-month,” he added. Bigbasket.com sells about Rs. 1 crore per month of organic fruit and vegetables and another Rs. 50 lakh worth of organic provisions.

“It is still very small, but online sales are picking up. We are seeing some good traction, said Raj Seelam, Managing Director of Sresta Natural Bioproducts Pvt Ltd, which markets its products under the 24 Mantra brand. Seelam, however, could not give any volume or the value details of the brands sold online.

Vidya Sadanand, co-founder of Adi Naturals, said Bigbasket has helped boost sales of fruit and vegetables by 150-200 kg every week. Prior to the tie-up with Bigbasket, Adi Naturals that sources organic products right from Jammu & Kashmir to down South was selling about 300-400 kg of fruit and vegetables through its stores.

“We sell about one tonne of vegetables, fruits and staples every week and are looking to expand our tie-up with Bigbasket to widen our reach,” Sadanand said, adding that consumer awareness on organic stuff needs to pick up.

## **Market estimate**

The organic product market is estimated at over Rs. 1,000 crore and is growing annually at over 20 per cent.

Sumat Chopra, co-founder and CEO, Ekstop.com, said: “With growing health awareness, organic products are gaining interest amongst consumers. People are ready to spend a little extra to have organic products as a part of their day-to-day diet. Mumbai as a market has a very high acceptance rate for organic produce.”

Chopra said the adapters of these products are from different income groups but are people who are conscious of the hazards of chemicals & pesticides. “While our normal products have a great offtake, organic products have been increasing by almost five per cent on a month-on-month basis.

To cater to this growing demand we have increased the range of organic foods available on our portal. The range offers products varying from Grocery & Staples to Spices & Tea, etc.” According to a survey by Morarka Rural Research Foundation, the demand for organic food products is also rising from smaller towns and moffusil with consumers willing to pay up to 20 per cent more from pesticide free produce.

## **Key challenge**

Several online retailers, however, said that the lack of scale in organic retail may pose a challenge. However, logistics is a big cost for these online portals. In grocery, the ticket sizes are smaller and the high logistics cost makes nation-wide delivery unviable.

# Business Standard

## Soybean, groundnut output to be less than last year

Sopa, an Indore-based trade body, has forecast India's overall output at 10.44 mn tonne against 9.48 mn tonne of previous year

[Soybean](#) output in India is likely to rise by about 10 per cent this year, due to favourable weather conditions. A survey by The Soybean Processors' Association (Sopa), the Indore-based apex trade body, has forecast India's overall output at 10.44 million tonnes, as compared to 9.48 mt the previous year. The record so far has been 12.19 mt in 2012.

The survey was conducted in the three major producing states of Maharashtra, Madhya Pradesh and Rajasthan. These account for 90 per cent of overall annual production.

Davish Jain, the chairman of Sopa, believes the yield would average at 959 kg a hectare in 2014, compared with 788 kg a ha the previous year.

It was 1,139 kg a ha in 2012. As for groundnut, the Indian [Oilseeds](#) and Produce Export Promotion Council (IOPEC) has projected output at 4.33 mt this year as compared to 5.16 mt last year. Kishore Tanna, its chairman, said deficient monsoon rainfall had impacted sowing, estimated at 3.26 mn ha in 2014 versus 3.64 mn ha in 2013.

Groundnut export in 2014-15 is expected to cross 600,000 tonnes, in comparison with 512,000 tonnes last year, said Tanna. These had

risen by 40 per cent in the first half of this financial year, to 221,000 tonnes.

Sesame seed, however, should see much more output this year, said Tanna. IOPEPC estimates it to rise 143 per cent to 476,891 tonnes, from 196,180 tonnes last year. Its export is also expected to fare much better. India exported 257,000 tonnes of sesame seeds last year.