#### 23-04-2015

### THE MORE HINDU

#### TNAU special advisory for crop protection

Tamil Nadu Agricultural University has issued a special advisory for crop protection following abnormal weather conditions. A release from the Centre for Plant Protection Studies said that due to weather conditions in paddy growing area, there was a possibility of outbreak of rice blast and brown leaf spots in paddy. The farmers would do well to delay application of nitrogenous fertiliser and go in for insecticides.

The advisory had also said that farmers should spray pesticides to control brown planthopper that sucked the sap from the base of the plants. It asked farmers to drain water out of the fields before spraying the pesticides. It asked farmers to get in touch with the Director, Plant Protection Studies, on 0422-6611237, the Professor and Head of Agricultural Entomology Department on 0422-6611214 and the Professor and Head of Department of Plant Pathology Department on 0422-6611226.





Micro entrepreneurship, artisanship and agriculture are the three promising areas where huge number of jobs can be created, according to Ravi Venkatesan, former Chairman of Microsoft India and presently Chairman of Senior Venture Partners (SVP) India, a network of philanthropists.

Stronger focus on these three areas will go a long way in creating millions of jobs and boosting livelihoods at the bottom of the pyramid, he said while addressing TiE Chennai on Wednesday.

"Most of the activity relating to entrepreneurship is happening in big cities. It is cool to be an entrepreneur, and it is ok to fail also in cities. But the big challenge is to create entrepreneurs in small towns. A lot of work is needed to ignite entrepreneurship in these locations," Mr. Venkatesan said.

He also stated that artisans segment offered huge potential. "No country has the same rich tradition of art and crafts like India. But the segment has not received the attention it deserved," he argued.

Mr. Venkatesan said "the number of artisans in the country fell by 30 per cent in the past 25 years, and in the next 5-10 years, it is expected to fall by another 30 per cent. While a huge number of artisans are leaving the profession, their sons migrate to cities to work as cab drivers or delivery boys for companies such as Flipkart," he added.

"Third area is agriculture. Though India is trying to emulate western model, we can mitigate the issue of urban migration by focusing on rural formers and improving their income levels," he said.

He said SVP was working with orgnisations that were making good interventions in those three areas. "We have been experimenting with our models. But we want to commit ourselves strongly towards these areas in the coming years with our expansion to many cities," he added.

SVP India, started in 2012 in Bangalore, has now its chapters in Pune and Mumbai. It will launch New Delhi chapter on October 1.

The big challenge is to create entrepreneurs in small towns. A lot of work is needed to ignite entrepreneurship in these locations."

Ravi Venkatesan Chairman, SVP India

#### Wet cocoa beans procurement centre comes up at Markanja



Cocoa growers in Markanja village in Sullia taluk need not go to the taluk headquarters, which is at about 25 km away, to sell wet cocoa beans now.

Markanja Cocoa Growers' Association, sponsored by the Department of Horticulture, opened a wet cocoa beans procurement centre in the village a few days ago.

Three years ago, the department promoted the association to form a cluster of cocoa growers under the Integrated Horticulture Development Scheme. The association has become the first market-linked association among such associations formed for crop clusters in Dakshina Kannada under the scheme.

The other clusters formed in the district include those for pepper, banana, jackfruit and pineapple.

Yogesh H.R., Deputy Director, Department of Horticulture, told *The Hindu* that forming the group to cultivate a particular crop within a given area by providing financial assistance, guiding them in raising the crop and market-linking the group by granting revolving fund, were the main features of the scheme.

In the case of Markanja Cocoa Growers' Association, the government has provided a subsidy of Rs. 2 lakh to form the association comprising 162 farmers. They were given inputs on cultivating the crop. Later, the government gave another Rs. 2 lakh as revolving fund alongside a contribution of Rs. 2 lakh from the association members.

He said that the centre would collect cocoa beans on Wednesdays. And, farmers are paid immediately by drawing money from the revolving fund. Cocoa beans thus collected were sold to Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd. (CAMPCO). The payment made by CAMPCO would go to the revolving fund of the association.

Mr. Yogesh said that henceforth the association would have to sustain on its own by improving its business at the purchase centre. It could also purchase banana and pepper from farmers. The association has been allowed to sell agriculture inputs such as manure, pesticides and sprayers to farmers. It could also collaborate with the Dakshina Kannada Horticultural Producers' Cooperative Marketing and Processing Society (HOPCOMS) to sell banana purchased from farmers.

He said that there were four clusters (associations) of cocoa, seven of pepper, two of banana and one cluster each of jackfruit and pineapple in the district.

#### Entrance for admission to agriculture, horticulture courses

The entrance test for students seeking admission to B.Sc. (Agriculture), B.Sc. (Horticulture) and other agricultural related courses for the current year, under the farmer/agricultural labourer/cultivator quota, will be held on May 16 at the Horticultural College in Munirabad, Koppal district from10 a.m.

Students belonging to general and backward classes categories will have to remit an exam fees of Rs. 500 while those belonging to Scheduled Castes, Scheduled Tribes and Other Backward Classes will have to pay Rs. 250. A demand draft, drawn in favour of Finance Officer, Horticultural Science College, Bagalkot, should be submitted during verification of records between May 4 and 12 during office hours.

Contact 9739625475, 9900759998, or 9591079897

#### **Back to basics**



At a time when news of farmers' suicide in Maharashtra due to crop failure comes as a setback, Mu.Balasubramanian, fondly called as Pamayan, comes across as the knight in shining armour for Tamil Nadu. For, he has not only created a model organic farm but also evolved a selfsustainable farming practice that has been drawing the attention of people from all over the State.

His model farm is spread across 4.5 acres in Solaipatti 15 km southwest of Tirumangalam and he calls his farming technique '*Thalanmai Pannaiyam*' (self-reliant farming). He has evolved a training module that takes into account salient features of ancient farming practices such as farmers' predicaments, how to enrich soil, how to grow a plant, best farming practices, marketing, visit to a farm and successful stories. It is now his endeavour to convert his farm into a revenue-generating source.

"I know this area is dry, the underground water is brackish and that is why I deliberately chose this place," says Pamayan. When he took this land it was filled with *karuvelam* trees. "I cleared it all and dug two huge pits to store water. I didn't get any free power from the Government and had to pump underground water into that pit. And rainwater also got stored in it," he says.

A great admirer of Bill Mollison's Permaculture design, which seeks to minimise waste, human labour, and energy input and to achieve a high level of synergy, Pamayan tried to infuse his own techniques to make his farming practice a sustainable one.

Born to a farmer in Sundaresapuram Village near Kadayanallur, young Pamayan had no idea whatsoever about agriculture. Severe drought drove his family out in pursuit of greener pastures and he ended up doing a course in journalism before joining the Association of Sarva Seva Farms (ASSEFA) as a documenter. It was his field job here that introduced him to agriculture. Several Sarvodaya leaders became his friends. The book '*One Straw Revolution*' by Masanobu Fukuoka presented to him by Gandhian K.M.Natarajan was an eye-opener. "I read about natural farming and was very impressive. The word sustainable caught my attention," he says.

Natural farming advocates planting wild vegetable variety as one can learn from the forests. It is also against pruning of plants. The relevance of such farming practice propelled Pamayan to search for similar effective organic farming practices and gradually he started translating and writing articles on agriculture in several publications.

Pamayan was attracted to permaculture's emphasis on a pattern that provides maximum benefit to the local environment. Zoning of plants is important. According to permaculture, plants that require frequent visit of the farmer should be in the inner circle while plants that don't require farmer's attention can be planted in the outermost circle. "Mollison's designer manual is a big inspiration for people like us," says Pamayan. "It even specifically states when to introduce poultry, goat and oxen into the agricultural land."

He wrote for *Pudhiya Kalvi* magazine on environment and agriculture. It soon became the reference material for several farmers' forums. When his friends asked him why could he not put his precepts into practice, that he decided to make organic farming a movement *Thalanmai Ulavar Iyakkam*. With ten like-minded friends, he started a group and created training modules for farmers and issued tips and booklets to help them set up their own organic farms. "We have designed the module on our own. We don't have any syllabus. It is purely based on practical difficulties of farmers and equips them to market their produces."

There was good response for his training sessions as the faculties were not university professors but farmers. The *Thalanmai Uzhavar Iyakkam* later became *Tamizhaga Uzhavaur Thozhilnutpa Kazhagam* (Tamil Nadu Farmers' Technology Forum).

The success of the programme encouraged farmers to volunteer. Now farmers from neighbouring states also visit to hear him speak.

Pamayan is a great admirer of legendary organic farmer Nammazhwar. But he concentrates more on integrated farming system. His vegetable cultivation stands testimony to this type of farming as he uses the dung he gets from cattle to produce vermicompost. The worms are used as feed for pisciculture and the water from the pit is filtered and used to grow climbers and tomato plants (no soil method). The plant wastes and weeds are then used as cattle feed. Pamayan has evolved this into a revenue generating mechanism. "The dung can also be used to generate biogas," he says.

Now his fully green farm also sees swarms of black soldier flies.

"The larvae of these flies are free protein source for the poultry," he says. He trains aspiring young farmers in his farm and offers guidance to those living in the villages nearby. He is already popular in his neighbourhood not only as Pamayan but also as 'Farm' Ayyan.

#### Managing fruit fly in mango

The mango fruit fly is believed to be the single largest crop damager in India. It accounts for about 27 per cent of harvesting loss. The flies attack semi ripe and mature fruits during the months of April and May. Other fruits like guava, citrus, plum, peach, sapota, loquot, etc are also susceptible to this pest attack.

Damage is caused both by adults and maggots. Adult female punctures the rind of near ripe fruits with its needle like ovipositor and lays eggs.

#### Maggots

The legless yellowish maggots after hatching bore and feed on fruit pulp and on maturity come out of the fruit, drop on the ground and pupate deep under the soil. Thus the maggots destroy the pulp making it foul smelling and discoloured. Infested fruits develop brown rotten patches on them and fall to the ground ultimately.

#### Management

— Collect the fallen infested fruits and dispose them by dumping and burying in 60 cm deep pits.

— Plough the interspaces in the orchard during summer to expose fly puparia to kill them under hot sun rays.

— Timely harvest of mature fruits should be done and the fruits may be treated with hot water for one hour at 48 degree celcius.

- Install methyl eugenol traps at 6 nos./acre

— Adopt male annihilation technique of using bait traps with 100 ml of 0.1per cent methyl eugenol (1ml/lit) and 0.05 per cent malathion 50EC

(1ml/lit) taken in 250 ml capacity wide mouthed bottles fitted with hanging devices.

— Another poison bait may be prepared by adding 100g of jaggery and 2ml of decamethrin 2.8EC in 1 lit of water and sprayed on the tree trunks at weekly interval. The bait could be sprayed on the nearby hedges and vegetation.

— Spray deltamethrin 0.025 per cent thrice at least 15 days interval commencing 45 days after fruit set.

— Spraying of 0.03 per cent dimethoate up to two weeks period to picking the fruits is also effective.

(Dr. J. Jayaraj, Professor and Dr. M. Kalyanasundaram, Professor and Head, Department of Entomology

Agricultural College and Research Institute, Madurai 625 104, Phone No. 0452-2422956, extn.214, email: agentomac@tnau.ac.in)

#### 200 paddy procurement centres opened in E.G.

CONSTRUCTIVE	
<ul> <li>The objective of the centres is to procure</li> <li>5 lakh tonnes of paddy during the Rabi season</li> <li>The centres will be operated by women self-help groups, Rythu Mitra groups and primary agriculture cooperative societies</li> </ul>	WHAT IS NEEDED FOR ENROLMENT
	• Aadhaar
	• Pattadar passbooks
	Tenancy certificates issued by the VRO
Apart from MSP fixed by govt., the centres will offer transport charges and part of handling fare to farmers	
	Bank passbooks

East Godavari district administration has set up 200 paddy procurement centres across the district with an objective of procuring at least 5 lakh tonnes of paddy during the current Rabi season.

The centres will be operated by the members of women self-help groups, Rythu Mitra groups and primary agriculture cooperative societies in different parts of the district. In addition to the minimum support price fixed by the government, the centres will offer transport charges and part of handling fare to farmers.

Joint Collector S. Satyanarayana said the Civil Supplies Department had procured 4.36 lakh tonnes of paddy through paddy procurement centres during the Kharif season, and the target was fixed as 5 lakh tonnes for the Rabi. "The MSP is Rs. 1,020 per 75 kg for the common variety and Rs. 1,050 for the Grade-A variety. As many as 98 centres have already started functioning, while the remaining centres will be opened by the end of this week," he said.

Explaining the process of sale, Mr. Satyanarayana advised farmers to take 1 kg of paddy to the nearby procurement centre, where the staff would test the moisture percentage and fix the price.

#### Transportation

The transportation to be done to the rice mill via the procurement centre concerned and the transportation charges will be paid immediately after the purchase. "The payment will be credited into the bank account of the farmer within three working days from the day of sale," he said.

#### Transparency to be ensured

Maintaining that the entire transactions would be transparent, Mr. Satyanarayana said farmers must produce copies of their Aadhaar cards, pattadar passbooks or tenancy certificates issued by the VRO and the copies of bank passbooks at the procurement centre for enrolment. He advised farmers to consult the helpline arranged by the Civil Supplies Department by calling 0884-6454341 from 8 a.m. to 8 p.m. on any working day for clarifications.

District Manager of the civil supplies department Krishna Rao, district supplies officer Umamaheswara Rao, project director of the DRDA S. Malli Babu and other officials were present.

#### **Compensation for crop loss enhanced**

Chief Minister, N. Chandrababu Naidu will visit sites of irrigation projects and make aerial surveys of canals till May end.

At a media conference after State Cabinet meeting here on Wednesday, Minister P. Raghunatha Reddy said the Mr. Naidu would review the progress of the projects at the respective sites with officials and experts. He said State Government has decided to increase compensation amount for losses caused to agricultural and horticultural crops by natural calamities.

Mr. Reddy said while the Centre had fixed Rs.6,805 per hectare of groundnut, the State Government increased it to Rs.15,000.

For Paddy, sugarcane, cotton and others, the Government would pay Rs.15,000 per hectare. In the case of mango, cashew and a few other crops, the amount has been fixed at Rs.20,000 For Pulses and soyabean, the enhanced amount is Rs.10,000.

In case of Banana plantations, the Government increased the amount to Rs.25,000. The ex-gratia to be paid in case of death in natural calamity has been increased to Rs. 5 lakh. In case of hospitalisation for more than a week due to injuries, the Government would pay Rs.50,000 to the individual. The government has sanctioned Rs.1067 crore towards input subsidy .

#### APMC unwilling to develop cold storage facility



The Agriculture Produce Marketing Committee (APMC) in Mysuru is unwilling to establish a cold storage facility at the renovated wholesale fruit market on New Sayyajirao Road here, but has promised to provide "ample" space on the market premises if private players come forward to develop the facility.

Traders feel that the fruit market, considered the largest fruit marketplace in the region, urgently needs a proper temperature-controlled storage unit

APMC authorities have expressed their inability to build the facility citing "maintenance reasons."

The fruit market consists of 41 warehouses, two cellars, 153 auction platforms and other necessary infrastructure. The market near Bamboo Bazaar is spread across 7.2 acres and a sum of Rs. 3.50 crore had been spent by the APMC for its facelift.

APMC president B. Beere Gowda told *The Hindu* : "Two units of 20 feet x 30 feet structures were available for setting up the cold-storage unit.

The traders have to take the lead and get the unit set up by some private players, or themselves pooling money. We can give space but cannot build and run the unit."

Mysuru lacks a government-run cold storage unit. Despite being a hub for traditional floriculture, no thought had been given for establishing the facility.

A trader had established the facility for meat products at Boti Bazaar and a fee is charged for storing goods.

Mr. Gowda, who is also a member of the Karnataka State Agriculture Marketing Board, said setting up the cold storage unit on PPP model was not technically possible.

Meanwhile, a meeting of flower merchants had been convened at the APMC at Bandipalya on April 30 to discuss the issue of shifting the flower trade from the century-old Devaraja Market to the wholesale flower market to APMC premises, which has been lying unoccupied for over two years.

#### Direct cash transfer into farmers account in the offing

The Government plans to introduce a scheme of direct transfer of the subsidy on agricultural inputs to the farmer's account, Chief Minister N. Rangasamy said on Wednesday.

Presenting the department-wise proposals in the Budget , the Chief Minister said, "It is proposed to digitise the data on the entire farm holdings and provide all the subsidy services online. This would help achieve transparency in dispensation of farm services." The Chief Minister proposes to extend subsidies to farmers to adopt improved technologies in enhancing productivity of cereals, millets and paddy and to enhance the subsidy under Precision Farming Programme from Rs.1.5 lakh to Rs.1.75 lakh per hectare.

Government will provide technical support to farmers to start Farmers' Produce Company for direct marketing of their produce. The government decided to establish a regulated market at Lingareddipalayam and Uzhavar Sandhai at Villianur, Madhagadipet, Thirukkanur and Kanniakoil. There is a proposal to construct a new agricultural complex at Vambakeerapalayam road at a cost of Rs. 3 crore.

Mr. Rangasamy said the government would conduct livestock melas to augment growth. In order to alleviate the loss of livestock farmers, 10,000 milch animals would be provided with insurance coverage for three years. In order to increase meat production, the government proposes to distribute 10 female and one male goat to 100 beneficiaries at 50 per cent subsidy.

"During the fishing ban period, relief assistance of Rs.4,000 per family will be enhanced to Rs.5,500. During the lean fishing season Rs.2,500 will be given per family. This will benefit 20,800 fishermen families," said Mr.Rangasamy.

#### **Tapping solar energy for farm operations**

Two solar agricultural pumpsets were put to test by the Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL), one at Maduthuru village of Atchutapuram mandal and the other at Padmanabham village, in Visakhapatnam district on Tuesday. Testing the pumpset at Maduthuru, EPDCL Chief General Manager (Commercial) B. Ramesh Prasad said that the solar sets were introduced by the government to promote green energy. As they had the capacity to work continuously for 8 to 10 hours, farmers need not depend on the conventional power source. The government has sanctioned 1,000 solar agricultural pumpsets to the five districts under the APEPDCL jurisdiction and the project is being implemented in collaboration with NREDCAP.



#### Handy cycle weeder for small farmers

Weeds are the biggest problem in crop production. Nearly 30 to 50 per cent of yield loss is due to weeds. These unwanted plants remove nearly 25 to 60 per cent of nutrients from the soil making them unavailable for plants and also act as host for several pests and infestations.

Weed management is a big problem mainly because of labour shortage. Agricultural activity in India is largely labour based and shortage of manual labour has a direct impact on crop production. So what is the option? Small sized weeding machines, which are priced affordably and easy to use are a good solution.

#### Easy to operate

Tarabalu Krishi Vigyan Kendra in Davanagere recently introduced a cycle weeder for farmers in the region, priced at an affordable rate, and easy to operate for removing weeds, according to Mr. B.O.Mallikarjuna, specialist at the institute.

"In the training, we had demonstrated the use of this device for weeding different crops. After the training programme, selected farmers were given the weeder for use in their own farms under our technical guidance. "We suggested to farmers that it can be used for all the crops like groundnut, sunflower, maize and vegetables with the spacing of 30-40 cm between the lines and 15 -20 cm within the plants," says Dr. T.N. Devaraja, Programme Coordinator.

As a trial, the weeding technology was demonstrated in a vegetable field of a farmer, followed by frequent visits by the KVK team to access and record data on weed menace, time taken by the device for weeding, and yield. Farmers using this device expressed their satisfaction that the weeder was well suited for those whose land holding was two acres or less.

#### **Best suited**

Though it can be used for any crop it is best suited for vegetables since the space between plants is more for operating this device.

The weeder can penetrate the soil to a depth of 2-2.5 cm. It can be used for weeding 1 to 1.5 acre in a day and can be either operated by a single

person or/and also attached to bullocks. It is ideal to use this device after 15-20 days of planting the crops in the main field.

Previously manual labourers were used for weeding work. The main problem with labourers is that many of them were inefficient and demanded high wages during planting, weeding or harvesting time.

#### **Hiring charges**

"Unlike foreign countries, where hundreds of acres are available without any borders, in India it is the other way around. Here 80 percent of our farmers are small and marginal growers with small land holdings divided by bunds on all four sides making it difficult to use big machines for any operations. Also the hiring charges per day are quite heavy and may not be feasible for a small farmer. For such people this type of machine may be useful," says Mr. Mallikarjuna.

#### Beneficiary

Mr. Renukarya, a retired agriculture scientist who has been using this device says:

"I have been using this machine and find it beneficial as I don't need to depend on external man power for operating it. I think this is the best technology for future agriculture when land holdings are reducing in size. "The population is increasing day by day but not the land and there will be more fragmented lands in future and this type of device will be very suitable for small farmers."

#### Operation

The machine operates efficiently when the field is irigated for the device to pull out the weeds. Farmers should note that the field must not be hard since it would be difficult to use the device. Taralabalu KVK is popularizing this technology in and around their region. The weeders are priced at Rs. 2,000 to Rs. 2,500 a piece.

Those interested contact Dr. T.N. Devaraja, Programme Co ordinator, Taralabalu KVK, Davanagere - 577 004, Phone: 08192-263462, Mobile: 0944985

6876, email: dvgtkvk@yahoo.com, website:www.taralabalukvk.com and Mr. Renukarya at 09900110947.



#### Maharashtra clips APMC wings, tells farmers to trade freely



A directive of Chandrakant Patil, Minister for Cooperatives, aims to unyoke farmers from the *Agriculture* Produce *Marketing* Committees (APMCs). Farmers' groups and self-help groups, who had to pay a licence fee and a cess before commencing selling, that too only through APMC traders, would now be able to sell their produce across the state without any licence or paying any cess. The idea is to allow farmers to freely sell their produce beyond the controlled confines of APMC. Patil told Newsline that the decision was taken to "decontrol" the markets and allow farmers groups to realise proper prices for their produce.

"APMCs charge cess and other taxes from farmers. Also, proper price realisation is not possible due to monopoly of traders in APMC markets," he said. The new regime in the state has also dispensed with direct marketing license (DML) which farmers groups had to take to dobusiness in APMCs. Patil, however, added that the order has been challenged in court.

Another important decision by Patil was confining the jurisdiction of APMC markets within their market premises. Now the Market Committees will not be able to charge a cess for transaction outside their premises. Until now, APMCs could levy cess on trading carried out elsewhere in the district. Officials from the Maharashtra StateAgricultural Marketing Board (MSAMB) said this move will help in encouraging parallel marketing hubs to evolve in various parts of the Restricting APMCs to their market vards would state. allow development of trading hubs outside APMCs. The APMC would also allow online application for farmers to register, added an official.

Other than market cess, APMCs charge handling and weighing charges from farmers.

Decontrol of the commodity trade has been a long pending demand. Other than decontrolling fruits and vegetable trade, farmers' organisations have asked for a more transparent tax regime. The move by Patil, observers say, was an attempt to weaken the hold of traders on APMCs. Traditionally, APMC traders have been supporters of the Congress and the NCP. Asked as to how farmers would be able to explore new avenues for marketing, Patil said that the state government will soon set up a marketing cell for farmers.

The move, as expected, has been opposed by traders who claimed it would be detrimental to farmers. Pravin Chorbele, a member of the Poona Merchant Chamber, said, "Trading in APMCs comes with guaranteed time-bound payment. Once control is off, chances of farmers being duped will be more."

#### Monsoon: Indian Met Dept forecasts 'below normal' rainfall this year



The country is staring at a second successive year of bad monsoon. The *India*Meteorological *Department* (IMD) predicted Wednesday "below normal" rainfall in the four-month monsoon season of June to September, the blame for which is being attributed to the phenomenon of El Nino that happens in the equatorial Pacific Ocean. In its first forecast for this season, the IMD said the country as a whole was expected to receive only 93 per cent of the normal rainfall. "Normal" is taken as the average annual rainfall for the period 1951-2000, or the long period average (LPA) as it is called. The LPA comes to about 89 cm of rain.

There was still a chance — 28 per cent probability — that the monsoon might actually turn out to be "normal", that is, there could be rainfall between 96 and 104 per cent of the LPA. But there was a far greater chance — 68 per cent probability — that it would remain well below that. Significantly, there was negligible chance, only 4 per cent, of an above normal or excess rainfall, the IMD said.

The forecast immediately triggered fears of

drought. Science and Technology Minister Dr Harsh Vardhan, who released the IMD forecast, said it was too early to talk about drought. "But the Cabinet Secretariat and the Prime Minister's Office have been informed about the forecast. The state governments are also being informed. We will be ready to deal with all kind of situations," he said.

The forecast released is a prediction for overall rainfall, for as the country as a whole. It does not give the likely regional or monthly distribution of the rainfall, which is a much better assessment of how crops are likely to be affected because of the rain. Those forecasts will come only in June.

"It is a bit early to talk about the impact on agriculture. If the rain happens at the rightplaces and at right times, deficiency in the overall rainfall over the country might have minimal effect on agriculture. But we need to wait for the second forecast for that kind of information," L S Rathore, head of the IMD, said.

But D Sivananda Pai, head of the Long Range Forecasting division at the Pune office of IMD, gave a hint of what was likely to come. He said in El Nino years, northwest Indiaand central India generally get affected. "This looks like a typical El Nino featurewhere

northwest India and central India receive low rainfall," he said.

"As of now, it seems El Nino is the main reason behind the *low* forecast for rain. The El Nino situation would get more clearer by June and then we will have a better picture of how bad the impact on monsoon is going to be," J Srinivasan, chairman of the Divecha Centre of Climate Change at the Indian Institute of Science, Bangalore, told The Indian Express.

In its last bulletin on El Nino, earlier this month, the Climate Prediction Centre of the National Oceanic and Atmospheric Administration of United States had said there was a 70 per cent chance that the El Nino event will continue till end of summer season, and a 60 per cent chance that it might go on into the winter season as well. In that kind of eventually, next year's monsoon might also get affected.

There is a strong correlation between an El Nino event and a drought but the correlation is not one on one. India had droughts in 1982, 1986, 1987, 2002, 2004 and 2009, which all happened to be El Nino years. But in 1994 and 1997, India received surplus rain despite the El Nino. On the other hand, there was no El Nino last year, but still India received only 88 per cent rain.

#### Coffee shields you against breast cancer recurrence



Drinking *just* two cups of coffee a day can help inhibit the growth of tumours and reduce the risk of recurrence in *women* who have been diagnosed with breast cancer, a new research suggests.

The researchers combined information about the patients' lifestyle and clinical datafrom 1,090 breast cancer patients with studies on breast cancer cells.

"The study shows that among the over 500 women treated with (the drug) tamoxifen, those who had drunk at least two cups of coffee a day had only half the risk of recurrence of those who drank less coffee or none at all," explained Ann Rosendahl, one of the researchers from Lund University in Sweden.

"The study also shows that those who drank at least two cups of coffee a day had smaller tumours and a lower proportion of hormone-dependent tumours. We saw that this was already the case at the time of diagnosis," Rosendahl noted. In the cell study, the researchers looked more closely at two substances found in coffee — caffeine and caffeic acid.

"The breast cancer cells reacted to these substances, especially caffeine, with reduced cell division and increased cell death, especially in combination with tamoxifen," Rosendahl noted.

"This shows that these substances have an effect on the breast cancer cells and turn off signalling pathways that the cancer cells require to grow," Rosendahl said.

The study appeared in the journal Clinical Cancer Research.

#### **Express Recipes: How to make Papaya Honey Smoothie**



Easy to make and super refreshing, this smoothie is a must-have this summer.

Papaya Honey Smoothie | Serves 2

#### Ingredients

1 cup chopped papaya

<sup>1</sup>/<sub>2</sub> cup cold milk

1 cup thick yogurt

cup vanilla ice cream

1 tbsp honey

few strands saffron (kesar) – soaked in 1 tbsp of warm milk

#### Method

\* Put papaya and milk in a blender and blend till smooth.

• Add *all* the remaining ingredients and blend until thick and frothy. Serve cold.

# THE TIMES OF INDIA

#### Coconut farmers cashing in on by-products like sugar and honey

<u>Coconut growers</u> have found a new way to supplement their income at a time when the rubber sector is reeling under a prolonged price crash.

Farmers are not only cashing in on neera, the nutritious non-alcoholic drink tapped from coconut palms, but also turning their attention to its by-products such as sugar and honey, which are in good demand, particularly in Europe.

Many of the 25 coconut producers have started production of neera and associated products, ensuring a minimum income of Rs 1,000 per tree a month to farmers from neera alone.

#### Why some key scrips bank on shower power

Wednesday's forecast of a weak monsoon saw some key scrips open flat to negative. While SBI was down by about 4%, HUL, Hero MotoCorp, M&M and ITC all opened weaker, recovering later in the day following government's clarification on taxations of FIIs -seen as a much bigger concern for Dalal Street than rains over the next five months. Despite the late rally, SBI, Maruti, Tata Motors and Bajaj Auto closed lower.

A weak monsoon is likely to impact stocks of companies in agro and fertilizer sectors as they're impacted directly by the rains. These include tractor manufacturers, companies involved in irrigation and irrigation equipment like pumps, and fertilizer producers.

Apart from these sectors, stocks impacted indirectly by weak monsoon are FMCGs, two-wheelers and small cars.Weak monsoon leads to lower disposable income among people in rural areas.

Banks could get hit from two sides. On the one hand, they may be forced to waive off farmer loans. On the other, lenders may witness lower demand for loans from rural areas. Insufficient rains also mean lower demand for gold in rural areas, market players said. However, an extended spell of hot weather usually prompts punters to bet on a rally in manufacturers of ACs and small generators, they said.

Economists pointed out a weak monsoon may stoke inflation that in turn could impact corporate earnings and affect the economy's growth.According to a report by HSBC on the Indian monsoon in 2014, the dry spell had spiked food prices by about 20% in 2009. A recent Crisil report said a deficient monsoon may shave 50 basis points off the expected 7.9% GDP growth for the current fiscal ending March 2016.All these have the potential to affect the current good run on Dalal Street, dealers said.

## 'Tamil Nadu government govt wants to project itself as savior of farmers'

The Tamil Nadu government's decision to red-flag the pro posed Coca-Cola plant at Perundurai in Erode has raised eyebrows in the industrial circuit on whether the state has become a victim of pressure groups.

"There is no issue with scrapping an industrial project when there is public outrage against it, but the problem is with the manner in which it was scrapped and the timing," said an industry source. What else will explain Pepsi inaugurating its plant without any fuss earlier this month, the source asked. Global CEO of Pepsico Indra Nooyi inaugurated a bottling plant in Sri City, 40km from Chennai in neighbouring Andhra Pradesh on April 3.

Political analysts see deeprooted politics behind the scrapping of the project than logic. Analyst Gnani Sankaran said the government had taken a U-turn on the issue due to the pressure mounted by farmers and other associations. "For electoral prospects the priority would be getting the support of voters. The government has taken the decision based on political calculations. It had taken the same stand in the GAIL pipeline issue. The government wanted to project itself as the savior of farmers," he told TOI.

Only a year ago, the TN government scrapped the multicrore GAIL pipeline project. In the first place, the government misread the people's mindset when it allowed the Coca-Cola project (which local villagers felt was dumped on them when their Kerala neighbours threw the project out). Coca-Cola, too on its part, should have built local strength for the project rather than expect the state to do all the groundwork, induatrial sources said.

"What has happened in Erode appears to be a repeat of Plachimada (in Palakkad district of Kerala) incident involving the cola company. Villagers are apprehensive about their resources being used by a company," former Planning Commission member Arun Maira told TOI. He said he was yet to go through the project details.

"The state has potentially high polluting plants across its map. It has allowed these to function with safeguards. Coca-Cola's plant could also have been accorded sanction with stringent terms and conditions," a CII member quipped.

The bottling unit could have been saved, if it was a local make ike Kalimark or some other brand with a desi tag, feel industry officials. "Cola companies are always seen as profiteering. There is a general angst against Coca-Cola and Pepsi. I wonder if the protests would have been as severe had it been a desi firm or a highly influential bottler making the beverage instead of Coca-Cola or Pepsi," the CII member wondered.

#### Now, irradiation of rabi onions on cards

After completing experiments on the irradiation of the kharif onions, the Nation Horticulture Research & Development Foundation (NHRDF) is now planning to conduct research on the irradiation effects on the summer onion crop from the first week of May.

The NHRDF recently conducted research on the kharif onions to find out the effects of irradiation on the shelf life of the crop. It found out that losses up to 5% may be reduced if the kharif crop is irradiated.

Speaking to TOI, a senior official from the NHRDF, who recently conducted research on kharif onions, said, "Generally, the losses in onions are due to sprouting, rotting and weight loss. Following research on the irradiated and non-irradiated kharif onions, we will be conducting research on the irradiated and non-irradiated summer onions by April-end or the first week of May. Earlier, the Bhabha Atomic Research Centre (BARC) had conducted research on the irradiated summer onions and found out that sprouting can be curtailed if the onions are irradiated. Now, we will conduct a fresh survey on the summer onions to find out the losses that can be reduced in the crop following irradiation."

He further said, "As per our recent research, up to 5% of the losses can be reduced in the kharif crop following irradiation. In the summer crop, we expect that 10% of the losses can be reduced by irradiating the summer onions. Reducing even 10% of the losses will be a big achievement. We will purchase the summer crop in the next two days and will irradiate it at the irradiation centre of BARC at Lasalgaon. We will start our experiments on both the irradiated and the non-irradiated crops thereafter.

They will be stored for around seven months from May to November to find out the effects of irradiation."

# BusinessLine

#### Huge global stocks to affect sowing of kharif corn

Higher ending stocks of corn globally will reduce returns for Indian corn growers. This is likely to affect sowing of the kharif crop this year, according to experts.

A huge global oversupply of corn has brought down corn prices by some 27 per cent since April 2014 and is also affecting domestic prices and exports. According to the US Department of Agriculture (USDA) data, the ending stocks for 2014-15 trade year is estimated to rise 10.3 per cent at 188.45 million tonnes (mt) against 170.84 mt at the end of last year. Data reveal that the US with rise of 15 mt of ending stocks would contribute maximum to ending stocks globally.

"Higher ending stocks are an area of concern for domestic as well as international markets. The falling prices will impact sowing in India as well as other major exporting countries such as US, Brazil and Ukraine," said Raju Choksi, Vice-President (Agri Commodities), Anil Nutrients Ltd.

Choksi attributed the current firmness in domestic corn prices to unseasonal rain in some of the growing regions in India. "We expect prices to soften once rabi crop arrivals start next month. The global situation is likely to put pressure going forward on kharif sowing as growers are likely to avoid sowing, due to abundant supply," Choksi said. Over the last few years, demand for corn as animal-feed has increased in India compared to demand for food, seed and industrial consumption.

"The Indian market is following world market as far as consumption pattern is concerned. However, the ratio of feed consumption globally is higher at around 80 per cent against 55 per cent in India. We expect this trend to continue as growers shift to corn for feed following lower oilmeal production," Choksi said.



#### How producer organisations can help in market integration?

Small farmers continue to face problems with regard to production and marketing their produce in a better way. Producer Companies (PCs) could help in their decision making in production and marketing. In other words, farmers need to be more market-oriented and trained in managing a variety of risks. Evidences from developing countries prove this. Consider such a PC in Rajasthan which might typify a model of backward and forward integration between smallholders and markets.

#### **Producer interest**

Ajaymeru Kishan Samrudddhi Producer Company Limited (AKSPC) was an outcome of a pilot project in 2011-12 conducted by a development arm of BASIX known Indian Grameen Services. The PC started functioning in early 2013 under the aegis of Small Farmers' Agribusiness Consortium (SFAC).

Among the five PCs (two in Nagar and three in Ajmer) promoted by IGS, four PCs were merged with AKSPC on account of operation and management problem. Some 2,500 farmers have become members of AKSPC and contributed Rs. 13 lakh as share capital. Some 142 Farmer Interest Groups (FIGs) paid Rs.1,000 each to make the PC operational.

#### Market linkage

The Chief Executive of AKSPC says that the PC has a formal contract with input providers (similar to Primary Agricultural Co-operative Societies), viz. seed, fertilisers and chemicals.

For example, backward linkage encompasses several manufacturers/input suppliers, namely National and State Seed Corporations, Chambal Fertilisers and Chemicals, Indian Potash, Syngenta, Gardha, Pravardhan Seed Co., among others. It has helped the PC supply inputs to its members at a subsidised rate and created business portfolio of Rs. 60 lakh in 2013-14.

The PC, in addition to input supply, recommends the package of practices for cotton, cumin/jeera, wheat, mustard and various variants of gram in consultation with the State Agricultural Department and the Agricultural University. Forward integration is indeed worthy to mention here. The organisation after its registration procured around 12 lakh tonnes of black gram at the minimum support price. In 2014-15, AKSPC procurement increased with an average price of Rs. 32.50-33 paid to members.

Through software-enabled trading environment, AKSPC has sold the entire quantity to the SFAC and earned 1 per cent commission of Rs. 12 crore. In summer, the PC is planning to procure green gram (moong) either from APMC market yard or farmers' field/alternative channels.

Apart from farmer produce sales, AKSPC has supplied Rs. 1.40 crore of inputs to the member-producer.

And, AKSPC purchases pesticides and micronutrients from recognised manufacturers and retails to the members from its counter/point-of-sales.

The PC has become an institutional member of NCDEX in derivative trading and the organisation expects to receive some training from the exchange on aggregation, trading mechanics and delivery.

While outcome of the intervention might bring some fortune to small farmers, AKSPC needs to look up to its financial health and management. Only one or 2 in-house staff may not be sufficient for scale-up or IGS support to capacity building will be short-term.

Issues and Policy concern

In addition, bank credit is essential to expanding business operation of the PC.

However, AKSPC needs to step in hiring warehouse for storing the member-produce and concentrate on a scale and economic viability.

Incidence of taxes, license of APMC for mandi procurement, and alignment of interests of resource institution and PC coupled with governance issues should receive the attention of the Ministry of Agriculture and the Ministry of Corporate Affairs.

Nabard could be a vital resource institution to AKSPC as the nodal refinance agency for rural credit plays a role in selection/identification of FIGs drawn from a group of progressive farmers of notified villages in the district.

Then, Farmers' Club (FC) is formed and eventually, is linked to PC. Thus, PC has a federal structure in that FC and FIG form the middle and the bottom-tier, respectively.

Nabard includes this activity as imperative in its district development programme. For example, 6 FIGs have formed one FC drawn from notified villages of Ajmer.

Nabard, in association with not-for-profit organisation, such as BASIX – IGS conducts farmer meeting in a periodic interval where farmers get an opportunity to meet the experts in agriculture and allied sectors.

The writer is Post-Doctoral Fellow of the Centre for Management in Agriculture, IIM-Ahmedabad. Om Niwas Sharma of BASIX assisted him in the field visit. Views are personal.

#### Walmart wishes to source agri commodities from AP farmers

Walmart, the US-based retail giant has expressed interest to collaborate with the Andhra Pradesh Government in sourcing agriculture commodities from local farmers, increasing productivity and capacity building in the agriculture sector.

This was conveyed by David Cheesewright, President and Chief Executive Officer (CEO) of Walmart International during his meeting with the Chief Minister N Chandrababu Naidu today at the Secretariat. Naidu responded positively and a task force including Walmart India executives and Special Chief Secretary to Government (Agriculture) Vijay Kumar has been constituted. "We can review the decisions and action plan once in three months and evaluate our progress," the Chief Minister said in an official press release.

The Chief Minister was informed that the company is currently sourcing cashewnuts, red chillies, coconuts and sweet lime from the State.

Cheesewright said that Walmart Foundation is interested in working with the government on CSR activities such as training women from Self-help Groups (SHGs) in various skills.

The Chief Minister also assured the Walmart CEO that the State would extend support for cold-chain linkages and in bridging supply gaps. He sought Walmart's technology and marketing expertise in improving productivity.



#### Fertiliser firms resisting potash price hike

Indian farmers may have to shell out more for potash price this year following pressure from global sellers. This could add to their worries as they already face prospects of a below normal monsoon Indian fertiliser companies are resisting attempts to hike prices of potash by major global suppliers, saying that any such move will hit the demand for the soil nutrient.

After securing a price increase of \$10 per tonne (or around 3 per cent) from Chinese customers this year, exporters from Canada and Russia are insisting that Indian buyers take a similar price increase. Companies such as Indian Potash Ltd and Zuari Industries are the large importers of potash.

#### Weak rupee

Sources said Indian companies are negotiating with global suppliers such as Uralkali and Potash Corp to maintain a status quo on prices, citing a weak currency and their inability to pass on the hike to farmers as the Government had ruled out any hike in subsidy.

Last year, Indian companies had bought the nutrient at \$322 a tonne on a cost and freight basis.

"Suppliers are asking \$332 a tonne, while we want prices to remain unchanged. We are trying impress upon them that any increase in prices would have to be passed on the farmers and that could impact the demand," sources said.

Also the rupee has weakened against the dollar by about 5 per cent since early April last year till date.

#### Imports up

India totally relies on imports to meet its potash requirement. The country had imported around 4 million tonnes of potash last year.

In the current financial year, imports could increase to around 4.5 million tonnes, provided prices remain unchanged, sources said. A price increase of \$10 a tonne would inflate the potash import bill by around \$40 million (₹250 crore).

Though the Indian Metrological Department, in its outlook on Wednesday, forecast a below normal monsoon for this year, the fertiliser industry is hopeful of better sales this year.

"Though below normal monsoon has a bearing on the fertiliser off-take, we are optimistic of a better rainfall in the year ahead," fertiliser industry sources said. For the Kharif season, the Government has assessed the requirement of muriate of potash (MoP) at 18.31 lakh tonnes (lt) against total sales of 14.11 lt in kharif 2014.

Similarly, urea requirement is assessed at 15.79 million tonnes (mt) for kharif 2015 against sales of 13.99 mt in the previous season. The requirement of di-ammonium phosphate (DAP) has been assessed at 5.09 mt for kharif against sales of 3.64 mt in the previous season.

Except for urea, the imports of potash and phosphatic fertilisers are under Open General Licence and companies import them depending on their commercial judgement.

In the 2014-15 fiscal, urea imports grew 23 per cent at 8.74 mt against 7.08 mt the year before.

#### Coonoor tea sale volume at a new high

The rising trend witnessed in the offer for Coonoor Tea Trade Association auctions continues this week with the volume of 15.87 lakh kg for Sale No: 17 on Thursday and Friday to be the highest so far this calendar barring Sale No: 2 when the volume was 16.91 lakh kg. This week's offer is as much as 1.82 lakh kg more than last week's offer.

Of this, 10.93 lakh kg belongs to leaf grades and 4.94 lakh kg to the dust grade.

As much as 14.76 lakh kg belongs to CTC variety and only 1.11 lakh kg to orthodox variety.

Tata Global Beverages Ltd, chose good medium varieties. Indcoserve was fairly active on medium smaller grades.

There was fair enquiry from exporters for medium and plainer teas. Internal buyers were less active.

There was fair demand for brighter liquoring teas from upcountry buyers.

#### US, Canada show interest in Indian virgin coconut oil

Increased export enquiries for virgin coconut oil, especially from the US and Canada, have revived some hopes among the coconut oil traders in Kerala.

Sources in the market said that a leading company has recently received an export order for 30,000 tonnes from Canada.

However, traders said they are not in a position to meet the demand due to insufficient production of this particular variety of oil, considered to be high in nutritional values. Over 30 virgin coconut oil manufacturing units in Keralaproduce only a meagre 4,300 tonnes a year.

Coconut Development Board is extending the necessary technological support for these units. However, production has not increased to meet the demand, traders said.

Meanwhile, the coconut oil market in Kerala and Tamil Nadu is on a steady line this week with prices remaining more or less steady at ₹14,000 a quintal and ₹14,100 respectively. Copra prices are also ruling at ₹10,100 in Kerala and ₹10,000 in Tamil Nadu.

Thalath Mahmood, Director, Coconut Oil Merchants Association, said that a good demand for raw coconuts to Karnataka from northern parts of Kerala has reduced copra arrivals to central parts of the State.

Several desiccated coconut powder manufacturing companies in the neighbouring State have started buying raw nuts in bulk quantities in the price range of ₹30-33/kg.

## **Business Standard**

#### Farmers should wait and watch: L S Rathore



At a time when rural India is looking at a gloomy picture on account of crop damage due to unseasonal rain, the forecast of a poorer monsoon is not good news. L S Rathore, director general of the India Meteorology Department, in conversation with *Sanjeeb Mukherjee*, says farmers should wait and watch, as no sowing is on. Edited excerpts:

IMD has forecast the monsoon this year to be below normal. As is thepractice, you will update this in June. Do you believe things mightchangeforthebetterinbetween?

If we believed that things could change, we would not have given a forecast that shows below-normal rain. As of now, from our models, in the given parameters, the rains would be 93 per cent of the long-period average (LPA), with an error of plus or minus five per cent. The possibility of things changing is also plus/minus five per cent at present.

There is no mechanism to understand how things would evolve in the

coming weeks. We would look at all the parameters and update the forecast in June.

#### What should farmers do, with the big crop loss in the rabi season?

Wait and watch; there is no sowing going on. But, yes, you need to prepare for bad rain. As we approach the actual season, things might get clearer.

For tactical decisions like when to sow and what happens if rains do not arrive on time in some parts, farmers should wait for our weekly and monthly rain forecasts, which we will come out with once the season is on.

#### How realistic is the threat of an El Niño? In your forecast, you have said El Niño conditions are likely to persist during the monsoon.

As on date, it is having an impact on the Indian monsoon and the forecast of seven per cent less than normal rain has been made after factoring this in. What shape it takes remains to be seen.