

20-7-2015

# THE HINDU

## Meet focuses on improving milk yield

Minister for Housing, Urban Development and Agriculture R. Vaithilingam (second from left) handling a cotton plucking machine at the Agri Inter-2015 in Coimbatore on Saturday.—  
Photo: S. Siva Saravanan

More than 500 farmers took part in the conference on improving milk yield that was organised at the international agricultural conference on the third edition of 'Next Generation Indian Agriculture' at the 15<sup>th</sup> Edition of Agri Intex 2015, on Saturday.



The three-day Agri Intex is organised by The Coimbatore District Small Industries Association (CODISSIA) from Friday to Sunday. *The Hindu* is the media partner of the event.

## Breed development

R. Murugan, president of Progressive Dairy Farmers Association that organised the one-day conference on dairy farming, said that the event is aimed at educating ryots on aspects of breed development, farm mechanisation to bring down labour cost and reducing feed cost by conserving fodder to help the farmers to get maximum profit.

“About a decade ago average annual milk yield of a cow in Tamil Nadu and Punjab was almost the same.

A recent study reveals that average annual milk yield of a cow in Tamil Nadu is around 1,000 to 1,200 litres. But, average yield of cows in Punjab is at 4,000 to 4,500 litres a year,” he said.

Mr. Murugan claimed that the yield was around 12,000 litres a day for the same breed cows in a few European countries and the United States of America and about 14,000 litres in Israel because of the good dairy practices practiced by them.

He attributed the high yield to inseminating cows with bulls from high milk yielding variety cattle.

Earlier, Minister for Housing, Urban Development and Agriculture R. Vaithilingam inaugurated the conference. The Minister said that subsidy extended by the State Government for state-of-the-art farm equipment and farm input has helped in improving food production in the State to maintain above one lakh metric tonnes over the last three years.

He said that the food grain production in the State that was 1.15 lakh metric tonnes in 2013-14, and 1.28 lakh metric tonnes in 2014-15, is expected to reach 1.4 lakh metric tonnes in 2015-16 and 1.7 lakh metric tonnes in 2017.

He said that the government is planning to invest Rs. 1.26 lakh crore in agriculture sector under its 'Vision 2023' project.

Mr. Vaithilingam also released the fair directory at the function.

*Subsidy extended by the State Government for farm equipment and farm input has helped in improving food production,*

*says Minister*

**‘Govt. taking steps to reduce post-harvest loss’**



Visitors interacting with exhibitors at the Agri Intex 2015 agriculture trade fair at the CODISSIA Trade Fair Complex in Coimbatore on Friday.

The Government of India is keen on reducing the post-harvest loss and is likely to come out with a proposal, K. Alagu Sundaram, Deputy Director General (Engineering), Indian Council of Agricultural Research, said here on Friday at the inauguration of Agri Intex 2015.

The ICAR had estimated that the post-harvest loss was Rs. 44,000 crore in 2005-07, which was about six – 18 per cent loss. But the loss rose to Rs. 92,600 crore in 2012-14 which was mostly due to increase in production cost, though in percentage terms it was marginal reduction of one percentile point.

Mr. Sundaram said that the aforementioned figure was only the quantitative loss. If one were to factor in the qualitative loss as well, then the loss was thrice the number or about Rs. 3 lakh crore for 2012-14. To offset the loss, which could be done only through technology, the Government may come out with a proposal.

The Central Institute of Post Harvest Engineering Technology, which had developed some good quality, would play a major role in this. The ICAR had suggested that the Government must promote on-farm processing so that 50 per cent loss could be prevented.

It had also suggested that the Government rope in Krishi Vigyan Kendras to set up primary processing centres across the country; at least 220, he added.

R. Amalorpavanathan, Deputy Managing Director, National Bank for Agriculture and Rural Development, said that the organisation was keen on promoting sustainable agriculture practices, improving market access for farm products and work to promote nutritional security.

K. Rathinam, Managing Director, Amul, said that the milk cooperative federation in the State procured and processed only 10 per cent of the entire produce as it did not have the requisite technology and infrastructure. Every 10 years, Amul migrated to the latest technology and that helped it bring down production cost.

As against private players who suffered Rs. 4 – 6 production cost a litre, Amul spent only 80 paise a litre, which helped it fight the market. Tamil Nadu should look at improving technology and also chilling milk at source at the collection centres.

Tamil Nadu Agricultural University Vice-Chancellor K. Ramasamy said that Tamil Nadu would be able to further improve its agriculture production if the farmers took up precision farming, and net house cultivation methods.

He suggested that the State Government should also look at water management in villages to boost production.

Vice Chancellors of Tamilnadu Veterinary and Animal Sciences University and Tamilnadu Fisheries University S. Thilagar and Baskaran Manimaran respectively addressed the gathering. R. Shasi Kumar, Chairman, Agri Intex 2015, said that the 15<sup>th</sup> edition of the agricultural trade fair saw 3,000 exhibitors and they include institutions from Israel, Japan, Germany, Italy and several Indian states.

### **Kharif sowing of pulses, oilseeds picks up despite sluggish monsoon**



As against 346.34 hectares sown in 2014-15, this year so far 563.35 lakh hectares has been cultivated with a sizeable surge in the sowing of pulses, coarse cereals, oil seeds and cotton.

### **TOPICS**

#### **economy, business and finance**

#### **agriculture**

*Area under sugarcane hit, government ready with contingency plan.*

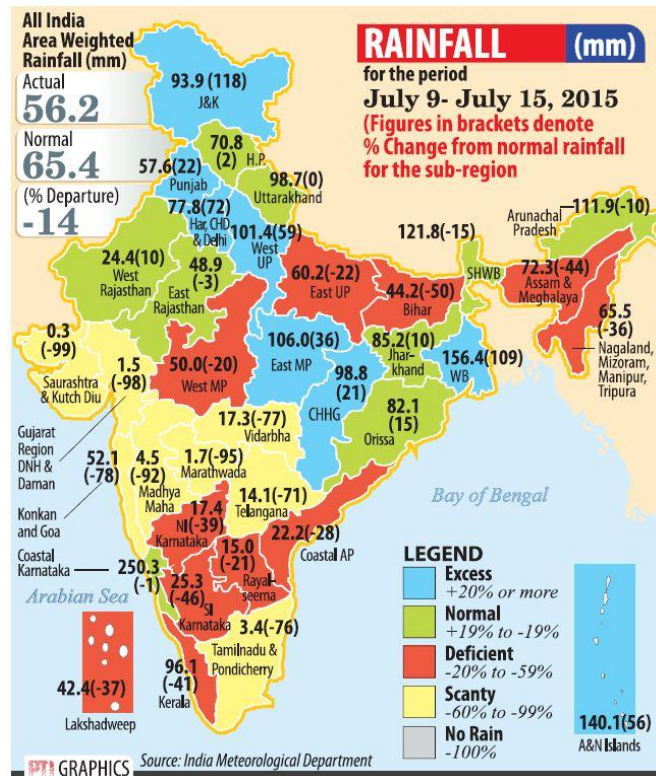
Amidst growing concern over the sluggish progress of the southwest monsoon in parts of Maharashtra, Gujarat, Telangana, Andhra Pradesh and north interior Karnataka, the government on Friday said sowing of kharif crops has improved over last year particularly in the cultivation of pulses and oilseeds.

A higher minimum support price with bonus seems to have made farmers grow more pulses. However, as sugarcane arrears mount, the area under sugarcane has gone down with 44.80 lakh hectares sown so far as against 46.09 lakh hectares in the corresponding period last year.

The India Meteorological Department has said the monsoon has so far been six per cent lower than Long Period Average. Rainfall has been lower by 12 per cent in south peninsula, by 13 per cent in central India and by six per cent in east and northeast India. Although the monsoon has covered the entire country, 11 sub-divisions remain deficient. About 39 per cent districts (238) are deficient.

While this may not augur well for farmers who suffered rain and hail in the rabi season resulting in lower output of foodgrains, the government on Friday released the statistics for cultivated area under kharif which is 62.6 per cent higher than last year. As against 346.34 hectares sown in 2014-15, this year so far 563.35 lakh hectares has been cultivated with a sizeable surge in the sowing of pulses, coarse cereals, oil seeds and cotton.

Resulting in lower output of foodgrains, the government on Friday released the statistics for cultivated area under kharif which is 62.6 per cent higher than last year. As against 346.34 hectares sown in 2014-15, this year so far 563.35 lakh hectares has been cultivated with a sizeable surge in the sowing of pulses, coarse cereals, oil seeds and cotton.



## Pulses area up

The sowing of pulses is higher at 55.99 lakh hectares against 23.92 lakh hectares in the corresponding period last year due to improved sowing in Rajasthan, Madhya Pradesh, Tamil Nadu and Maharashtra. The cultivation of coarse cereals is higher by 54.7 lakh hectares at 102.35 lakh hectares on account of higher sowing in Rajasthan, Madhya Pradesh and Tamil Nadu.

## Centre to release Rs. 400 cr. crop insurance

The Centre will release Rs. 400 crore towards crop insurance for farmers of Gujarat this week, a State Minister said on Sunday.

“The Centre is going to release Rs. 400 crore towards crop insurance for farmers of Gujarat on July 25 that will benefit around 2.5 lakh farmers of the State,” Gujarat Minister of State for Agriculture, Mohan Kundariya said.

## **Vegetables are safe to consume**

*Pesticide residues within limits in Tamil Nadu: report*

Rejecting the allegations of the Kerala government that vegetables supplied from Tamil Nadu have high level of pesticides residue, the Agriculture Department has data to prove that 96 per cent of samples were free of pesticide residue.

According to an analytical report prepared by the Tamil Nadu Agricultural University, only two vegetable samples — bhendi and bitterguard — have pesticide residue level exceeding the Maximum Residue Limit (MRL), set by the Food Safety and Standards Authority of India (FSSAI) and the CODEX (European Union Standards).

All the fruits — grape, mango, banana, guava and fig — were free from pesticides residue. For the current year, the analysis of 117 vegetables and fruits was completed by Pesticide Toxicology Laboratory of the Agricultural University on June 15.

The samples were processed through standardised multi-residue method approved by the National Accreditation Board for Testing and Calibration Laboratories (NABL).

The detection and quantification was done for 45 pesticides by Gas Chromatograph (GC) with confirmation in Gas Chromatograph—Mass Spectrometer (GCMS) as per the food safety requirement. Pesticides banned in Kerala, but used in Tamil Nadu were not considered. But pesticides banned as per Central Insecticides Board & Registration Committee are already restricted for marketing in Tamil Nadu, sources said.

“In five (4.1 per cent) vegetables — bhendi (4) and bitterguard (1), the residue level exceeded the permissible level. The remaining 96 per cent of the samples were free of pesticides residue,” the report said.

A senior official of the Agriculture Department said inspection in 4,800 retail pesticides shops found no banned pesticides.

### **Awareness campaign**

To create awareness of judicious use of pesticides, the department has launched ‘Grow safe food campaign’ on five essential principles. The message of application of pesticides on the right crop, at the right time in approved doses and as per approved methods against pests for which pesticides have been approved is being conveyed to farmers and other stakeholders.

## Studying the climate



Nowadays climate change is a hot topic, though most of us know little about it.

Climate is the average pattern of weather over a long term. Studies on climate change involve several disciplines, including physics, chemistry, biology, geology, meteorology, and oceanography.

The Inter-governmental Panel on Climate Change (IPCC), working under the United Nations, is the leading international body for the assessment of climate change. It reviews and assesses the scientific, technical, and socio-economic information produced worldwide. But it does not conduct any research.

The Central Ministry of Earth Sciences carries out substantial research in this area. There are plenty of research opportunities under the ministry. A few of them are listed below.

### **Carbon-Cycle Research**

The Indian Institute of Tropical Meteorology, Pune, is the main centre for research in this area. Further, the Ministry supports research in several academic and research and development institutions.

Estimating the impact of future carbon dioxide emission trends is essential for negotiating international treaties. Accurate estimation of greenhouse gas emission in our country and surrounding seas requires precision measurement systems. The Global Atmosphere Watch



programme of World Meteorological Organisation demands accuracy of the order of 0.01 ppm for CO<sub>2</sub> and 1 ppb for CH<sub>4</sub> (methane).

The refinement of bio-geo-chemical models (carbon, nitrogen, silica, phosphorous, iron cycles) in the various earth-system components (atmosphere, land, and ocean) needs research. Predictions will cover future climate impacts including ocean acidification, loss of biodiversity and productivity.

#### Climate Services

India Meteorological Department, New Delhi and the Indian Institute of Tropical Meteorology, Pune are engaged in providing a comprehensive set of specialised climate services for the country and for South Asia. There has to be continued development of statistical and hybrid prediction models for the region. This naturally involves continuous research. Joint studies with the Indian Council of Medical Research envisages the understanding of climate–disease relationships to develop advisory services.

#### Cryosphere Processes and Climate Change

The Cryosphere is the second largest component of the climate system, after the ocean. Our knowledge of cryosphere within the global climate system is relatively less known. Studies of biotic components in the cryosphere and glaciological processes, accumulation patterns and snow layering characteristics are vital. In addition to the ice core records from Antarctica, records from the Arctic region and Himalayas have to be studied for a comprehensive understanding of climate change.

The National Centre for Antarctica and Ocean Research, Goa and the India Meteorology Department, Delhi carry out substantial research work in cryosphere processes and climate change.

#### Carbon dioxide Sequestration

Growth in population and economic activity has increased anthropogenic (man-made) Carbon dioxide emissions which stress the natural carbon cycle. Earth's climate is expected to warm even more rapidly during this century, because of increased Carbon dioxide emissions. Forums like the U.N. convention of climate change, Kyoto Protocol and Global Climate change program have addressed the mitigation plans in controlling the green house gases.

The National Institute of Ocean Technology, Chennai conducts research in

Ocean CO<sub>2</sub> sequestration techniques

CO<sub>2</sub> capture technology from industrial sources, and

Development of ocean instrumentation for Equality Impact Assessment

Impact of Sea Level Rise

There are numerous activities including industry, agriculture, recreation and fisheries on the coastline. A rise in the sea level will impact on all of these. It is estimated that the mean sea level would rise between 0.18 and 0.59 m by the end of the 21st century. It may be even greater by 0.1 to 0.2 m thanks to ice sheet flow. The landward transgression of coastal barriers will affect human life near the coast. Detailed studies and research in respect of the long Indian coastline is being undertaken by the Integrated Coastal and Marine Area Management – Project Directorate, Chennai / Indian National Centre for Ocean Information Services, Hyderabad / Indian Institute of Tropical Meteorology, Pune / other academic and R & D institutions.

### **Himachal vegetable cultivation reaps over Rs.2,500 crore**

The vegetable cultivation in Himachal Pradesh, especially off-season, has increased the State's annual production to 14.60 lakh tonnes, and taken the State's annual revenue well over Rs.2,500 crore, an official said here on Sunday.

In the current kharif (monsoon) season, four lakh hectares have been covered under food grain and the target of production has been fixed at 8.85 lakh metric tonnes, an official of the State agriculture department said.

During this fiscal, Rs.450 crore would be spent under various schemes to give boost to agriculture production and to increase the income of farmers, he said.

Top priority is being accorded to crop diversification, for which Rs.66 crore are being spent during this fiscal, he added.

The State's agriculture and horticulture-based economy is highly dependent on the monsoon.

The official said it has also been decided to continue coffee plantation on 10 hectares during this fiscal and to extend weather-based crop insurance scheme to peas, tomato and ginger crops.

The State has approached Japan International Cooperation Agency for the second phase of the crop diversification project under technical cooperation, he said.

The agriculture department is also implementing four national programmes for which Rs.90 crore have been earmarked.

The State has launched several schemes to transform agriculture into agri-business, including the Rs.110-crore Y.S. Parmar Swarojagar Yojana, Rs.154-crore Rajiv Gandhi Micro Irrigation Scheme, and the Rs.20 crore Borewell and Lift Irrigation Scheme.

To provide compensation to the farmers and farm labourers in case of accidental injury or death, the State government has launched Mukhya Mantri Kisaan Evam Khetihar Mazdoor Jeevan Suraksha Yojna.

A compensation of Rs.150,000 will be given in case of death while working on the farm or machinery, and Rs.50,000 in case of permanent disability.

Himachal Pradesh annually earns about Rs.2,500 crore from the cultivation of vegetables, while horticulture generates more than Rs.3,200 crore annually.

The cultivation of exotic vegetables and flowers in poly-houses and the setting up of controlled atmosphere chains is expected to add to earnings for growers. – IANS

***State has approached Japan International Cooperation Agency for crop diversification project***

**‘Aquaculture has crucial role in GSDP growth’**

Irrigation Minister Devineni Umamaheswara Rao launched two products - Karyomax and Karyoblast, brought out by Robust Life Sciences (RLS) - for the aquaculture sector, here on Sunday.

Speaking on the occasion, he said the government gave due priority to aquaculture, which played a crucial role in achieving double digit growth of the Gross State Domestic Product (GSDP).

“The government is facilitating the transfer of technical know-how to fields through the world’s best R&D labs. The government is also extending necessary support to aquaculture farmers to export their produce,” the Minister said. Mr. Rao suggested that farmers take the help of the Marine Products Export Development Authority (MPEDA) and the Agricultural

Products Export Development Authority (APEDA) to find new and consolidate existing markets.

RLS chairman and managing director C.V. Subba Rao said the newly-launched products were growth enhancers for prawn and shrimp. “They will curb the menace of white spot and patch and running mortality diseases, which stifle the tremendous potential of aquaculture sector in the State,” they added.

RLS co-founder B. Babuji Rao and Karyotica Biologicals managing director B. Ravi Chandra, who is the brain behind the new products, stressed the need for farmers to be acquainted with scientific ways of nurturing aquatic animals.

### **Village adoption gives new lease of life to farmers**



A farmer using sprayer in his fields on Monday.

The adoption of Pazhuvanji in Marungapuri block by the Reserve Bank of India during 2010-11 has brought about a phenomenal growth in agricultural, economic and social status of villagers who are now self-reliant.

The RBI’s endeavour is aimed at ensuring financial inclusion of villagers.

But it has got a wider dimension with Indian Overseas Bank (IOB) and National Agriculture and Rural Development (NABARD) chipping in. IOB and NABARD volunteered to adopt not only this village but also a couple of hamlets – Vembanur and Oonaiyur in the periphery. These three villages have been registering a phenomenal growth in all areas.

Setting up of solar lights, extension of credit facility or input supply for an estimated 2,080 farmers, formation of 20 Farmers Clubs and four Joint Liability Groups, vocation through desi bird rearing and bee-keeping for a group of farmers besides training in tailoring for women are some of the major activities taken up in these villages.

### **Business Correspondents**

“We have appointed Business Correspondents who have been monitoring the financial needs of the villagers,” says S. Prabakaran, Lead District Manager, IOB, which has opened a new branch at Theerampatti to cater to the needs of these villagers.

Although the term of adoption had come to an end, the economic activities have been progressing on a sustained basis thanks to a follow-up scheme.

Milk production has been a major activity of the villagers and loans had been sanctioned to 75 persons for purchase of milch animals. “They have been supplying about 525 litres of milk at these villages,” says C. Kumar, manager of Montfort Social Act Centre, who has been keeping a follow-up on the socio-economic development of the villagers. A growing awareness of personal health and hygiene was another achievement. “These villagers resorted to open defecation during the pre-adoption period. But individual toilets have been constructed in a majority of houses. “We ensure proper utilisation of the toilets,” Mr. Kumar said.

### **Heavy rain affects life in Chikkamagaluru**



The bridge across the Tunga, near Kalasa in Mudigere taluk, was submerged on Sunday owing to heavy rain affecting road connectivity between Kalasa and Horanadu.— (Another Photo on Page 2)

Heavy rain that has been lashing parts of Chikkamagaluru has affected life in the district. Road connectivity between Kalasa and Horanadu in Mudigere taluk was stopped on Sunday as the bridge constructed across the Tunga was submerged. People travelling between these

two places had to take an alternative route via Haluvalli, covering a distance of seven to eight km more.

For last two days several parts of Mudigere, Sringeri, Koppa, and Chikkamagalur taluks have been receiving heavy rainfall. In the last 24 hours, ending at 8.30 a.m. on Sunday, the average rainfall recorded in the district was 36.8 mm, against the normal of 16.6 mm.

The highest rainfall of 167.5 mm was recorded at Kere in Sringeri taluk.

Heavy rainfall also affected traffic at Charmadi Ghat. The number of vehicles taking the Charmadi Ghat stretch that connects Dakshina Kannada with the hinterland has gone up in recent months, as the Shiradi Ghat stretched has been closed for repairs.

### **Water-levels in dams up**

Veerendra P.M. reports from Shivamogga:

Incessant rain lashed the district on Sunday owing to which the inflow of water to major reservoirs increased. The water-level in both Linganamakki and Bhadra reservoirs rose by 3 ft each in a span of two days.

On Sunday, the water-level in Linganamakki reservoir stood at 1,776 ft against the maximum level of 1,819 ft. The inflow was at the rate of 17,500 cusecs.

The water-level in the Bhadra reservoir stood at 159 ft against the maximum level of 186 ft. The inflow was at the rate of 17,240 cusecs.

The Tunga is in spate following the release of water at the rate of 45,000 cusecs from the Gajanur reservoir to the river.

*In the last 24 hours, ending at 8.30 a.m. on Sunday, the average rainfall recorded in the district was 36.8 mm, against the normal of 16.6 mm.*

### **Irulas getting back to agriculture in Anaikatty**

Close to 150 Irula families of Anaikatty near Masinagudi in The Nilgiris were farmers growing beans, chilly and other vegetables for their living. About six years ago, they were forced to leave their fields due to inadequate rainfall. They worked as farm labourers at Masinagudi, Valaithottam and Moyar areas.

Moderate showers received in the area last year put the village back in the track of agriculture.

B. Niligiri Bomarayan (60) of the village that is a forest settlement decided to make use of the available water and get back to farming even while others were sceptical.

Seeing him cultivate beans on just about an acre, about ten other families started growing beans. Though they could not make big profit, they made some money by selling the produce at the markets in Ooty and Mettupalayam. Motivated by their efforts, this year about 50 families have started tilling the ground using tractors and sowing seeds to grow beans, chilly, brinjal, ragi and maize. But, the farmers feel that they will be able to make good profit and encourage others too to get back to agriculture if they get support from the Government.

### **Organic terrace gardens come of age**

*Residents of Madurai add some green space to their place of living*



D. Archana waters plants in her terrace garden in Madurai.— Photo: G. Moorthy

With apartments fast replacing independent houses and eating up space for gardens, a good number of residents of the Temple City have started setting up terrace gardens to add some 'green' to their place of living.

D. Archana, a lecturer at KLN Polytechnic College, who began to maintain a terrace garden nearly two years ago says there has been a sharp increase in the number of people wanting to have terrace gardens ever since the movie '36 vayadhinile' was released. "The protagonist in the film inspires people around her to take up terrace gardening to grow organic vegetables which, in turn, has inspired many people here. People are also realising the importance of consuming fresh, organic produce," she adds.

Ms. Archana says she has helped 15 people set up terrace gardens since January this year through her initiative 'Gather 2 garden'. "Hands-on training and awareness are must before people to start their own terrace gardens. While senior citizens are familiar with the basics of gardening, many youngsters are unaware of them since they have grown up in apartments," she says.

In terrace gardens, plants such as brinjal, chilli, tomato and greens, comprising spinach varieties, can be grown through the year, and creeper plants such as snake gourd can be grown based on the appropriate weather conditions.

Ms. Archana, who has conducted two workshops which saw a turnout of nearly 60 people interested in starting terrace gardens, reiterates that the healthy trend is here to stay.

S. Charanya of Chokkikulam, a housewife, who has been maintaining a terrace garden since January, says the greens grown in her garden are extremely tasty. "The components that go into the garden ensure that the vegetables are completely chemical-free. We also ensure that most of what we use for the plants is recycled from our own houses, right from kitchen waste such as vegetable peels, which can be used as a component in the manure, to using waste water from the kitchen or water from the air conditioners," she explains.

Maintaining a small terrace garden is also seen as a stress buster by many. "After a long trip, the first place I visit is my garden. Cooking and eating vegetables grown in our garden give so much satisfaction and maintaining the terrace garden is truly a stress buster," says Nambi Rajan, a resident of Nagamalai Pudukottai.

### **Farmers demand training, storage facilities for vegetables in Madurai district**

Farmers in the district have appealed to the district administration and the Agriculture Department to initiate and impart training to youths in villages in value addition and sale of vegetables.



During the recent farmers' grievance day meeting, the farmers said that fluctuations in vegetable production which affected the selling prices, coupled with the lack of storage facilities in many villages, had resulted in them incurring losses.

“If the youths in our villages are trained in value addition or even spoken to about marketing and retail channels, it would be of great help for us and minimise losses due to price fluctuations and other market factors. In April, we were forced to sell tomato for as low as Rs. 2 per kg,” said a farmer from Melur.

Faculty members of Agricultural College and Research Institute, Madurai, offered to host training programmes in this regard, and said that based on their requirements, they would impart training to groups of not less than 25 people.

### **Cold storage**

Addressing the issue of inadequate of storage facilities, Collector L. Subramanian said that Integrated Marketing Complex which would soon be built in Vinayagapuram would have a massive cold storage facility for the benefit of farmers.

“Once the facility is opened, farmers need not bring their vegetable produce all the way to the markets in the city. Instead, they can deal with buyers at the complex. The facility will be centrally located so that it can be easily accessed by all farmers in the district,” he said.

Planned at a cost of Rs. 40 crore, the Integrated Marketing Complex would be a one-stop shop for farmers where they could sell their produce, make use of the storage facilities and meet officials with regard to any agriculture-related issues. While the land had been identified for the complex, and construction work was yet to begin.

The Collector asked the farmers to assess their training and storage needs in their respective area and season of cultivation, and submit the details to the Agriculture Department, based on which necessary assistance would be given to them.

### **Back to sunflower farming**

For those using Madurai-Dindigul highway, the sight of sunflowers in full bloom on a few fields near Vadipatti comes as a treat for the eyes. A few farmers in Kulasekaranpatti near Vadipatti have taken up sunflower farming after a gap of nearly eight years and said that they are waiting to harvest the crop after 25 days.

“Sunflowers are mostly grown in the Dindigul region and only a few farmers started cultivating it in Madurai district. However, inadequate rainfall in the last seven years have resulted in many not venturing into cultivation of sunflower as water available is barely enough to meet our drinking needs,” said M. Periyasamy, a farmer at Kulasekaranpatti. Two more farmers are cultivating sunflowers on three acres of land each near his fields.



The farmers, who primarily raise maize, said that a decade ago they used to cultivate sunflower after April once the main crop was harvested. “In the last eight years, most of us had very poor yield of maize and we depend mainly on milch animals for income. Since there is no water, we cannot afford to raise sunflower even after the main harvest is over,” a farmer in the area, said.

The farmers said that heavy rains during this ‘Chithirai’ prompted them to begin cultivation of the flowers again.

“Sunflowers actually need very less water and need to be watered only once in eight days. The crop can be harvested within 90 days and the produce must be taken to Vellakovil oil market since prices quoted by local dealers are less,” said S. Karuppan, another farmer.

Sunflowers from Vadipatti command a good price in the Vellakovil market, he said.

Mr. Periyasamy said that expected more rains. “Based on how favourable the Chithirai rains were in helping us raising an additional crop this year, we are hoping that the monsoon will also be as good,” he said.

### **Water level at Mettur**

The water level at the Mettur Dam stood at 86.49 feet on Sunday against its full level of 120 feet. The inflow was 7,622 cusecs and the discharge, 2,000 cusecs.

## Focus on bio-farming techniques



Farmers of Ariyalur district vied with one another in exhibiting their produce at a seminar-cum-exhibition organised at Shozhanmadevi to sensitise the farmers to the importance of bio-farming techniques. Most of them brought several gunny bags of vegetables and samples of nurseries raised using bio-manure. “There was a scramble for the samples of value-added products such as biscuits and pickles made using bio-vegetables,” they said. The seminar acted as a bridge between officials of Agriculture and Horticulture Departments on the one side and bio-farmers on the other. The farmers acknowledged the cooperation being extended by officials while officials realised the needs of the farmers.

With the start of the academic year, complaints about either delay or non-sanctioning of education loans have become a regular phenomenon. To tide over the problem, the district administration made a special arrangement in coordination with Canara Bank for sanctioning loans to eligible students. As many as 30 students were identified at a special camp and loans were sanctioned to the tune of Rs. 52.61 lakh. S. Palanisamy, Collector, who gave away loans recently, urged students to re-pay the same promptly. He hoped the education loan-related complaints from students would be far less this year. R. Dhanabal, Circle Head, Tiruchi Circle Office, said the camp benefited not only students but also differently-abled persons, self-help group members and other weaker sections, who got loans to the tune of Rs.78.55 lakh.

Though the construction of a culvert near the Collectorate on Collector Office Road has received well by local residents, they point out the long duration taken for completing the work. It has so far been completed about 60 per cent of work since the start of the project about 2 months ago. The vehicles plying on both directions have been forced to move slowly at the construction site. Considering the heavy flow of vehicle traffic, passengers and local people pleaded with the authorities concerned to complete the project as quickly as possible.

**M. Balaganessin**

**and C. Jaishankar**

### **Only 79 p.c. of sowing target achieved in Bidar**

Delayed rain and lack of moisture in the soil due to last year's failed monsoon has affected sowing in Bidar district.

Agriculture Department officials say only around 79 per cent of the sowing targets has been reached till now. Farmers have cultivated around 2.7 lakh hectares of the 3.4 lakh hectares that is sown on an average in every kharif season during the advancing monsoon.

#### **Area**

Among the taluks, Humnabad has achieved 80 per cent sowing on around 47,000 acres. Aurad comes second at 77 per cent with sowing on 63,000 hectares, Bhalki 75 per cent (54,000 hectares) and Basava Kalyan on 73 per cent (51,000 hectares).

Bidar is the worst-hit with 70 per cent sowing on 31,000 hectares.

#### **Crop**

The common crops in the are green gram, red gram and black gram as well as oil seeds like soya, sunflower, niger, black sorghum, ginger and sugarcane.

Scarce rainfall could lead to reduced yield, say farm scientists.

#### **Production**

“Around half of the production of green, red and black gram, takes place in Bidar and Kalaburgi. Any reduction in production is likely to increase the prices,” said Anil Kumar Metre, red gram trader.

Agriculture Department officials say they are hoping for rain this week.

Forecast reports say it will rain in the next few days. Sowing will pick up if it that happens, R.N. Sugur, Joint Director of Agriculture, said.

***Bidar is the worst-hit of the taluks with 70 per cent sowing on 31,000 hectares***

## Farmers deplore lack of fair price for coconuts



A labourer peeling off shells from coconuts at Vaduvloor near Mannargudi.— Photo: B. Velankanni Raj

A number of coconut farmers in the district have been toiling hard to produce coconuts but poor marketability hinders attractive price for them.

The district has a good potential in coconut production but the Gandhi Market in Tiruchi alone has been the marketing place. Wholesale dealers from Gandhi Market or their agents come to the villages in the district and purchase the produce. One of the important conditions stipulated is that the coconut growers should remove the shells before marketing them.

Coconut growers have formed clusters in the district with each cluster accounting for about 10 to 15 farmers who bring their produce periodically to a common place for removing the shells. The farmers employ about seven labourers to peel off the shells and the wage per coconut is 0.45 paise.

One of the farmers at Vaduvloor, R. Amudha, says coconuts from Arasapattu, Moovarkottai, Kulamangalam, Vadapadhi and Samayakudikadu are being brought to an open field near Sri Kothandaramar Temple in Vaduvloor. T. Dakshinamurthy, a coconut grower, says though the coconut growers toiled hard, the price was not attractive. “While each coconut is being purchased for Rs.7 or Rs. 8, it is being sold for at least Rs.20,” they say.

A pest, ‘marai’, has been responsible for a fall in the quality of coconuts. They said the growth of the coconut is affected due to this pest attack. Besides, the coconut is discoloured from its green to brown colour. The growers suggest that attractive price should be fixed for coconuts. As they could not be stocked for a longer duration, they have to immediately sell them to the only market in Tiruchi, they lament.

The weekly average despatch of coconuts from Vaduvloor to Tiruchi stood at 10,000. The formation of a growers company would ensure attractive returns to them, they feel.

National Bank for Agriculture and Rural Development has planned to convene a meeting of growers in the district and ascertain their views for floating a company or other body to ensure attractive returns.

N. Ravisankar, District Development Manager, NABARD, told *The Hindu* that the district in general and the Mannargudi belt in particular, accounted for a large area under coconut cultivation. In fact, there has been a shift in cropping pattern from conventional paddy to coconut in the wake of inadequate irrigation supply in a few clusters, he added.

### **Oats upma**



#### **Ingredients**

1 cup oats

3/4 cup water

1/4 tsp turmeric powder

1 1/4 tbsp lemon juice or tamarind juice

Salt to taste

Roasted peanuts fistful

2 tsp oil

1/2 tsp mustard seeds

1 tsp split gram dal

1 1/2 tsps Bengal gram

2 slit green chillies

1 red chilli de-seed

2-3 sprigs coriander and curry leaves

### Method

Heat oil in a heavy bottomed-vessel. Once the oil is hot, fry the mustard seeds, Bengal gram and split gram dal till they turn red. Add the chillies, curry leaves and a pinch of turmeric powder to the mixture. To this add water and salt and bring to a boil. Now add the oats and mix well. Reduce the flame and cover with a lid. Let it cook for 5 minutes. Now remove the lid, add lemon juice or tamarind juice and mix well. Let this cook for another 3-4 minutes without the lid, stirring once in a while. Garnish with roasted peanuts and coriander leaves. You can also serve it with yogurt or pickle.

### Good fat is an essential nutrient, say experts

<b>The 'yes' foods</b>			
<b>Good fats:</b> Omega-3 and Omega-6	<b>Sources:</b> Fish, fish oil, cod liver oil, and krill oil, vegetables, flaxseeds, soybeans, kidney beans, black beans, walnuts and canola oil.		
<b>Advantages</b>	<b>Intake of Omega 3-rich diet by pregnant women will help in normal infant vision development</b>	<b>Omega-3 helps regulate the amount of bad fat (triglycerides) circulating in the blood</b>	<b>Reduces the risk of heart disease Has positive effect on one's mental health</b>

*Fats such as Omega-3 and Omega-6 can help prevent heart ailments and reduce cholesterol*

Awareness to remain fit and lead a healthy life is making a lot of us banish fat from the dining table in our homes. While cutting down on fat is a healthy decision, there is also a flip side to it. Do you know that there is actually a class of fats that help prevent heart ailments and reduce cholesterol? Yes, there are good fats too. Most of the nutritionists often point out that good fats are essential for normal functioning of the body.

So what are these good and bad fats?

Saturated fats and trans-fatty acids are bad fats and their consumption should be avoided because they clog arteries, increase risk of heart ailments, hypertension and diabetes, dietary experts said.

Most common sources of saturated fat are animal products such as meat, high fat milky products, coconut and palm oil.

The good fats are mono-saturated fats (Omega-3 and Omega-6) that are very essential to our body and their main source are vegetables, seeds, fish and nuts. The thumb rule is that the healthy fats are always liquid in room temperature while bad fats are invariably solid.

“Our body manufactures most of the fats it needs directly from the diet. However, it cannot synthesize essential fatty acids on its own, like Omega-3 and Omega-6 and has to depend on outside sources for supply. These fatty acids are considered ‘essential’ because their deficiency can trigger serious physical and mental health conditions, including depression, compromised immunity and abnormal functioning of organs including liver and kidneys,” says chief nutritionist, Apollo Hospitals, Harita Shyam.

Omega-3 is polyunsaturated fatty acid (PUFA) which is considered essential nutrient for the body. It allows the body to function properly and offers substantial health benefits. “Common liquid cooking oil like sunflower and safflower oil is usually PUFA fat. They are essential fat, which means they are required but the body can’t make it. They are needed for blood clotting, muscle movement, and inflammation,” says chief nutritionist, Care Hospitals, Madhurima Sinha.

Omega-3 fatty acids are beneficial to the heart and can also reduce the chances of having a stroke or a heart failure.

“Research has shown that Omega-3 decreases risk of arrhythmias (abnormal heartbeats), which can lead to sudden death. They are also good for a healthy brain and eyes. In fact, Omega-3 has the potential to improve blood circulation and oxygen absorption,” says Ms. Harita Shyam.

“It’s important to have fat in your diet. About 20 to 35 per cent of your calories should come from healthy fats. Good fat is an essential nutrient, important for brain development in children, vitamin absorption and healthy skin, hair and nails, among other things,” says Dr. Radhika Reddy, chief nutritionist, KIMS.

M. Sai Gopal



## City all set to go organic for this year's Onam



Officially green:Vegetable cowpea beds in front of Greater Cochin Development Authority office in the city.— Photo: H. Vibhu

With residents' associations, cooperative banks, voluntary bodies and political parties stepping in to take up organic farming, Ernakulam is expected to see increased availability of safe-to-eat vegetables, especially during Onam. The Greater Cochin Development Authority (GCDA), which has joined hands with the district administration and the Department of Agriculture to launch a drive in the city, has received 5,000 registrations from groups, individuals and institutions.

“Each registered entity will be given 25 growbags each. Nearly two lakh growbags and planting materials will be distribute,” said N. Venugopal, GCDA chairman.

Secretary of the district unit of the CPI (M) P. Rajeev said the party-led primary cooperative societies and local units of the party had undertaken vegetable cultivation for the Onam market. He said the party planned to bring about 800 tonnes of vegetables to be sold through 164 stalls.

The party's Jaiva Jeevitham programme is aimed at sustained cultivation of safe-to-eat vegetables and fruits. “Around 170 acres have been brought under organic vegetable cultivation under the party initiative,” said Mr. Rajeev though only about 50 acres are needed for the targeted quantity of vegetables for the Onam market. Around 2.5 lakh saplings, one lakh growbags and 500 kg of seeds have been distributed in the district.

An official of Ernakulam District Cooperative Bank said the apex cooperative had distributed seeds to 50,000 families through 783 primary societies affiliated to it. The cooperative will spend around Rs. 6 lakh on the project for what the official called “poisonless” Onam initiative.

The secretary of the Palliakkal Service Cooperative Bank, M.P. Vijayan, said the cooperative was supporting farmers, including pokkali farmers, with a total of 40 acres under cultivation. The farmers strictly follow organic method of cultivation, said Mr. Vijayan.

The Chief Executive Officer of Vegetable and Fruit Promotion Council Keralam, Ashok Kumar Thekkan, said the council too was moving its farmers towards organic cultivation. A council official said vegetable cultivation by farmers under its fold is spread over 1,100 hectares. It is estimated that Kerala requires 22 to 25 lakh tonnes of vegetables per year. Of this, more than 50 per cent is imported from other States.

### **Agriculture Ministry launches 3 portals**

#### **economy, business and finance** agriculture

The Agriculture Ministry has launched three agri-portals — Soil Health Card portal, Fertiliser Quality Control System portal and Participatory Guarantee System. The objective is to make the process of organic farming certification, fertilisers' quality checking and issuance of soil health cards, more transparent and accountable. These portals, launched only in English, will be made available in regional languages also in the next phase.

Soil Health Card portal has been developed for registration of soil samples, recording test results of soil samples and generation of Soil Health Card (SHC) along with fertiliser recommendations. This is a single, generic, uniform, and web-based software accessed at [www.soilhealth.dac.gov.in](http://www.soilhealth.dac.gov.in).

Fertilizer Quality Control System (FQCS) is a web-based and configurable workflow application developed by NIC for processing of sample collection, testing and generation of analysis reports. The application can be accessed at <http://www.fqcs.dac.gov.in>.

Participatory Guarantee System is a process of certifying organic products, which ensures agriculture production process in accordance with the standards laid down for organic products and that desired quality has been maintained. This is exhibited in the form of documented logo or a statement. In order to promote domestic organic market growth and also to enable small and marginal farmer to have easy access to organic certification, a decentralised organic farming certification system called Participatory Guarantee System – India (PGS-India) is implemented by the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India. It is cost-effective, farmer-friendly and hassle-

free. It is outside the framework of third party system of certification, which is a pre-requisite to enter export market of organic produce.

It is a quality assurance initiative that is locally relevant with active participation of stakeholders, including producers/farmers, traders and consumers in certification system. This group certification system is supported by Paramaparagat Krishi Vikas Yojana (PKVY) scheme. It, in a way, supports domestic demand for organic produce and trains farmers in document management and adherence to other requirements of certification process and prepares him to opt for third party certification if he wishes to go for export. For online operation of this certification system, a web portal :<http://www.pgsindia-ncof.gov.in> has been created.

### **Promote solar-power pump sets among farmers, officials urged**



Thanjavur Collector N. Subbaiyan (second from left) reviewing the progress of the implementation of the 'Samsad Adarsh Gram Yojana' on Saturday. He is flanked by MPs K. Parasuraman and R.K. Bharathimohan.

Priority will be accorded to farmers coming forward to set up solar-power motors in their farms in two villages where the Sansad Adarsh Gram Yojana is being implemented in the district, said N. Subbaiyan, District Collector.

Presiding over a meeting to review the progress of the work being implemented in Ottangadu near Thanjavur and Tirumangalakudi near Mayiladuthurai adopted under the scheme by K. Parasuraman and R.K. Bharathimohan, Members of Parliament, Thanjavur and Mayiladuthurai respectively, here on Saturday, the Collector said not many applications had been received from farmers for solar energy operated pump sets. He called upon the rural development and agriculture department officials to motivate farmers and identify the interested beneficiaries to fulfil the objectives of clean energy – one of the goals of the adoption.

Mr. Subbaiyan advised the local body officials to take action to issue identity cards to agriculture labourers through the welfare board.

Referring to the various works selected under the programme, the Collector advised the officials to execute the same without any delay.

K. Srinivasan, Project Director, District Rural Development Agency, Sivakumar, Project Officer, Mahalir Thittam, and R. Tiruvalarchelvi, Chief Educational Officer, spoke on the progress of the work being implemented by their departments.

### **Sale of fertilizers worth Rs. 1.22 lakh stopped**

The Department of Agriculture has issued 'stop sales order' against the sale of 3.40 tonnes of fertilizer in Shencottah block as no mandatory permission has been obtained from the officials concerned.

According to Joint Director of Agriculture C. Chandrasekaran, agricultural operations have moved to top gear in Tenkasi, Kadayanallur, Kadayam blocks of the district after water was discharged from Adavinainar, Gadana and Ramanadhi dams and consequently, requirement for fertilizer, one of the main inputs of agriculture, has increased manifold in this region.

Since checking the quality of the fertilizers being sold in the market and its price is imperative, a special squad headed by Assistant Director (Quality Control) Sankar S. Narayanan inspected 3 Primary Agricultural Co-operative Credit Societies and 10 private dealers. The inspection revealed that Rs. 1.22 lakh-worth 3.40 tonnes of fertilizers, without getting permission from the Department of Agriculture, had been stocked for sale.

"Hence 'stop sale order' was issued," Mr. Chandrasekaran said.

He said similar inspection in fertilizer and pesticide shops of other blocks would be conducted in the days to come and hence the fertilizer and pesticide dealers should display the stock positions of fertilizers and pesticides and the price. Proper bills must be given to the farmers for the purchase of fertilizers and pesticides.

"Anyone daring to violate this instruction will have to face stringent action under Fertilizer Control order 1985 and Insecticides Act 1968," Mr. Chandrasekaran warned.

## **Kalam sees good prospects in clean fuel for cane farmers**

*The former President advises farmers to form sugarcane cooperatives*



Former President A.P.J. Abdul Kalam giving away award to a farmer at Shozhamadevi village near Ariyalur. —PHOTO: M. SRINATH.

The Union and State government should take steps for setting up clusters of farmers sugarcane societies for optimising profit to the producers.

These societies should utilise the latest farm technology for producing sugarcane and cane-allied services at their respective cluster, said the former President A.P.J. Abdul Kalam.

Speaking after honouring bio farmers at a seminar-cum-exhibition on organic farming organised by ICAR Krishi Vigyan Kendra at Sozhanmadevi village near here on Friday, he said that zero-effluent sugar factories could be established with modern technology. With Ariyalur district accounting for a large area under sugarcane, he appealed to farmers to set up sugarcane societies which would not only produce sugar but also sugar-based products. Referring to the demand for ethanol, bio ethylene, molasses and other by-products of sugar industry, Mr. Kalam advised farmers to go in for sustainable sugarcane initiative (SSI) which doubled the yield in the cash crop.

In this context, he appealed to the Union and State governments to encourage sugarcane farmers set up societies in each and every cluster in the district.

Mr. Kalam said that ushering in a “water revolution” alone would provide a solution to the challenges faced in food production.

He said that every citizen should take up the responsibility of protecting water bodies, particularly the tanks and irrigation channels in their area. “Encroachments on the water bodies should be prevented at any cost,” he said.

Farmers should adopt an integrated approach such as protection of water bodies, production of agricultural produce through organic farming, better post harvest handling, and marketing their produce.

Mr. Kalam said that organic farming was the lasting solution in the present-day scenario.

V. Natanasabapathy, president of Krishi Vigyan Kendra, Ariyalur district, spoke on the achievements of the bio farmers of the district who have set up an exhibition of their produce.

### **Farmers told to adopt demand-based cultivation method**

Stating that systematic cultivation based on the market demand as one of the solutions to end farmers' suicides, social activist and veteran journalist R.P. Venkateshamurthy said here on Saturday that the State government should workout a programme to bail out farmers. Mr. Venkateshamurthy, who was among the prominent leaders of the Karnataka Raitha Sangha in 1980s, said at a press conference, "When we began the movement, we were demanding remunerative prices for agricultural produce. Even today, the same demand holds good, as no government has fulfilled it".

The growers would get remunerative or reasonable prices for their produce when they get sufficient demand in the market. "In Switzerland, there is a system where farmers cannot cultivate a particular crop in more than the area fixed by the government for that crop. The government fixes the maximum cultivable area for every crop, considering the demand in domestic and international markets. There, the chances of farmers getting a reasonable price for their produce are more.," he said. Mr. Venkateshamurthy said, he and a few of his like-minded friends, who were with M.D. Nanjundaswamy of the Raitha Sangha during its initial days, would soon meet the Chief Minister and appeal to him to bring in such a system in Karnataka. "Our politicians and officials visit foreign countries but they do not study good practices there and introduce them here," he said.



### **Monsoons and markets**

Speaking at the foundation day celebrations of the National Bank for Agriculture and Rural Development (Nabard) on July 12, Union Finance Minister Arun Jaitley said that there were

reasons to smile on the economic front as India remains a bright spot, despite the global slowdown. He talked about the 7-8 per cent overall growth in hand, and the 8-10 per cent growth that is realisable in the near future.



But he admitted that agriculture remains a concern and promised that as tax revenue goes up, an increasing share would be spent on building a strong and vibrant agricultural sector. Nabard can play an important role in that process. It has completed 33 years of service to the nation. From 1982 to 2015, it has come a long way in terms of extending rural credit for myriad programmes ranging from rural roads and irrigation under the Rural Infrastructure Development Fund to building value chains with farmer producer organisations (FPOs) and micro-finance initiatives.

Of late, it has also acquired the distinction of being accredited as the first national implementing entity (NIE) of the Green Climate Fund (GCF) of the United Nations Framework Convention on Climate Change. As an NIE, Nabard is supposed to lead and promote work on climate change adaptation and mitigation, especially in agriculture and rural development activities. Given that in the first three years of the 12th Plan (2012-17), the average rate of growth in agri-GDP has been a mere 1.7 per cent against a target of 4 per cent, there is cause for concern as this is leading to agrarian distress.

No wonder, Nabard chose “mitigating agrarian distress and enhancing farm income” as a suitable topic for discussion, which was inaugurated by Jaitley. It is worth sharing some of the takeaways from this seminar, attended by several brilliant speakers who have devoted their lives to Indian agriculture and rural development.

What are the root causes of agrarian distress today? Basically, two factors: monsoons and markets. A drought last year, followed by unseasonal rains that damaged the rabi crop, and falling global agri-prices, which are pushing down domestic farm prices of several commodities, from rice and corn to sugar and groundnuts. Farmers’ incomes have plummeted and many cannot service their loans, raising demands for a loan waiver. Small and

fragmented holdings, excessive specialisation and input intensification of agriculture as well as restrictive markets also contribute to the increasing distress.

### **The olive oil debate: getting it right**



Olive oil has found a place in urban Indian kitchens and its availability in supermarkets and neighbourhood kirana stores clearly indicates its growing demand. There, however, still seems to be some myths around the types of the oil and its usage. Almost sacred in the Mediterranean region — in countries like France, Spain, Greece, Italy and Portugal — olive oil is not native to India but needs no introduction here.

Used as a baby massage oil until a few years ago, it has slowly acquired the mighty reputation of being heart-healthy. Several studies confirm that consumption of olive oil, rich in mono-unsaturated fatty acids (MUFA), has contributed to low rates of cardiovascular disease, breast cancer and increased life expectancy in the Mediterranean belt. One of the largest — the Seven Country Study (1958-1964) — showed that Greece, with the highest consumption of olive oil, reported the lowest number of deaths from heart disease. It is in fact thanks to olive oil that the distinction between good and bad fats began to be recognised.

The French and Spanish paradoxes symbolised the importance of the quality of fats rather than simply the quantity. Low incidence of heart disease in the populations of the two countries was attributed to the high consumption of mono-unsaturated rich olive oil included in a healthy diet comprising whole grain, fruits and vegetables.

It reflected the benefits of good fat. Olive oil differs from other oils in that it is derived from a fruit rather than a seed and has among the highest concentrations of polyphenols, MUFA and vitamin E. These special features are responsible for several of its health benefits. The polyphenols, vitamin E and A lead to high antioxidant levels, which lower bad cholesterol (LDL), blood pressure, risk of heart disease and cancer.



The higher the polyphenol content, the greater are the health benefits. The high MUFA content is responsible for increase in good cholesterol levels, improvement of blood sugar levels in diabetics and reduction of abdominal obesity. Olive oil comes in a number of varieties: Extra-virgin, virgin, pure / refined/ light, and pomace. Extra-virgin or the first pressed olive oil is the highest quality. This oil has the highest polyphenol content. Virgin olive oil is a slightly lower category based on acidity levels less than 2 per cent. Olive oil (pure / refined), with an acidity of less than 3 per cent, is obtained by refining virgin olive oils (not olive-pomace oils) that have a high acidity level. Pomace or olive seed oil is extracted from the pulp or paste that is left over by using high heat and solvents.



## THE TIMES OF INDIA

### **Insurance cover for farmers in Shimla**

To provide adequate compensation to the farmers and agricultural labourers in case of any injury or death, the state government has launched an ambitious scheme, being implemented by the state agriculture department. The scheme titled 'Mukhya Mantri Kisaan Evam Khetihar Mazdoor Jeevan Suraksha Yojna 2015-16' covers the farmers and agricultural labourers who will be given compensation in the event of injury or death during the operation of farm machinery. A provision of providing compensation of Rs 1.50 lakh has been made in case of death due to an accident occurred while working on the farm or machinery, whereas Rs 50,000 will be provided in case of permanent disability to the victim. The scheme is limited to the domicile farmers and farm labourers and will not to be applicable to workers or employees of any company or contractor.

### **Congress reassigns duties:**

Shimla: Himachal Pradesh Congress Committee (HPCC) has given additional responsibilities to the PCC secretaries in the party organization so as to give them a chance to learn and grow in the party hierarchy. HPCC chief spokesperson Naresh Chauhan and general secretary Harbhajan Singh Bhajji said that state party chief Sukhvinder Singh Sukhu had given responsibilities to secretaries and they have been attached with general secretaries and vice-presidents so as to give them a chance to learn and grow in the party hierarchy. "Further, changes have been made in the responsibilities allotted to PCC vice-presidents and general secretaries," Naresh Chauhan said.

### **African students find TN a safe bet for higher education**

For Nzamveth Orifa, an MSc microbiology student from Rwanda, Coimbatore has become a home away from home. He is part of the growing tribe of international students, especially from Africa, who are enrolling themselves in colleges in the region for its quality education,

affordable courses and, most importantly, the near absence of racial discrimination.

If the experience of Nzamveth and his friends are an indication, Coimbatore, and Tamil Nadu overall, does not fit into the stereotype that India is a highly colour-conscious, even racist, society where African students are treated poorly. "I had thought of applying to universities in Delhi, Noida and Gurgaon, but my seniors discouraged me with accounts of racist attacks. These incidents have scarred us. Coimbatore with hardly any such cases of discrimination and its good quality colleges is best suited for me," said Nzamveth of CMS College of Arts and Science.

According to police records, there are 653 students from various countries pursuing higher education in the Manchester of south India. While the students are a global mix coming from as far as the US and Albania, the city is a favoured destination for students from Sudan, Rwanda and Nigeria who alone account for two-thirds of them.

The reputation of Coimbatore seems to have been built over the years through word of mouth. "Our seniors who first visited Coimbatore almost ten years ago felt it was a good place to pursue higher education, and it is their goodwill and feedback that has made many of us pursue graduation here," said Nzamveth.

A Tamil Nadu Agricultural University spokesperson told TOI that good alumni feedback is crucial to get international students "If the students are comfortable, and satisfied with the quality of the education, they spread the message."

While Coimbatore is a hub of Rwandan and Sudanese students, Erode is a preferred location for Kenyans. Aware of the issues a global community of students may face, colleges are particular about maintaining equality among foreign students with some of them conducting awareness programmes for local students on racism and equality. "We ensure additional support for international students as we realize the cultural differences," said a TNAU spokesperson.

Though there are no concrete laws against racial discrimination in educational institutions, most account it under ragging. In case a student is found involved in racial discrimination, institutions tend to suspend or even rusticate them. Educational consultant J P Gandhi feels the presence of some world famous institutes and the pleasant climate in the region is a crowd puller when it comes to foreign students. "Some institutions have made a mark globally for their excellence. Others have exchange programmes which help to popularize the institutions in other countries," said Gandhi.

While the city is known for technical education, with over 70 engineering colleges, international students are interested in commerce, management and science courses. "Most African students join arts, commerce and management courses. Only a few have taken up engineering but pharmacy is in demand," said the Coimbatore police commissioner AK Viswanathan.

Coimbatore seems to dissolve the initial scepticism with which African students land there.

Yzes Mbonyimana, 24, from Rwanda who came here for undergratuation liked it enough to pursue his masters in computer science."When I came here, I was scared whether I would be able to adjust to the place. The faculty and students treated me as their family and in a couple of months, I began to admire the city, its people and culture, I was convinced that I should do my postgraduation from here."

### **Scarce rain, but veggie prices fall**

Despite the region receiving deficit rainfall, prices of vegetables have dropped significantly in the last 10-15 days bringing smiles on the faces of citizens.

Many varieties of green vegetables such as spinach, fenugreek and coriander have seen price cut of more than 50% during the period. Moreover, the prices of cauliflower, cabbage, cluster beans and capsicum have also dropped by about 25-40%.

Wholesalers and retailers have attributed dip in prices to the arrival of fresh crops. "The markets are being flooded with huge quantity of vegetables these days which is leading to cut in prices," said Babubhai, a wholesaler based in Jadhavwadi wholesale market.

"At present, the market is not bearing the brunt of deficit rainfall. Vegetables that were sowed early in the monsoon season when it rained satisfactorily are arriving in the market that to in abundant quantity. Farmers in and around the city and many parts of Marathwada have managed to grow short-duration crops such as green vegetables despite the absence of rainfall," he said.

Moreover, many farmers, who are facing water scarcity, are making attempts to sell their agriculture produce at the earliest, Babubhai said.

However, he said the prices of green vegetables may go up in the next 10-15 days. "The region has not witnessed rain for the past 25 days, which may affect the arrival of crops and trigger the prices," he said.

Meanwhile, the prices of onion and tomato were on the higher side on Sunday. In the wholesale market, onion was sold at Rs 25 per kg against it previous rate of Rs 18 per kg. Tomato price has also jumped from Rs 20 per kg to Rs 35 in the last 15 days.

Onion wholesaler Rambhau Perkar said 25-30 tonnes of onion are arriving in the market against the demand of about 40-45 tonnes. "This is the stocked material which the suppliers are gradually pushing it in the local markets. We may see further hike in onion prices in coming days. Short supply will continue till the arrival of fresh onion crop in October-November," he said.

# THE HINDU BusinessLine

**Monsoon revives over west coast**



A causative low-pressure area from northwest Bay of Bengal raced past eastern States to reach north MP and south UP on Sunday

## **Thiruvananthapuram, July 19:**

Rain deficit for the country as a whole deteriorated to 8 per cent on Sunday, but a revival in monsoon fortunes is already bringing heavy showers along the west coast and over North India.

A causative low-pressure area from northwest Bay of Bengal raced past eastern States to reach north Madhya Pradesh and south Uttar Pradesh on Sunday.

## **Heavy showers**

India Met Department said that it has brought 'heavy to very heavy' rainfall over west Madhya Pradesh, south-interior Karnataka, Kerala and Lakshadweep, during 24 hours ending Sunday morning.

The heaviest rainfall (in cm) was reported from Ujjain-32; Shajapur-17; Bhopal-15; Raisen-14; Indore-13; and Dhar-10 (all in Madhya Pradesh); Agumbe-23 (Karnataka); Agathi-15 (Lakshadweep); Canning-10 (West Bengal). The 'low' will be active for a day or two and continue to drive rain all over Madhya Pradesh, adjoining Rajasthan and Gujarat. It is shown as tracking mostly to the west across the upper reaches of central India.

The US Climate Prediction Centre sees heavy rain over the western coast, Madhya Pradesh and Chhattisgarh during the week ending July 24. In fact, the rains will scale up over across central India and the western coast during the last week of the month (July 25 to 31) as per the US agency forecast.

### **Follow-up 'low'**

This is being attributed to the formation of a follow-up 'low' in northwest Bay of Bengal on July 28-29, as per the outlook of the European Centre for Medium-Range Weather Forecasts. It is forecast to form off the Odisha-north coastal Andhra Pradesh coast; the more southerly origin would translate into better reach of rain into parts of Maharashtra as well.

According to the European agency, the 'low' will intensify at least one round ahead of rolling into the mainland. Given this, flooding rain may be expected over Odisha and Andhra Pradesh to begin with.

### **4th edition of Banana Festival coming up**

The 4th edition of the Banana Festival is scheduled for December 4th and 5th at Madras University. Tamil Nadu Banana Producers Company (TNBPC) is organising the event this year jointly with the Confederation of Indian Industry.

TNBPC was formed at the 3rd edition of the Banana Festival, held in December last at Trichy.

A P Karuppaiah, President, Tamil Nadu Banana Growers' Federation told Business Line that the event would focus on hi-tech cultivation of banana and the need to preserve traditional varieties.

Banana farmers in Theni district broke the national record last year by getting a yield of 120 tonnes of banana per hectare.

About 5,000 farmers in the district adopted hi-tech farming practices covering an area of 12,000 hectares, Karuppaiah said.

### **Exorbitant loans triggering farmer suicides: Karnataka CM**

Citing exorbitant loans as a major reason for farmer suicides, Karnataka Chief Minister Siddaramaiah on Sunday warned strict action against private money lenders charging more than 14 and 16 per cent interest rate.

“One of the major reasons is inability to repay loan; they have taken loan from banks, societies; they have also taken loan from private money lenders,” Siddaramaiah said.

There was a spurt in suicides among distressed farmers in June and July and a committee consisting of officials has been constituted to look into this, he told reporters.

“We have received complaints about private money lenders charging higher interest rates. They should not charge interest rate above 14 and 16 per cent. 14 per cent interest for secured loan and 16 per cent for unsecured loan. Charging above this will be a violation of the law, and we will take action against them,” the chief minister said.

In Mandya alone, authorities have registered more than fifty cases, and have seized about 1,000 documents, said Siddaramaiah, who is on a visit to Mandya and Mysore districts to comfort families of farmers who have committed suicide.

Amid a spurt in farmer suicides that has put government under opposition fire, the CM had directed all district in—charge ministers to visit families of the deceased farmers during the weekend and sought a report on compensation extended to them.

Alleging government of being “careless”, opposition had said more than 50 farmers had allegedly committed suicide in the last two months. According to sources, Governor Vajubhai R Vala has reportedly written to the government seeking a detailed reply on increasing number of farmer suicides.

Stating that more number of farmer suicides have been reported from Mandya and Mysore districts, he said there is a need to ascertain the cause behind these deaths — if it is due to exorbitant loans or sugarcane issue or any other problem.

“I have already requested farmers not to commit suicide, we are with them. We have already directed co—operative societies not to recover loans, banks have been asked not give notice or forcefully demand for repayment...” he said.

About the steps taken by government to protect farmers like setting up of enforcement cells at district level to keep a check on private money lenders and repayment of dues to sugarcane farmers, Siddaramaiah said government is planning to constitute an expert committee.

“We are constituting a committee under M S Swaminathan on agriculture (Vision Group for the agriculture sector); to find the reason for deaths we will be constituting a separate committee,” he said.

**Post harvest losses ‘alarming’**



A stall at the Agri Intex 2015, organised by the Coimbatore District Small Industries Association and Tamil Nadu Agricultural University at CODISSIA Trade Fair Complex, in Coimbatore S SIVA SARAVANAN

Dissemination of technologies to curb/ control post harvest loss is urgently needed, K Alagu Sundaram, Deputy Director General (Engineering), Indian Council of Agricultural Research (ICAR) said.

Highlighting alarming data about post-harvest loss in agriculture, he said the loss was estimated to range between 6 and 18 per cent in the two year period between 2005 and 2007. The exercise of assessing the loss was repeated seven years later during 2012 and 14 when it was found to hover between 5 and 15 per cent.

In real terms, the quantum of loss had shot up from ₹ 42,000 crore a year in 2005-07 to ₹ 92,600 crore in 2012-14 period. The jump was mainly because of the increase in the procurement price and productivity increase, he said and lamented that technological interventions had not helped bring post harvest loss under control.

The above findings were the outcome of a government survey involving 12,000 farmers across 105 districts covering 45 crops, he said.

Quantity apart, quality loss was found to be enormous at over ₹ 3 lakh cr, Sundaram said, stressing the need for dissemination of technologies. “There is no dearth of technology to contain post harvest losses; sadly it has not been penetrated beyond research labs.”

### **Primary processing centres**

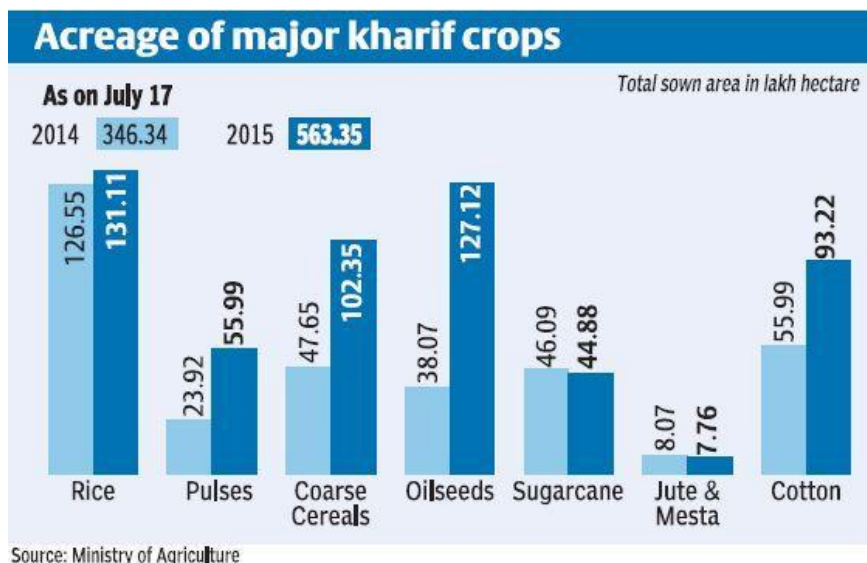
The DDG was in the city delivering the Chief Guest address at the 15<sup>th</sup> edition of the Agri Intex 2015 – agricultural trade fair presently underway at the Codissia Trade Fair Complex here.

He further said that 50 per cent of the loss was at the farm itself, before the produce is moved to the mandi. To address this issue, the ICAR, he said, plans to set up primary processing centres in the 220 agricultural institutes across the country.

Farm mechanisation practices and processing centres is the need of the hour. Shortage of farm hands and rising labour costs will make agriculture a difficult proposition in the years to come.

“There is no food shortage in India. We have enough and more of vegetables, pulses and milk. We need to curb post harvest losses by looking at value addition, innovative techniques and information dissemination,” he reiterated.

### Kharif sowing rises 63% led by pulses, oilseeds





Kharif crops such as rice, sugarcane, cotton and a range of pulses and oilseeds, have been sown over 563.35 lakh hectares (lh), an increase of 62.7 per cent from the corresponding period last year when acreage stood 346.34 lha. However, the long break-up in monsoon rains during most part of the July is a cause of worry as it could impact yields.

According to the latest data released by the Agriculture Ministry here on Friday, the rise in sowing – up 26.5 per cent over the previous week – has been led mainly by greater coverage of pulses, oilseeds, cotton and coarse cereals.

The dry spell prevailing in large tracts across central and western parts since the beginning of July, which accounts for 33 per cent of monsoon rains, has resulted in greater coverage by sturdier crops.

“While sowing has raced ahead, it will remain to be seen what is actually realised since the rain in July is crucial for crops. Delayed rain can impact yields and this is a worry,” said DK Joshi, Chief Economist, CRISIL.

Data from the India Meteorological Department showed below-normal rainfall across India for the sixth consecutive day with 7.8 mm recorded on Friday, around 22 per cent lower than the normal average of 9.9 mm for the day. Overall, rainfall between June 1 and July 17 is 7 per cent below the normal of 318.4 mm, with surplus rain recorded only in Northwest India, which has received 14 per cent above normal rain.

“For the Central region, we are expecting rain over the next two days. While the Arabian arm is weak, we see a pressure region developing over Western MP due to the Bay of Bengal arm strengthening,” said Anupam Kashyapi, Director and Scientist-in-charge, IMD-Bhopal. Double-digit pulses inflation was a cause of worry in the latest data released earlier this week. Acreage has risen by 134 per cent over the same time last year, from 23.92 lh to 55.99 lh. All three major pulses – arhar (tur), urad and moong – have been sown over more area.

### **Sowing specifics**

Arhar acreage is up nearly 93 per cent at 20.30 lh while urad sowing has risen almost 268 per cent to touch 13.46 lh. Moong acreage is up 199 per cent at 15.06 lh.

Maharashtra and Madhya Pradesh, in particular, have seen greater arhar and urad coverage while moong has been sown in large quantities across Rajasthan and parts of Maharashtra.

Oilseeds, such as soyabean, castorseed, groundnut, sunflower and sesamum, have been sown across 127.12 lh, about 234 per cent over the year, led mainly greater coverage of soyabean across 95.7 lh from 19.5 lh last year, a whopping 390.8 per cent increase.

Largely attributed to the timely onset of the monsoon in Madhya Pradesh and Maharashtra, which collectively account for 90 per cent of soyabean output, experts are worried that the dry spell over the last three weeks could cause overall output to decline.

Around 9.4 lh have been covered in Rajasthan as well, up from just 0.16 lh last year.

“The crop was sown almost a month earlier than last year but now the dry weather has resulted in a grim situation. If there’s no rain over the next day or two, it’s likely that the crop

in shallower soil where there's less moisture retention will suffer," said VS Bhatia, Director, ICAR-Directorate of Soybean Research.

### **Cotton acreage**

Cotton has been sown across 93.22 lh – a 66.5 per cent increase from 55.99 lh during the corresponding period in 2014-15. Less rainfall in Gujarat and Maharashtra has spurred more sowing in the two largest cotton-growing States.

Experts, however, state that the situation with cotton acreage is the same as with oilseeds since farmers had delayed sowing last year due to the late monsoon onset as well. "It's too early to speak on yield but overall acreage will be the same or slightly lower," Dhiren Sheth, President, Cotton Association of India, had told BusinessLine earlier.

Area under cotton in Gujarat has more than doubled this year at 23 lh (10.19 lh), while Maharashtra has recorded acreage almost tripling to 33.27 lh (11.24 lh).

Coarse cereals, such as jowar, bajra, ragi and kharif maize, have registered a 115 per cent rise in acreage. Sowing of bajra, in particular, is up 158 per cent to 35.62 lh. Acreage of rice, the main Kharif foodgrain, has edged up 4.4 per cent to 132.11 lh while that of sugarcane is about 2.8 per cent lower at 44.8 lh.

### **M&M plans to double agri-biz turnover; enters branded edible oil segment**



Ashok Sharma, President & CEO, Agri Division, Mahindra & Mahindra launching the NuPro mustard oil in Kolkata on Friday ASHOKE CHAKRABARTY

Mahindra & Mahindra's (M&M) agri-business division expects to almost double its turnover to ₹1,000 crore by this fiscal (FY 2015-16) as it expands into newer segments such as branded edible oil. The agri-biz vertical had reported a turnover of ₹580 crore last fiscal.

On Friday, it entered into the branded edible oil segment with its “NuPro” brand. It is also planning a foray into pulses and dairy retailing businesses by the end of this fiscal.

According to Ashok Sharma, President and Chief Executive (Agri and Africa and South Asia Operations), it will expand the mustard oil business in the eastern region for the first year. The eastern region includes West Bengal, Bihar, Odisha, Jharkhand and Assam.

From the second year, it’ll look to expand to other States with edible oils like sunflower oil, rice bran oil, soyabean oil and vegetable oil, he said.

“Right now the focus is on establishing the NuPro brand. There is scope for us to grow and we aim to be amongst the top three players in the next three to four years,” he told reporters on the sidelines of the launch. The market size of mustard oil in West Bengal is pegged at ₹6,000-7,000 crore. The company will compete with Fortune, Emami Group’s Healthy & Tasty and Saffola.

According to Sharma, the agro division will enter into the pulses retailing segment, through this NuPro brand too. “Pulses will include the likes of arhar (pigeon pea), chana (chickpea), urad (black gram) and masoor (lentil),” he said.

The company has been supplying pulses to wholesalers under the “Finegrade” brand.

It is also planning a foray into the dairy segment with the launch of liquid milk by the end of this fiscal.

### **Poor quality grinds turmeric**



Spot turmeric prices decreased at Erode markets due to arrival of poor quality turmeric.

At the Regulated Market Committee, 330 bags arrived for sale and traders purchased only 52 bags of turmeric. The finger variety fetched ₹6,099-6,877 a quintal and the root variety ₹6,019-6,444.

At the Uzhavan Market, Erode's weekly sale, 409 bags found takers of the 526 bags put up for sale. The finger turmeric was sold at ₹6,489-7,599 and the root variety ₹6,339-6,999.

### Pepper steady on limited activities

Pepper prices ruled steady on limited activities. Only 15 tonnes of pepper were traded on the terminal market. In the international market, all the other origins are at par with Malabar at present, market sources told *BusinessLine*. European buyers are staying away from the market following the Greece crisis. American buyers are also holding back hoping the prices would decline when the Indonesians enter the market after the Ramzan holidays. Spot prices remained unchanged at ₹62,000 (ungarbled) and ₹65,000 (garbled) a quintal. August and September contracts on the IPSTA platform were also steady. Export prices were at \$10,700 a tonne c&f for Europe and \$10,950 for the US.

### Weak arrivals lift pulses



Even as monsoon continued to remain elusive, majority of pulse seeds in Indore mandis traded higher with demand outstripping arrivals. Weak arrival and strong buying support from the millers lifted masur (bold) to ₹6,900 a quintal, while masur (Madhya Pradesh) ruled at ₹6,500. Masur dal (medium) was at ₹7,500-7,700, while masur dal (bold) ruled at ₹7,800-7,900. Uptrend also continued in urad with urad ((bold) at ₹8,000-8,200, while urad (medium) ruled at ₹7,500-7,600. Urad dal (medium) fetched ₹8,600-9,100 (up ₹500 from last week), urad dal (bold) at ₹9,200-9,400, while urad mongar was ₹10,600-800. Moong (bold)

fetched ₹6,500-6,800, while moong (medium) ruled at ₹6,000-6,200. Moong dal (medium) was at ₹7,900-8,000, moong dal (bold) ₹8,300-8,400, while moong mongar ruled at ₹8,000-8,300.

### **Mahyco optimistic on GM food crops**

Farm biotechnology company Maharashtra Hybrid Seeds Company Ltd (Mahyco) has expressed optimism over the easy passage for genetically modified food crops including Bt brinjal and Bt chickpea (Bt chana) with growing emphasis on agri biotechnology by the Centre.

While there has been no progress towards revoking the moratorium on Bt brinjal, the genetically modified chickpea has been allowed for field trials in Maharashtra and Andhra Pradesh. However, Maharashtra government later put a ban on field trials after protests.

“There has been positive development since the NDA government came to power in the Centre. Field trials have been approved for food crops besides other cotton varieties. Also, Prime Minister Narendra Modi during his speech at the launch of DD Kisan Channel had encouraged genetic engineering to increase pulses production,” said Usha Barwale Zehr, Chief Technology Officer, Mahyco.

Bt Chickpea trials are being conducted in Andhra Pradesh by Sungro Seeds, a sister concern of Mahyco after obtaining the Bt technology from the Assam Agricultural University (AAU), Jorhat.

“The Bt variety of chana is not only insect resistant but also improves yield by about 15-20 per cent. It will also protect the crop from *Helicoverpa* spp. (pod borer), which can cause yield damage up to 75-90 per cent,” said Bharat Char, Lead-Biotechnology, Mahyco. According to him, the Bt variety of chana would be more beneficial to the small dry land farmers .

Approximately about 18-19 million tonnes of pulses is produced in the country, out of which about 40 per cent is chickpea, having an area of about 9.60 million hectares. But to meet the annual pulses consumption of about 22-23 million tonnes, India is heavily dependent on imports with an import bill touching \$2.3 billion (approx ₹14,700 crore).

With Central push for the agri biotechnology, Zehr expressed optimism about easy passage for Bt brinjal as well.

“Bangladesh has already experimented with Bt brinjal with two successful seasons. They had released the seeds in 2013. The sad part is that the technology is ours and they are taking the benefit,” added Zehr.

The writer was in Jalna recently at the invitation of the company

## **‘Infrastructure improvement key to dairy growth in TN’**

Technology is the key for improving the dairy sector in Tamil Nadu. The potential is huge, but what we need is well-channelised system, K Rathinam, Managing Director, Amul Dairy, said.

Addressing participants at the 15<sup>th</sup> edition of Agri Intex 2015, an agricultural fair organised jointly by the Coimbatore District Small Industries Association (Codissia) and Tamil Nadu Agricultural University at the Codissia Trade Fair Complex, Rathinam stressed the need for improvements in infrastructure and imbibing technological advancements at the farm itself.

Commercial dairy farms have not been successful in India as 90 per cent of the dairy farms are with the poor and marginal farmers, he said and suggested going the Amul way to make dairy farming a remunerative proposition.

“At Amul, we imbibe new technologies every 10<sup>th</sup> year, import machines and take to modern processing. Our processing cost is as low as ₹0.80 a litre against ₹4-6 a litre in TN,” he said.

Hailing the Progressive Dairy Farmers’ Association initiative, the Amul MD said, “for this to work effectively, you will need to set up a processing plant at the farm itself and brand the product.”

He advocated the need for creation of a market to sell new products, a bulk chiller and an automatic milk collection centre in every village to ensure that the milk is not spoilt.

Amul, a ₹30,000-crore company, is completely managed and controlled by farmers from village collection to administrative set up, Rathinam said, stressing the need for controlling the dairy produce to achieve the target

“Tamil Nadu is a good milk producing State, but the daily collection of milk by Aavin is only 15 lakh litres against the State’s production of 1.15 lakh crore litres of milk every day. On the other hand, nearly 80 per cent of the State’s requirement of milk in Gujarat is collected by the farmer-owned cooperatives,” he said.