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# THE HINDU

## **Turmeric auction held**

The weekly auction of turmeric held at the Tiruchengode Agricultural Producers Cooperative Society registered a sales turnover of Rs. one crore on Sunday.

While a quintal of *Virali* turmeric fetched a price ranging between Rs. 6,159 and Rs. 9,155; the *Kizhangutur* turmeric fetched price between Rs. 4,793 and Rs. 7,429 and *Panangali* turmeric between Rs. 8,099 and Rs. 12,799. More than 2,500 quintal of turmeric was auctioned for Rs. one crore on that occasion, according to society sources.

## **Trade hit at farmers' market in Ooty**

With simmering differences between members of the Farmers Market and vegetable dealers in the Municipal Market coming to the fore here on Monday transactions in the former were hit for a few hours in the morning.

Protesting against the alleged high handedness of the Municipal Market traders, the farmers refused to sell goods. They said that since they were making available good quality vegetables and fruits at reasonable prices, consumers were flocking to the Uzhavar Sandhai which according to them is one of the best farmers' market in the State.

Regrettably some of the traders in the Municipal Market were trying to tarnish the image of the Farmers Market.

Alleging that they were being threatened by the traders, they said that on Sunday evening some of them had made an unauthorised entry into the Farmers Market and vandalised their goods.

They sought protection for themselves and their goods.

The traders, however, contended that vegetable dealers from other places were posing as farmers and selling vegetables in the Farmers Market.

They complained that it was functioning beyond the official working hours.

Assistant Agriculture Officer Krishnakumar said that since the farmers here can only bring hill vegetables, a few persons in the plains had been given cards to bring vegetables from other districts.

It will be very difficult to verify whether they are farmers or traders.

### Egg price drops

The wholesale price of egg dropped further to Rs. 3.26 here on Monday. Officials at the National Egg Coordination Committee, Namakkal Zone, said that the price dropped by 10 paise on Monday. The loading price was Rs. 3.70 for Chennai, Rs. 3.62 for Mysore, and Rs. 4.02 for Kolkata.

### Meeting

The farmers' grievances meeting will be held on December 26 at 10.30 a.m. at the Collectorate.

### Red sanders offenders to lose welfare benefits

**Stringent MEASURES** | LAND OWNERS AND LESSEES TO BE BROUGHT TO BOOK, IF RED SANDERS DUMPS ARE DETECTED ON THEIR AGRICULTURAL FARMS AND ORCHARDS

“ Workers are felling trees within two hours of their arrival and transporting them through stolen vehicles procured from Tamil Nadu. Police and forest officials must be more vigilant and act swiftly

**MURALIKRISHNA,**  
Kurnool Range DIG



*Kurnool Range DIG Muralikrishna and Joint Collector M. Rama Rao addressing the media in Kadapa on Monday. – PHOTO: BY ARRANGEMENT*

**1** Repeater stations in forest areas mooted to strengthen the communication system

**2** Scope for tracking the movements of red sanders smugglers and vehicles ferrying the felled logs using the GPS to be explored

**AWARENESS CAMPAIGN**

**1** Drama troupes and Kala Jathas to undertake awareness campaign to educate residents of forest-fringe villages

**2** Posters in Tamil to be distributed to educate the labourers being hired from Tamil Nadu

*The accused to face withdrawal of ration cards, LPG connections and govt. subsidies*

Several stringent measures for the accused in red sanders smuggling cases are on the cards such as withdrawal of ration cards, LPG connections and withholding the subsidies under all government welfare schemes, Kadapa Joint Collector M. Rama Rao has said, adding that such moves will act as a deterrent to the offenders.

Briefing the media on the deliberations of Kadapa District Coordination meeting with police and forest officials at the District Police Office here on Monday, he said that the land owners and lessees would be brought to book, if red sander dumps were detected on their agricultural fields, plantations and orchards.

Base camps would be set up in forest areas by forest and police officials to step up vigil on smuggling activities, Kurnool Range DIG Muralikrishna said.

“Proposals for setting up repeater stations in forest areas to strengthen the communication system to get quicker information about smuggling activities have been submitted. The scope for tracking the movements of red sander smugglers and vehicles ferrying the felled logs using Global Positioning System (GPS) would be explored, Mr. Muralikrishna said.

### **Task force**

A Red Sanders Anti-Smuggling Task Force would be constituted soon, with the DIG, SP, six Circle Inspectors, Conservator of Forests and Deputy Forest Range Officers as its members under the provisions of G.O. 217, Rayalaseema DIG B.Balakrishna said, adding that the Preventive Detention Act (PD) would be invoked against some offenders through District Collector.

Further, massive awareness campaigns had been planned to educate residents of forest-fringe villages against red sander smuggling. Drama troupes and Kala Jathas under the supervision of SP Navin Gulati will undertake the campaign, the DIG said. The red sander depots at Kadapa, Proddatur and Badvel were being fenced to protect the logs stored there, Proddatur DFO Sivasankar Reddy said.

Referring to arrest of 11 APSRTC drivers from Kurnool district for transporting the labourers engaged to fell red sanders trees, the DIG said an inquiry was on and some more arrests were likely be made.

Posters were also prepared in Tamil to create awareness among the labourers being hired from Tamil Nadu.

The workers are felling the trees within two hours of their arrival and transporting them through stolen vehicles procured from Tamil Nadu. Police and forest officials must be more vigilant and act swiftly, the DIG said.

### **Weekly cotton auctions from Dec.24**

Weekly cotton auctions for the current harvest season will begin at the Regulated Market at Thuraiyur will begin from December 24.

District Collector Jayashree Muralidharan, in a press release, pointed out cotton auctions were held at the market last year and based on requests from farmers the auctions would be held this year also. The weekly auction would be held every Wednesday. Farmers from Thuraiyur, Musiri, Uppilliyapuram, Pullampadi, Manachanallur, Thottiyam and other places can participate in the auctions. Farmers are not required to pay any commission for selling their produce at the auction, she said.

### **Milk cold room commissioned at Salem Aavin plant**

*11 automatic milking systems to be distributed at a cost of Rs. 66 lakh*

Minister for Milk and Dairy Development B.V. Ramanaa commissioned the 50,000 litre capacity milk cold room-III, constructed at a cost of Rs. 92.44 lakh, at Salem Aavin Dairy here on Monday.

He also inspected the construction of another one lakh litre capacity Milk Cold Room, being built at a cost of Rs. 158.80 lakh under the National Mission for Protein Supplements (NMPS).

General Manager of Salem Aavin K. Santhi and officials explained the process of procuring milk, unloading it at the plant, processing it, packaging and distribution of milk to various points in the districts. The Minister also inspected the ghee and butter manufacturing units and the cold storage units apart from visiting the milk powder production plant. Aavin's special milk-flavoured drinks that were produced and packed in tetra packs were also inspected.

Earlier, speaking at the meeting of the Salem District Cooperative Milk Producers' Union Limited, Mr. Ramanaa said that 17 milk cooperative unions were functioning in the State and Salem Aavin is the biggest. About five lakh

litres of milk were procured by the Salem Dairy everyday and distributed to various places. He said that efforts are on to improve milk production by 2,000 litres a day by improving the fodder availability to the farmers.

He said that 11 automatic milking systems would be distributed at a cost of Rs. 66 lakh and also solar powered electricity production would be made available at a cost of Rs. 1 crore for implementing milk cold storage. “Also, 20 booths would be setup in Salem to improve the sales from 1.82 lakh litre to two lakh litre,” he added. MLAs Thaniyarasu, K.P.P. Baskar, and S.K. Selvam and members of various milk cooperative societies participated.

### **‘TS govt. should focus on boosting cashew cultivation’**



**HUGE POTENTIAL:**A cashew plantation in Aswaraopet mandal of Khammam district.- Photo: G. N. Rao

Cashew growers in the district are awaiting a fillip to the horticultural crop to enable them to sustain their cashew plantations and boost production.

Khammam is perhaps the only district in Telangana to cultivate cashew on a commercial scale. Cashew is mainly grown in Dammapeta, Aswaraopet, Gundala, Mulakalapalli, Vemsur, Penuballi, Sattupalli and several other mandals.

The horticultural crop is presently being cultivated in over 11,000 hectares in both Agency and plain areas of the district. Tribal farmers constitute a major chunk of cashew growers in the district. The area under cashew cultivation is gradually dwindling owing to lack of institutionalised marketing opportunities and proper encouragement from the agencies concerned. The acreage under cashew cultivation had reportedly come down from around 15,000 hectares a couple of years ago to little over 11,000 hectares now. The production of

cashew has reportedly declined from over 13,000 metric tonnes to over 10,000 metric tonnes at present, according to sources. Several cashew farmers have switched over to eucalyptus plantations in Aswaraopet, Dammapeta and a few other mandals owing to reasons like lack of technical and marketing support in the last couple of years. Many cashew farmers are struggling to cope with pests like tea mosquito bug.

“Cashew cultivation has the potential to address the agrarian crisis plaguing farmers in many parts of the district,” says P. Papa Rao, a cashew grower of Raipadu in Gundala mandal. I have been cultivating cashew for the past two and a half decades. It has proved viable for me, he remarks.

Prudent crop and pest management besides support from government agencies is vital to sustain cashew cultivation. Several farmers of Mamakannu and a few other villages in the mandal are facing the problem of pest attacks, he points out.

We are compelled to go to far off places to sell our cashew produce in the absence of a marketing mechanism, deploras Lingaiah, another cashew grower. The Telangana government should focus on boosting cashew cultivation and setting up of cashew processing units under the aegis of women self-help groups. Such a move would ensure sustainable livelihood to farmers and tribal women, he suggests. Training sessions are being organised at regular intervals to create awareness on crop management and pest control techniques, says Suryanarayana, assistant director, Horticulture-II, Khammam.

### **Govt. buys paddy, maize at Minimum Support Price**

The Mysuru district administration started procuring paddy and maize from Monday in seven procurement centres set up across the district. Farmers, who have been waiting to sell their crop in procurement centres after prices of paddy and maize fell, were seen thronging at procurement centres to sell their crop.

Paddy procurement centres were set up in the seven taluk headquarters in the district and at the APMC yard. Besides paddy, the district administration started procuring maize, raggi and Maldandi maize.

C. Shikha, Deputy Commissioner of Mysuru district, told *The Hindu* here on Monday that paddy would be purchased from farmers till March 21 2015 while the purchase of ragi and maize would continue till the government took a decision on the last date of procurement.

She said that while paddy would be purchased from all farmers, maize would be purchased from small and marginal farmers up to a maximum limit of 50 kg per farmer. Paddy has been bifurcated into two groups and paddy (ordinary) was being purchased for a minimum support price of Rs. 1,360 per quintal and Rs. 1,400 per quintal for A grade quality. MSP for ragi is Rs. 2,000 per quintal, and for maize is Rs. 1,100 per quintal. If the Union government releases funds to purchase maize, an additional amount of Rs. 210 per quintal different amount would be given to farmers.

The DC said that she had instructed officials to provide basic facilities like drinking water, rest rooms, and tarpaulins to protect crops in case of rain, to farmers bringing their crops to the procurement centres. She said that tahsildars have been asked to appoint videographers to record the purchase of crops in procurement centres, the cost of which will be borne by the purchasing agency.

The DC said that the purchasing agency (Karnataka Food and Civil Supplies Corporation) had been directed to pay the amount to farmers within 24 hours of the purchase. If farmers wanted the amount be credited to their bank account, payment would be made accordingly.

K. Rameshwarappa, Senior Deputy Director of Food and Civil Supplies Department told *The Hindu* that the purchasing agency had been asked not to make farmers wait near procurement centres for several days with their crop and to purchase the crop as and when the farmers come to the centres. The Joint Director of Agriculture has appointed quality assessment officers at each procurement centre, Mr. Rameshwarappa said.

### **Agricultural meet**

The Sixth Children's Agricultural Science Congress, being organised by Agri-Friends, will be held here on January 9 and 10. Therambil Ramakrishnan, MLA, will inaugurate the event.

Chief Minister Oommen Chandy, Minister for Agriculture K.P. Mohanan, Education Minister P.K. Abdu Rabb and Cooperation Minister C.N. Balakrishnan are expected to take part in it.

More than 500 students are expected to participate in the two-day event. About 100 project papers will be presented. Seven projects will be shortlisted and the best project will receive an award. The programme will provide a platform for

students to present their research findings in different disciplines of agriculture. Experts will evaluate the findings.

### **Separate policy sought for dryland farming**

*'A major chunk of agricultural land in north Karnataka is without irrigation facilities'*

K.S. Puttannaiah, MLA and a leader of the Karnataka Rajya Raitha Sangha (KRRS), has urged the State government to initiate steps to evolve a separate policy for dryland farming.

He was speaking after inaugurating a seminar on farmers' movement, organised by the KRRS to commemorate farmer leader late N.D. Sundaresh here on Sunday.

Farmers in the northern and central Karnataka region were in dire straits owing to perennial drought. As a major chunk of land there was without any irrigation facilities, the farmers were incurring heavy losses owing to the vagaries of weather. The government should rescue these farmers by announcing a separate policy for dryland farming, he said.

The drought had also triggered socio-economic crises in the northern and central Karnataka regions. The rate of migration of rural youth to urban centres for livelihood was very high there. It was essential to undertake a detailed research on the problems of farmers engaged in dryland farming in the State and the impact of drought on the socio-economic conditions of people, he said.

The government should ensure easy access to loans for such farmers. To augment the income of families dependent on farming in the rain-fed regions, women members of the family should be motivated to take up animal husbandry, Mr. Puttannaiah said.

### **Remunerative price**

The government should fix a remunerative price for sugarcane. Apart from sugar, the factories were earning huge profits by selling molasses that were used in the production of liquor. The government was generating significant revenue on account of electricity generated from bagasse, besides Excise Duty on the sale of liquor produced from molasses. These factors should be taken into account while fixing the price of sugarcane, he said.

## Onattukara to become second tuber hub

<b>FARM INITIATIVE</b>		
<p><b>Biodiversity Board has taken up project to create gene bank</b></p> 	<p><b>13</b> species of tuber crops cultivated in Onattukara identified</p> <p>Board prepares list of <b>29</b> tuber crops that can be introduced</p>	 <p><b>Pilot project was implemented at Edavaka in Wayanad</b></p>
<p><b>Panchayat-level committee to provide training to farmers</b></p>		<p><b>Bid to revive local dietary and health traditions</b></p>

The Onattukara region in Alappuzha district is set to become the second hub of tuber crop cultivation in the State after Edavaka in Wayanad.

The Kerala State Biodiversity Board has taken up a project to preserve and enhance the diversity of tuber crops in the region and create a gene bank.

### **Participatory project**

Farmers in Thazhakara, Mannar, Chennithala, Mavelikara, Thekkekara, and Chettikulangara grama panchayats, and Mavelikara municipality will be involved in the participatory project.

The KSBB has identified 13 species of tuber crops including two varieties of Greater Yam (Kaachil), eight varieties of Colocasia (chembu) and three other tuber species cultivated by farmers in Onattukara.

KSBB member secretary K.P. Laladhas said a list of 29 tubers that could be introduced in the Onattukara region had been prepared.

“The farmers will be encouraged to plant these species also.” The KSBB has collected the seeds from other parts of the State.

The panchayat- level Biodiversity Management Committees will identify the farmers for the project and provide training.

It was in 2013 that the KSBB selected Edavaka grama panchayat in Wayanad for the first phase of the project to conserve the diversity of tuber crops.

As many as 60 varieties of tubers recorded in the Panchayat Biodiversity Register are cultivated in public land, schools and homestead farms in Edavaka. The success of the pilot project at Edavaka has encouraged the Kerala State Biodiversity Board to replicate the model in the Onattukara region.

“A resilient crop, tubers can withstand extreme climatic conditions and offer a rich source of affordable, tasty and nutritious food,” said Dr. Laladhas.

“Over the years, many of the tubers have dropped off the common man’s menu for various reasons and very few farmers today cultivate them. By encouraging people to include tubers in their menu, the project also seeks to revive local dietary and health traditions.”

The establishment of a gene bank for tubers is a major objective of the project. Dr. Laladhas said the project would be extended to more districts in the coming years.

### **Panel moots 100 per cent free irrigation for farmers**

The Vijay Kelkar Committee, formed to “suggest measures for removal of regional imbalance” in Maharashtra, has recommended “100 per cent free irrigation and power facilities” to farmers of Marathwada and Vidarbha regions to stop suicide by farmers.

*The Hindu* has accessed the synopsis of the committee report, which was submitted to Maharashtra government in October 2013, but the previous Congress-NCP government decided not to make it public

## ‘Maa Thota’ a ray of hope for tribal people

*The flagship programme of NABARD aims at ensuring financial security of poor*

DEVELOPMENT PLANK		
'Maa Thota' is helping 2,100 tribal families to improve their standard of living	The programme has turned barren lands into farm fields, by engaging various water conservation measures	Training is being imparted to tribals on usage of advanced technology to increase crop yield
The programme, with financial support from NABARD, is being implemented in Saravakota, Patapatnam, Meliyaputti, Jalumuru and Hiramandalm mandals	Farmers get financial support for development of land and get the ownership right over the stretch in future	
		
Tribal farmers engaged in land development schemes implemented in hilly areas of Patapatnam mandal in Srikakulam district under the 'Maa Thota' programme.- PHOTO: BASHEER		<b>A. RAMA KRISHNA RAJU,</b> BREDS CEO
		I earn around Rs.25,000 per annum by selling ridge gourd which has huge demand for its export quality. Farmers can earn even more, if proper storage and marketing facilities are created
<b>J. CHINA BABU,</b> a tribal farmer		

The ‘Maa Thota’ programme’, a flagship programme of National Bank for Agriculture and Rural Development (NABARD) aiming at tribal development, has come as a ray of hope for around 2,100 families living in the remote areas of the district. The programme is striving for ensuring the financial security of the tribal population.

The tribal habitations, in the absence of job opportunities and basic amenities food and potable water, has seen mass exodus of the population to faraway places in search of green pastures.

Compared to people living in plains , tribals lead a pathetic life with meagre income and poor amenities. In this backdrop, the ‘Maa Thota’ programme has become a bon for the tribal families living in five mandals such as Saravakota, Patapatnam, Meliyaputti, Jalumuru and Hiramandalm.

With the financial support from NABARD, Bapuji Rural Engineering and Development Society has been implementing the programme in rocky terrains

which have now turned into farm lands. In a span of ten years, NABARD and BREDS could turn barren lands into agriculture fields, by engaging various water conservation measures such as construction of water pits, percolation tanks.

NABARD Assistant General Manager M.D. Vasudevan and BREDS Chief Executive Officer A. Rama Krishna Raju told The Hindu that they were imparting training to tribals on the usage of advanced technology and techniques to ensure more yield from crops. During development of land, farmers will get financial support for engaging labourers in their fields and get the ownership right over the land in future.

“Each tribal family is able to generate up to Rs. 30,000 per annum by growing vegetables, banana, cashew, neem, amla and other crops. They will also ensure their financial security by growing teak plants, along the crop area which will act as insurance in case of crop failure,” said Mr. Ramakrishna Raju.

“I earn around Rs.25,000 per annum from the exclusive sale of ridge gourd which has huge demand in the district for its export quality. Farmers can even earn more, if proper storage and marketing facilities are created for their produces,” said J. China Babu, a tribal farmer.

### **Farmers celebrate Ellu Amavasya**



It was celebration time for farmers. Casting aside their differences and cutting across caste and communal lines, the entire farming community celebrated Ellu

Amavasya, on the new moon day of the Pushya month of the Hindu calendar, to pay their obeisance to Mother Earth.

Braving the cold, the farmers with their family and friends trooped to their fields and offered prayers to the standing crops, particularly jowar. They spent the entire day in the fields, sharing the food with each other. People in cities and towns, who do not have any agriculture land of their own, made a beeline to the parks and gardens.

Ellu Amavasya is known for its special food preparations. Special dishes of green vegetables and pulses are prepared. These food items are first offered to the standing crops during the pooja and later shared with family and friends. The special dishes prepared on the occasion included 'Kadabu', 'Bajje', 'Bartha', 'Holige'. Ellu Amavasya was celebrated with tradition gaiety in Yadgir district as well.

### **Paddy procurement centre set up**

Food, Civil Supplies and Consumer Affairs Department has established a procurement centre, for the purchase of the paddy directly from the farmers, at the warehouse of the department at Rajendra Gunj in Raichur on Monday. Similar procurement centres will be established at the warehouses of the department in the remaining four taluk headquarters at Manvi, Sindhanur, Lingasugur and Deodurga. The sources in the department said that the actual procurement of the paddy would begin on Tuesday.

The centre in Raichur was inaugurated by Raichur Tahsildar Balraj Devarakudra. While the 'A' grade paddy will be purchased at a cost of Rs. 1,400 per quintal from the farmers at the procurement centres, normal paddy will be purchased at a cost of Rs. 1,360 per quintal. Farmers who wish to sell their produce at the procurement centre should compulsorily bring their photo identity card, Pahani document and bank account number. The payment will be directly made to the account of the farmers. . The procurement centre will be in operation from December 22 to March 21, 2015.

## Maize procurement centres set up in Chitradurga

Deputy Commissioner Hemaji Nayak has said that maize procurement centres will start functioning at Chitradurga APMC yard, Bharamsagar and Chickjajur from Monday.

Speaking at a district task force committee meeting here on Monday, he said that 50 quintals of maize would be purchased from small and medium farmers at Rs. 1,100 a quintal. If the Union government declared a support price of Rs. 210 a quintal, it would be deposited to the accounts of farmers. A list of small and medium farmers would be prepared and coupons would be issued to them mentioning the date on which they would have to bring maize. The price would be deposited directly to the farmers' accounts, and they should give the IFSC code of their branch, he said.

An agency had been appointed by the State Warehouse Corporation to purchase maize and arrangements had been made to store 6 lakh quintals of maize in ware houses in the district, Mr. Nayak said. "The maize will be purchased for 60 days from December 22 on all working days between 10 a.m. and 5 p.m.," he added.

Farmers can contact the nodal officers on 77609-66910 and 77609-60918 for details.

## Smart way to sambar

*Infuse your revamped sambar with more proteins, vitamins and minerals*

Sambar is a staple in this part of India. While some of us consume it by the gallon the rest of us go by the litre. One way or the other, we all consume gigantic quantities of sambar every year and it's about time we got smart about it.

Given the quantity, sambar can be a delicious hearty side that doubles as a potent source of nutrients or just a bowl of empty calories with a hint of oxidised oil. But guess what? As long as we're talking about homemade sambar, you get to choose what you want it to be!

And this is the case with any recipe really — by being smart about the ingredients, portions and cooking methods, we can create a dish that falls right in the middle of the "tasty and healthy" zone. So here's how to go about it.

## **Rethink your ingredients**

Potato sambar is awesome but potato contains mostly starch and doesn't add much to your health metre. Have you tried spinach or capsicum sambar? It tastes great and comes with a good dose of vitamins and minerals. Don't limit yourself to one vegetable. A mixed vegetable sambar with whatever vegetables you have at home is easy and comforting on a tired day. Have you tried doubling the amount of vegetables in your sambar? Do it and you'll suddenly become best friends with vegetables.

One of the most nutritious foods known to mankind is ghee and we built our cuisine on it. So why don't you use it? No, it won't make you fat or clog up your arteries. It'll only nourish you with fat-soluble vitamins and make your taste buds hi-five in joy. It is also perfect for high-heat cooking.

## **Rethink the feel**

Sambar can be thick or watery, based on how you cook it. A thicker sambar with a load of lentils and vegetables is better nutritionally. It is richer in proteins and specific vitamins and minerals, depending on the vegetables used. Soak the lentils for a couple of hours prior to cooking. This reduces the amount of phytates present in the lentils and makes it easier for digestion and nutrient absorption. It also renders the dal soft, and hence provides a rich and smooth consistency.

## **Rethink your plate**

Traditionally, sambar is eaten with a lot of rice. But that's because, back then, consuming enough calories was a problem and rice was the solution. Today, when calories are abundantly available, getting enough proteins, vitamins and minerals is the problem. A different problem warrants a different solution. So try eating your smart sambar with half the usual quantity of rice and a side of avial and you'll be pleasantly surprised at how satiated you are.

Now obviously I don't propose that you drastically change the way you make your sambar. But think outside the box. What we need today is food rich in nutrients and our traditional foods can be made to fit the bill. This way, you get to eat what you're used to while still consuming a nutrient-rich wholesome diet.

***Try eating your smart sambar with half the usual quantity of rice and a side of avial and you'll be pleasantly surprised at how satiated you are.***

## **Marine debris damaging coral reefs: NIO scientist**

The increasing amount of marine debris like plastic, glass, rubber and others break or damage reef, a senior scientist said.

“Marine debris like plastic, glass, metal, rubber abandoned fishing nets and other gear often get entangle and kill reef organisms and break or damage them,” said Dr. Mahua Saha, senior Scientist from National Institute of Oceanography (NIO) addressing representatives of SAARC nations during a workshop held at Port Blair, Andaman.

She said the reefs in North-western Hawaiian Islands are particularly prone to accumulation of marine debris because of their central location in the North Pacific Gyre.

“From 2000 to 2006, NOAA and partners removed over 500 tons of marine debris there,” Dr. Saha added.

The workshop was organised by NIO for SAARC Coastal Zone Management Centre.

The policy makers from four SAARC countries — India, Bangladesh, the Maldives and Sri Lanka — participated in the event.

Dr. Saha said that the increasing level of marine pollution is playing an important role in coral destruction.

“Reefs in close proximity to human populations are subject to poor water quality from land and marine-based sources. In 2006, studies suggested that approximately 80 per cent of ocean pollution originates from activities on land,” she said.

“Major part of pollution comes from land-based run off, oil spills, nutrients and pesticides from agriculture, wastewater, industrial effluent, untreated sewage and others.”

Among the four major types of marine pollution — chemical pollution, nutrient pollution, marine debris pollution and air pollution, chemical and nutrient pollution play major role to obstruct the role of corals.

Pesticides containing persistent organic pollutant (POPs), hydrocarbons from oil tankers and heavy metals from industrial (mining, dredging) effluent cause major threat to corals, the scientist said.

Some coral species are sensitive to these although the extent is not yet known, Dr. Saha said.

Toxic chemicals like POPs and PAHs can destroy or damage reef communities by affecting coral's reproduction and growth and can be bio-magnified to a critical level for the higher level animals of the food chain making them vulnerable to this process, the workshop was told.

Heavy metals such as copper and zinc have been linked to reduced fertilisation, fecundity and growth in adult corals.

Dr. Saha said nutrients discharged in form of fertilisers, waste feed and other materials from aquaculture and agriculture into coastal waters which lead to the bloom of nuisance algae (eutrophication) and subsequent oxygen depletion, plays a major hindrance in coral growth.

She pointed out that according to World Resource Institute, Washington, the Southeast Asian coral reef including Indian Ocean, are in high risk in terms of human activities.

The percentage of inland pollution and marine pollution is also very high in these regions.

“However, inspite of corals and other marine ecosystem are at higher risk with the effect of marine pollution, not much work on effect of pollution have been done so far. Hence, more studies have to be done on quantity and quality of chronic pollutant discharge such as on corals. And also long term studies are needed to document the recovery times of reef from sewage impact,” she added.

## From Swiss Rolls with Chocolate to Peanut Butter Cookies: Five Christmas delicacies you must make



**By Nita Mehta**

It's the time to get into kitchen and put together some of the yummiest Christmas delicacies. Here're five mindblowing recipes from my kitchen to impress your guests this Christmas.

### **1. Swiss Rolls with Chocolate**

Swiss Rolls with Chocolate (Source: Nita Mehta)

#### **Ingredients**

For the cake

2 eggs

50 gm flour (maida)

1/8 tsp baking powder

10 gm cornflour (2 measuring tbsp)

75 gm castor sugar

50 ml (4 tbsp) oil

1 tsp vanilla essence  
tray size 7"x9"  
chocolate filling  
½ cup white butter – softened  
¾ cup powdered sugar – sifted  
¼ cup cocoa, approx.  
1 tsp vanilla essence

### **Method**

- \* Sift flour, baking powder and cornflour. Keep aside.
- \* Line the tray with butter paper. See that the butter paper extends above the tray on all four sides. There is no need to grease the paper.
- \* Break eggs in a beating bowl. Add essence.
- \* Add sugar and beat till very fluffy, pale and thick. Beat for 7-8 minutes till it increases 4-6 times in volume.
- \* Add oil gradually with the beater running on full speed. After the oil is added the mixture becomes less in volume. Remove beater.
- \* Fold flour in batches in the egg mixture and mix very lightly.
- \* Pour in the tray to a thickness of ¼" thick layer. Level with a spatula.
- \* Bake at 180°C/350°F for 15 minutes till golden on the top. When the cake leaves the sides of the tray and is springy to touch, remove from the oven. Spread powdered sugar on a grease proof paper and turn out the cake over the sugar.
- \* To prepare the filling, sift sugar and cocoa powder. In a pan put butter. Beat till fluffy. Add all the other ingredients and beat well till well mixed. (Add more cocoa and sugar, according to your taste.)
- \* Spread the chocolate filling on the sponge cake and roll upwards.
- \* Pack the roll tightly in a plastic wrap or aluminium foil and keep in the fridge till required. To serve, cut the roll into 12 pieces.

## 2. Beans & Cauliflower Casserole

A delightful combination of beans with cauliflower. Any other vegetable, like mushrooms or babycorns, carrots or broccoli or mixed veggies may be substituted for cauliflower.

### Ingredients

½ cup red kidney beans (rajmah) – soaked overnight  
4 cups finely chopped cauliflower  
1 onion – chopped  
3 tomatoes – blanched, peeled and chopped  
2½ tbsp tomato ketchup  
1 tsp Worcestershire sauce  
1½ cups (150 gms) grated cheese  
½ cup cream  
2 tbsp oil, salt and pepper to taste

### Method

- \* Pressure cook beans with 2 cups water and ½ tsp salt to give 1 whistle. Keep on low heat for 20 minutes or till soft. Let the pressure drop. Drain the water from the cooked beans.
- \* Fry the onions and cauliflower in 2 tbsp oil until onions turn golden and the cauliflower is cooked. Add 1 tsp salt and ½ tsp pepper.
- \* Add tomatoes, beans, ketchup and worcestershire sauce to the onions. Mix well. Check salt and pepper.
- \* Remove from fire. Add half of the grated cheese.
- \* Put the mixture in a baking dish.
- \* Mix the other half of the cheese with cream. Add ¼ tsp salt and ¼ tsp pepper. Pour cream over the vegetables and spread gently.
- \* Cook at 180°C/350°F for 25 minutes or till done.

## 3. Peanut Butter Cookies

### Ingredients

100 gms breakfast sugar, 75 gms yellow butter  
100 gms peanut butter, preferably crunchy variety  
100 gms flour (maida), ¼ tsp baking powder

## **Method**

\* Beat butter and sugar till fluffy. Add peanut butter and mix well. Sift flour and baking powder. Fold in the flour and make a soft dough. Keep in fridge for 10 minutes.

\* Take out and roll into small balls. Roll the top of the balls in 2 tbsp breakfast sugar and place them on a greased baking tray. Space them properly since they will spread while baking. Keep the tray in fridge for 30 minutes.

\* Bake at 180°C/350°F for 20-25 minutes till bottom turns golden brown.

## **4. Plum Pudding**

This flour-and-butter based steamed pudding is bursting with raisins, dates, currants, candied peel and orange rind, and tempts with its cinnamon aroma.

Serves 8

## **Ingredients**

¼ cup salted butter

1/3 cup brown sugar

1 cup milk

12 dates – pitted and chopped

½ cup raisins (kishmish)

¼ cup dried currants

¼ cup candied mixed fruit peel – chopped

1 tbsp orange rind

1 tsp baking soda (mitha soda)

1 cup flour (maida)

2 tsp ground cinnamon (dalchini)

a pinch salt

## **Method**

\* In a large saucepan combine butter, sugar, milk, dates, raisins, currants, mixed fruit peel and rind of orange. Bring to a boil.

\* Remove from heat and stir in the baking soda.

\* Sift flour, cinnamon and salt. Add to the dry fruits and mix gently until blended.

\* Pour mixture into greased pudding mould. Cover with a double layer of greased wax paper or aluminium foil and steam for 2 hours.

## 5. Christmas Cake

This mouth-watering cake has a dark colour from the brown sugar and caramel, and is thick with raisins, dates and nuts. Check that you have all the ingredients in your kitchen including liquid glucose, glycerine and rum. Glowing eyes and happy smiles on the faces of your loved ones will be your reward.

### Ingredients

100 gm (1 cup) plain flour (maida)  
½ cup sugar  
½ cup brown sugar  
125 gm margarine  
1 tsp liquid glucose  
4 large eggs  
2 tbsp caramel  
1 tbsp candied ginger  
1 tsp vanilla essence  
½ tsp mixed spice powder (cloves, cinnamon, cardamoms)  
¼ tsp glycerine  
DRY FRUIT  
¼ cup (75 gm) candied peel  
75 gms raisins  
10-12 (30 gms) dates  
¼ cup (60 gm) chopped glazed cherries  
25 gm almonds  
25 gm cashews  
½ tsp lemon juice  
¼ cup rum

### Method

- \* Mix together all the dry fruit, if large, cut down to an even size, approximately ¼" cubes. Soak them in rum. Cover with wrap. The soak should be regularly stirred to ensure even mixing. The right way is to soak fruit for a minimum of 2 weeks.
- \* Pre-heat the oven to 160-170°C.
- \* Cream together the margarine, liquid glucose, sugar and brown sugar. The creaming should be done until it becomes light and fluffy.
- \* Beat in the eggs gradually. Then add the vanilla essence, spice powder, lemon juice and finally the caramel.

\* Mix together the flour and the soaked fruit and fold this into the egg-margarine batter along with glycerine. Transfer to a tin immediately and bake at 160°C till golden brown (50 minutes).

\* Brush with 2-3 tsp rum when the cake is hot and out of the oven.

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Today's Weather



Cloudy

**Tuesday, Dec 23**

Max Min

29° | 23°

Rain: 0

Humidity: 89

Wind: normal

Sunrise: 06:27

Sunset: 05:48

Barometer: 1012

Tomorrow's Forecast



Partly Cloudy

**Wednesday, Dec 24**

Max Min

30° | 24°

Extended Forecast for a week

Thursday  
Dec 25



30° | 24°

Partly  
Cloudy

Friday  
Dec 26



24° | 22°

Partly  
Cloudy

Saturday  
Dec 27



25° | 22°

Partly  
Cloudy

Sunday  
Dec 28



26° | 24°

Partly  
Cloudy

Monday  
Dec 29



26° | 26°

Cloudy

### **Recipe: Caramel custard**

*Caramel custard is one of my favorite. The texture of this dish is so magnificent and mouthwatering. Not a very sweet dish but enough for a sweet craving. It's easy to make and accompanied along with strawberry jelly or chocolate tasted mind blowing.*

**Ingredients:** - 2 ½ cups milk - 1tsp vanilla essence - 4 eggs - ¾ cup sugar

**Method:** Take quarter cup of sugar in a thick-bottomed pan. Add a few drops of water and heat till the sugar caramelizes. Then pour the caramel into a deep bowl or mould and let it settle by cooling.

Heat milk while in another bowl add four cups of water and heat Break eggs into a bowl. Add half cup of sugar, vanilla essence and whisk gently till frothy. Add warm milk over this mixture and mix. Strain the mixture and pour the egg-milk mixture into the mould with the caramel.

Cover with aluminum foil and place it in the cooker. Cover with lid and steam for twenty-five to thirty minutes. Do not use the whistle. Remove when done.

Serve, turned out with caramel side up, either hot or cold.

### **Recipe: Papad ki subzi**

*Poppadum (papad) is not just a crispy cracker, which is a vital part of the traditional Indian thali. Rather, this flat bread can be used to cook a subzi as well. Here's what you need to do to make unique and scrumptious dish out of it.*

#### **Ingredients**

5 papads  
Cooking oil  
1 chopped onion  
½ table spoon of zeera (cumin seeds)  
1 table spoon of garlic and ginger paste  
Little bit of chilli and turmeric powder  
3 nicely chopped green chilies  
Salt to taste

4 table spoons of fresh cut coriander (for garnishing)  
Yogurt or curd

### **How to prepare it**

- Take papads and deep fry it. For those who like to eat less-calorie food, roasting is a best option.
- Cut papad into two equal pieces and kept it aside.
- While oil or ghee is being heated in a pan add cumin seeds.
- Soon add garlic-ginger paste along with finely chopped onion.
- Let it fry for some time and now add red chilli and turmeric powder.
- Fry for two minutes
- Now add the yogurt or curd and stir it
- Add half cup of water and keep the mixture till it boils.
- Add salt and stir it again. Soon add broken papad pieces into it.
- Now, do not stir it too much.
- Take off the gas stove and garnish it with fresh coriander.
- Serve it with simple boiled rice.

### **Recipe: Kale chane ka kebab with mint Curd**

*Vegetarian kebabs made of Bengal gram.*

**Preparation time:** 30 minutes

**Cooking Time:** 30minutes

**Serves :** 4

**Recipe Ingredients:**

500 gms Bengal gram (kala chana)

5 medium onions, chopped

12- 15 garlic, chopped

2 inches ginger, chopped

1 teaspoon salt

30 ml 2 tablespoons lemon juice

4 green chillies

¼ cup coriander leaves, chopped

1 teaspoon red chilli powder

1 teaspoon garam masala powder

1 cup oil for deep-frying

### **For the Spice mix**

5 cloves

2 bay leaves

1" sticks cinnamon

4-5 black cardamoms

5 green cardamoms

¼ teaspoon nutmeg powder

1 teaspoon cumin seeds

8 dried red chillies

2 tablespoons black peppercorns

### **For the Stuffing**

¼ cup mint leaves

10 green chillies, finely chopped

1 inch ginger, finely chopped

3 medium onions, finely chopped

125 g unripe mangoes, finely chopped

¼ teaspoon salt

### **Recipe Method:**

Soak the Bengal gram overnight. Peel and dice 5 onions.

Peel the garlic.

Tie the ingredients for the spice mix in a piece of muslin or place in an infuser.

Put the soaked gram in a pressure cooker with water reaching an inch above the gram.

Add the chopped ginger, salt 1tsp, chopped onions, garlic and the spice bag and pressure cook for 15 minutes or till done.

Remove the spices and grind them with a little of the cooking water to a fine paste. Grind the boiled gram using a little of the remaining water.

Add the ground spice paste, chopped coriander, lemon juice, chilli powder and garam masala to the paste. Mix well and adjust seasoning.

### **For the stuffing**

Mix together the chopped onions, green chillies, unripe mango and mint. And the chopped ginger.

Shape the gram mixture into 15-16 small patties on your palm. Place a little stuffing in the centre and bring the edges of the patty together to enclose the stuffing.

Heat the oil in a girdle. Put the patties on the girdle. Cook over medium heat till nicely crisp on side. ( frying pan. Add a few patties at a time and shallow-fry on medium heat till golden brown and crisp at the bottom) -to be deleted. Flip the patties over and cook the other side as well.

### **Ingredients for Mint Curd Chutney**

1 cup Mint leaves

½ cup Coriander leaves

2 Green Chillies

2 Tbsp Curd

Salt to taste

### **Method**

To make the chutney just combine all the ingredients and blend in food processor.

## **Ingredients for Stuffed Bhavnagri Mirch**

12 bhavnagri mirch

2 cups boiled chicken

½ tsp cumin seeds (jeera) powder

½ tsp chilli powder

½ tsp dried mango powder (amchur)

1 medium onion finely chopped

½ tsp fennel seeds (saunf) powder

½ cup cheddar cheese, grated

salt to taste

2 tsp oil

## **Method**

Slit bhavnagri mirch lengthwise from one side not separating from the base. Remove seeds.

Mix salt and all the spices to chicken. Stuff chicken mixture in mirch.

Heat oil in a flat kadhai. Place stuffed mirch in the pan and turn the heat to low. Cover with a lid. Turn over the mirch once the underside is cooked. Cook from both sides, remove from heat and sprinkle cheese on top and toast in the oven till the cheese melts and serve.

## **5 Tips to easy cooking when tired**

*Not everyday you feel up to cooking a scrumptious spread. Do you? So, here are ways to make your cooking task simple.*

### **Take the easier route**

You've had a very tiring day at work. Now, after coming back from work you realize you need to prepare dinner for the family. Worry not. Dish out some stuff that doesn't require much time. Dinner need not be elaborate everyday. So, even simple things like upma can be cooked for dinner. Load the upma with lots of fresh veggies like peas, carrots, French beans, onions and tomatoes - a mouthwatering and satisfying treat for your taste buds

### **Go egglicious**

A Spanish omelet with a crispy toast with a generous layer of butter will also be a good dinner sampling ideas. A scrambled egg or a simple omelet with onions and chilies can also make for simple tummy filling ideas.

### **Stock some ready to cook food stuff**

There are lot of ready to cook food available in the market. They come handy when you are hard pressed for time and are too low on energy to cook anything elaborate. So pick up those dosa, idli, dhokla, khaman stuff, even some curries or kheema parantha available in the stores and stock those in the refrigerator. Use these when you are in need.

### **Frozen food**

This is also one easy step. All you need to do is pack some frozen food like fish fingers, chicken nuggets or some malai kebabs and unleash those on the platter when you are so hungry that you need instant satiation.

### **Hot cuppa treat**

Do not forget to complement your dinner with a hot cuppa - either freshly brewed tea or a hot cup of coffee. It will help you rejuvenate.

# DECCAN Chronicle

## Mystic Mantra: Healing with sound



Physicists say sound is merely modification of electricity. Yogis say electricity is merely a modification of sound. Both are true | Representational Image (Photo Courtesy: VisualPhotos.com)

Our body and our life form function with an energy which moves like a bioelectric current within us. When everything within functions perfectly, we can hear a hum arise out of us — the sound of health. Energy, electricity, sounds — this is the play of the trinity in our being. A rhythmic hum means that we are in good health. When it's discordant, we should know that it's in chaos. The same happens with emotions — sadness and joy, misery and ecstasy create their own vibrations or hum. What is true of our being is true of the cosmos. Ancient sages, who illuminated us about the universe, meditated first to experience the same within themselves. Says Osho, “Physicists say sound is merely modification of electricity. Yogis say electricity is merely a modification of sound. Both are true. Sound and electricity are two forms of the same phenomenon. Call it electricity or sound, call it fire like Heraclitus or water like Lao Tzu... All these are merely forms of the formless!”

But how can you know the formless? Knowledge is possible only when there is form, when something is known. But form is a modification of the unknown. For a yogi, electricity is irrelevant. Through sound, he can change many phenomena, even inner electricity. He calls it prana — the inner bioenergy.

Through sound, it can be changed. That's why when you listen to classical music you feel a certain silence — your inner body energy changes. Listen to a madman and you feel you're going crazy too, because the madman's body electricity is in chaos, which you imbibe. Sit with an enlightened person and suddenly everything within you falls into a rhythm.

***To connect with our inner and outer cosmos, Osho has given a very powerful method of meditation, Nadabrahma. It lasts for an hour and has three stages.***

- *Stage I (30 minutes): Sit in a relaxed stance, eyes and lips closed. Hum loudly, so others can hear you. Visualise a hollow tube or empty vessel, filled only with vibrations of humming. A point will come when the humming continues by itself and you become the listener. Move your body smoothly if you want.*
- *Stage II (15 minutes, two sections): For the first half, move your hands, palms facing up, in an outward circular motion. Starting at the navel, both hands move forward and apart to make two large arcs, left and right. The movement should be so slow that at times there appears to be no movement at all. It's like you're giving energy to the universe. In the second half, turn the palms down and move them in the reverse direction. Let the hands come together towards the navel, as if you're taking energy in.*
- *Stage III (15 minutes): Sit or lie down, absolutely quiet and still. This method of meditation gives deep peace and nourishes our being with the universal energy. Modern researchers observe that the psycho-dynamics of the mind as an electromagnetic structure establishes the nature and reality of consciousness as an inter-dimensional energy process. It is an electrical process of cause and effect.*

## **At WTO, India wants clarity on agricultural issues first**

Opposes simultaneous work on fisheries subsidies and anti-dumping

**New Delhi, December 22:**

India has objected to the World Trade Organisation (WTO) starting work on reforming fisheries subsidies and anti-dumping rules before making headway to find a permanent solution to the food security problem.

### **For new formula**

In a recent meeting of the WTO committee on rules, where some members pushed for action on fisheries subsidies and anti-dumping, India said that without clarity in agriculture and other core areas it would find it difficult to start work on rules.

“We do not want the issue of finding a permanent solution to food security to get side-tracked. Focus has to remain on core issues and we should have a new formula in place by the end of next year as scheduled,” a Commerce Ministry official told *BusinessLine* .

The WTO recently agreed not to take action against India or other developing countries if their food procurement subsidies breached present caps, till a permanent solution to calculation of such subsidies was arrived at.

### **Permanent solution needed**

It also agreed to make all efforts to reach a permanent solution by 2014-end.

It is important for India to have a permanent solution in place soon as the interim relief against action comes loaded with conditions that it may find difficult to meet.

### **Fisheries, anti dumping**

In the rules meeting, New Zealand, on behalf of a group called the Friends of Fish, said disciplines on fisheries subsidies should be central to the work of the group. The group includes Argentina, Australia, Chile, Colombia, Costa Rica,

Ecuador, Iceland, New Zealand, Norway, Pakistan, Peru, Philippines and the US.

It urged that work on fisheries subsidies should start immediately.

Japan, on behalf of the group Friends of Anti-Dumping Negotiations, said that negotiations on anti-dumping should be part of the Post Bali Work Programme (priority issues identified in the Bali Ministerial meeting last December).

### **Transparency**

The group, which also includes China, want more transparency and stricter rules for anti-dumping investigations. Anti-dumping duties are levied against items that are sold by foreign companies at prices lower than what they charge in their home markets.

“We are not against work progressing in the two areas. But these have to wait or it could lead to long delays in sorting out our food security issues,” the official said.

New Delhi’s first preference is to get the WTO to agree to exempt food procurement subsidies from the list of trade distorting subsidies so that the caps don’t apply. Alternatively, it wants subsidy to be calculated based on reference price of recent years and not the existing reference year of 1986-88.

### **Cardamom gains flavour on demand**

#### **Kochi, December 22:**

Cardamom prices increased on higher domestic demand at last week’s auctions held in Kerala and Tamil Nadu.

Arrivals continued to rise and notwithstanding this development, prices moved up. This has led to the suspicion that inventories with end users/dealers are empty.

Besides, no carryover stocks are said to be with dealers/traders in primary and terminal markets. Growers are also reported to be not holding any stocks from the previous crop, market sources in Bodinayakkanur told *BusinessLine*.

The trade attributed the demand to fears of supply squeeze from Guatemala, the only other source of supply. In addition, consumption is on the rise. The per capita consumption has gone up.

On the other hand, availability of good colour bold capsules will come to an end with the closing of the current round of picking. This has prompted buyers to cover up. All these factors have aided the price rise at a time when prices of other commodities such as rubber, pepper, tea, etc are falling.

Individual auction average has been vacillating between Rs. 795 and Rs. 810 a kg. It was below Rs. 575 during the same period a year ago, official sources said. Export buying was slack as current prices higher. However, exporters bought an estimated 50 tonnes last week.

At the Sunday auction held by the Kerala Cardamom Processing and Marketing Company, arrivals declined to 118.5 tonnes from 121.3 tonnes at the previous Sunday and the entire quantity was sold out. The maximum price was Rs. 991 a kg and the minimum Rs. 554. The auction average increased to Rs.801.56/kg from Rs. 774.04 the previous Sunday, PC Punnoose, General Manager, CPMC, told *BusinessLine*.

Total arrivals during the season so far stood at 9,872 tonnes against 10,728 tonnes during the same period last year. Sales were at 9,704 tonnes and 10,381 tonnes respectively. The individual auction average, as on December 21 this year, was at around Rs. 790 ( Rs. 571) a kg.

Prices of graded varieties ( Rs. /kg): 8mm bold 1,025; 7-8mm 850; 6-7mm 750; below 6 mm 700.

### **CFTRI to help produce banana juice free of cost at farm-gate**

#### **Chennai, December 22:**

The Central Food Technology Research Institute (CFTRI) is willing to transfer its innovative and cost-effective technology to make “clarified banana juice concentrate” from unsold and ripened fruit at the farm-gate, free of cost.

The institute will also help farmers in setting up the facility.

“The entire facility, including the shed, would cost not more than Rs. 5 lakh,” said Ram Rajasekharan, Director, CFTRI.

One of the most cost-effective solutions the institute has come out with for bananas that have reached the point of advanced ripening just before the onset of spoilage, is to make clarified banana juice.

This product is a juice concentrate made of banana puree and clarified prior to concentration.

### Byproducts

Like in any fruit juice, specifications on pH (a measure of acidity of an aqueous solution), degree Brix (the sugar content) and microbial stability are addressed to make a safe and delicious product, said Rajasekharan.

He said that in the process, byproducts such as pulp and the peel can be used to make candy and animal feed respectively through solar drying.

According to him, the shelf-life of the concentrate will be about a year and this can be used to make fruit juice, carbonated drink or as a sweetening agent for other juices.

CFTRI has identified a few companies in Coimbatore that can manufacture necessary equipment for this.

### **Production**

Being the largest producer of banana in the world, India produced 29,000 tonnes of banana in 2012-13. Of this, Tamil Nadu produced about 20 per cent, followed by Gujarat (17 per cent) and Maharashtra (14 per cent).

Reports indicate that the production of banana has doubled in Tamil Nadu over the past four years – driven predominantly by Tiruchi, Erode, Karur and Thanjavur districts.

CFTRI has technologies to answer the need for extended freshness of produce upon harvest and technologies to address pre-harvest requirements to stagger harvests.

The idea is to keep the produce as fresh as possible from the point of harvest at the right stage till consumption, Rajasekharan said.

## **NCDEX advances delivery in castorseed, coriander contracts**

### **Mumbai, December 22:**

NCDEX has advanced the delivery in castorseed and coriander contracts to December 29 from January 12.

The open interest in the January contract of both these commodities has grown steadily in last few months leading to huge stock-up of goods at the accredited warehouses.

Additionally, pre-expiry margin in case of January contract will be levied from December 26 in a progressive and linear manner everyday so that buyers and sellers pay cumulative margins equal to 100 per cent of the value of the commodity as margin on the contract expiry date.

The open interest in castorseed was at 4,44,850 tonnes on December 19. This, coupled with the rising deposits in exchange approved warehouses, prompted the move to begin early delivery of goods to encourage smooth deliveries to take place through the clearing system of the exchange.

In the case of coriander, early delivery is being facilitated as there are no contracts for February and March. These months are considered lean period and so there are no coriander contracts for these months. The open interest in coriander was at 31,320 tonnes on December 19.

“We have extended our support to the market and we see a reduction in open interest concentration in the January contract and rolling positions to the February contract in castor seed,” said Samir Shah, Managing Director, NCDEX.