

## Save our farmers

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January 6, 2014 - Agriculture is the backbone of our country. It is an underestimated asset. Farmers depend on agricultural land. Owing to shortage of water, labour, electricity, manure, fertilizers and pesticides, farmers are forced to shift to other non-agricultural businesses.

The Union government has given 100 per cent tax holidays to farmers.

However, the number of farmers is gradually decreasing day by day, which is shocking. We should safeguard our farmers as food production depends on them.

M.R. Lakshiminarayanan,

*Kallakurichi*

FIX MINIMUM

SUPPORT PRICE

'Uzhavar Thirunal' is celebrated on January 16. Agriculture has the unique trait of self-reliance to which other professions have to bow.

But, farmers in Puducherry are not happy with the current scenario. They go behind realtors who offer high price for their land but not for farm products.

The government should support farming activity in the Union Territory by fixing minimum support price for all agricultural produce, taking into consideration the hard work of farmers.

V.Ramalingam,

*Thattanchavady Post,*

***Readers can mail their letters to [pondy.thehindu@gmail.com](mailto:pondy.thehindu@gmail.com) or write to The Hindu, No. 135, First floor, Mission Street, Puducherry – 600 001.***

## Farmers seek Rs. 2,500 for a quintal of paddy

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*Price issue: Farmers staging a protest in front of the Head Post Office in Kumbakonam on Sunday. — Photo: B. Velankanni Raj*

KUMBAKONAM, January 6, 2014 - Members of Thanjavur Cauvery Farmers Protection Committee staged a demonstration in front of the head post office in Kumbakonam demanding payment of Rs. 2,500 per quintal of paddy. Sundara Vimalanathan, secretary, who led the agitation, said the State government should pay an incentive of

Rs. 290 per quintal taking cue from Karnataka and Andhra Pradesh. He also demanded crop insurance compensation for damaged samba and thaladi crops last year. He sought payment of arrears with interest to sugarcane farmers, who supplied canes to two private factories around Kumbakonam.

# Farmers' agitation today

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TIRUNELVELI, January 6, 2014 - *Against shelving of river-linking project*

The denial of permission by the police for observing fast against the shelving of Tamirabharani-Karumaeniyar and Nambiyar river-linking project at Thisaiyanvilai on Monday (January 6) has forced the farmers to stage demonstration on the same day at the same venue.

As the project has come to a grinding halt due to the non-availability of funds though the first two phases have almost been completed. Demanding the resumption of the stalled third and fourth phases of this ambitious scheme, the farmers of Nanguneri, Thisaiyanvilai, Radhapuram and Sattankulam had announced that they would organise a fast at Thisaiyanvilai on Monday (January 6).

When the police denied permission for the agitation, the aggrieved farmers approached the court, which directed the police to look into the farmers' plea. However, the police was firm in its decision.

As the date of agitation falls on Monday, the farmers, having failed to get permission from the police, have decided to organise demonstration near Kamaraj Statue in Thisaiyanvilai on the same day for which the police have given permission.

"Hence, we appeal to the public, particularly the farmers, traders, students and the cadres of all parties to join the demonstration," said M. Appavu, former Radhapuram MLA, in a statement on Sunday.

***They are protesting against shelving of river-linking project***

## Encomiums paid to organic farming scientist

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*An organic farmer paying homage to Nammalvar, organic farming scientist, in Tiruvannamalai on Sunday.— Photo: C.Venkatachalapathy*

TIRUVANNAMALAI, January 6, 2014 - Organic farming scientist Nammalwar attracted youngsters to agriculture and natural farming methods, said S. Karuna, State deputy general secretary of Tamil Nadu Progressive Writers' and Artists' Association.

Addressing a programme held in the scientist's memory here on Sunday, Mr. Karuna recalled how organic and traditional farming methods helped Cuba to escape sanctions slapped on it. He said that it was good to see

Nammalwar's followers discussing the methods to carry forward his legacy for the benefit of society and environment.

Ramasamy, a farmer from Vettavalam, recalled how Nammalwar's teachings helped him to return to natural and organic way of farming. A. Kirubakaran, coordinator of Agam Trust that organised the programme, presided. Coordinator A. Narayanan compered the event. Poet Vaiyavan, activist Peter Jayaraj, and documentary film-maker Vinod Baluchamy participated.

Earlier, a memorial rally was taken out from Kanchi Road to the venue.

## Farmers to get tablets next month: Patil

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*Patil to take IT to the agriculture sector; gadget project a personal initiative*

*Farmers looking at different varieties of pomegranates on display at the Krishi Mela at Agriculture College in Bijapur on Sunday.— Photo: RAJENDRA SINGH HAJERI*

BIJAPUR, January 6, 2014 - Claiming that one of his objectives was to take

Information Technology (IT) to the agriculture sector, Minister for Information Technology S. R. Patil has said that he has decided to offer 100 high-tech agriculture-software enabled tablet computers to the farmers of Bijapur and Bagalkot district on a pilot basis.

Speaking after inaugurating Krishi Mela organised by the University of Agricultural Sciences, Dharwad here on Sunday, he said that the project would provide advanced information on the agriculture sector to the farmers of both districts.

Making it clear that he will be distributing the tablets in his personal capacity and not with the assistance of the government, he said that if the project sees success, then it will be implemented across the State with the help of the government.

Mr. Patil said that a few of his friends working in United States were preparing a software for the tablet "The tablets will help the farmers to get better knowledge of agriculture which they could implement in their fields for reaping higher yield. The software will be made simple and user friendly. These will be distributed next month," he said.

Mr. Patil said that the involvement of educated youth would bring radical change in the agriculture sector as they could easily adopt modern methods and increase the productivity in limited agricultural land.

The Minister also lamented that several innovations and researches relating to the agriculture sector was not reaching the farmers.

"If the research remains confined just to laboratories or research centres, then what is the use of such technology when the farmers who should be the primary beneficiaries of the innovations, remain deprived of it," Mr. Patil said.

Earlier, vice-chancellor of the University, H.S. Vijaykumar, said the two-day Krishna Mela will focus on giving information on advanced technologies in the agriculture sector to the farmers.

## MLA hears out farmers' woe

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*MLA G.H. Tippareddy speaking to farmers, officers and lorry drivers at a maize purchase centre in Chitradurga on Sunday.*

CHITRADURGA, January 6, 2014 - MLA G.H. Tippareddy along with the officers concerned visited the maize purchase centre at the Agriculture Produce Marketing Centre (APMC) at the and



solved the problems of farmers by holding a meeting of officers, farmers and the lorry drivers.

The farmers in the maize purchase centres were facing a lot of problems owing to negligent attitude of officers in issuing receipts and lifting the purchased maize. The farmers had also alleged that the officers at these centres were hand in glove with the middlemen who were exploiting the farmers.

In the meeting, the transport owners alleged that the officers concerned had not cleared their previous bills and were also not responding to their pleas to clear the bills at the earliest. So they had stopped transporting the purchase maize to warehouses. Ired by the unsatisfactory reply of the officers for the delay in clearing the bills, the MLA instructed them to clear all pending bills immediately and ensure that the purchased maize is supplied to warehouses without any delay.

### **Dysfunctional weighing machines**

The farmers alleged that the weighing machines in the purchase centres were not functioning properly and they were incurring losses owing to improper weighing of the maize. The officer's concerned delayed issuing the receipts for purchased maize and there are many instances where in the farmers had receipts for lesser quantity than they had supplied. The farmers had to wait for at least four days to load the maize into lorries after weighing, they said.

Responding the plea of farmers, the MLA stated that the issue would be discussed with the officers and would be instructed to rectify the loopholes in the weighing machines. "More weighing machines would also be installed to ensure that maize is purchase quickly," he said.

Krishnamurthy, an officer at the centre, informed the meeting that a total of three maize centres have been opened in the district and they are in Chitradurga, Chickjajur and Bharamsagar. So far a total of 6576 quintals of maize has been purchased from 55 farmers in Chitradurga and a sum of Rs. 86,14,560 has been paid to them.

In the Chickjajur centre, a total of 1944 quintals maize has been purchased from 16 farmers and they have been paid Rs. 25,49,915 and in Bharamsagar, the centre purchased 29,346 quintals from 177 farmers and paid Rs 3.88 crore to them.

Based on the complaints that the lorry owners were demanding more money for transporting maize to warehouses, the MLA instructed the owners of the lorries not to charge more than Rs. 45 per kilometre to transport maize from Bharamsagar to Hiriya and Rs. 33 per km from Chitradurga to Hiriya.

## **Kurnool tomato farmers in distress**

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*KURNOOL, January 6, 2014 - Farmers let cattle trample their crop after losing hope on getting profit*

Tomato farmers in Aspari and Pathikonda are in deep distress once again. It has been a cycle every year that farmers suffer huge losses on account of slump in prices during the peak season.

Farmers in Aspari, Pathikonda, Aluru, Adoni, Tuggali and Devanakonda areas grow tomato in a large extent as it has been the only cash crop wherein farmers get money immediately. The growers get decent price in the beginning of the season when the crop is exported to Tamil Nadu, Hyderabad and other areas. The rain-fed crop which has longer shelf-life is preferred by the consumers.

### **Prices dip to Rs.35**

However, on Saturday and Sunday, the prices dipped to Rs.35 per kg. The farmers groused that they spent nearly Rs.25 on picking of fruit and another Rs.10 on transport to the market.

### **No returns**

The transaction left no returns for them. A farmer, Urukundu, said they continued farming despite the losses with the hope that some day the prices might regain. Some farmers let the cattle trample the crop losing hopes of gaining profit. The popular demand for

processing the tomato remained unattended due to marketing problems. The idea of pulp extraction was debated with entrepreneurs, but was found to be unviable.

## Taking care of India's rich biodiversity

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Environmentalist Alka Tomar.

*The upcoming environment film festival in the Capital will explore pertinent issues on biodiversity. Festival director **Alka Tomar** speaks to **Madhur Tankha** on the need and theme of the initiative.*

For noted environmentalist Alka Tomar, the need to preserve the country's biodiversity is of utmost importance. As the director of CMS Vatavaran,

Environment and Wildlife Film Festival, Ms. Tomar said this year "Mainstreaming Biodiversity Conservation" has been chosen as the theme because India is home to rich and diverse biodiversity which is being threatened by rampant industrialisation and population explosion.

"In comparison to other countries, India has a rich biodiversity. If we see this from an international perspective, it feels good but India being a developing country is faced with inherent challenges. So the challenge is how to maintain our biodiversity. Accordingly this year, we will have discussions on Himalayas, coastal regions, protected areas and Western Ghats."

The festival's sub-themes include coastal and marine biodiversity, forest biodiversity, mountain biodiversity, and inland waters and wetlands biodiversity.

The festival will be held in the open for the first time. It will be held from January 30 to February 3 at the sprawling lawns of the Indira Gandhi National Centre for Arts here.

Ms. Tomar feels films on environmental issues play a vital role in disseminating the message on conservation to both the public and policy-makers. In this context, she is disheartened that Bollywood has so far not touched upon environmental issues. "Bollywood's track record on making films on environmental issues has been abysmal. One felt that a commercial film like *Kaal* would have presented a realistic picture of our wildlife and forests but it was on ghosts and supernatural stuff."

However, Ms. Tomar feels there is still hope as there are people in the film industry who are concerned about environmental degradation and are now showing their willingness to invest in such films. "Actor-producer John Abraham has partnered with Mike Pandey to make a feature film on tigers. The film has not been completed but there might be a discussion on its making at our festival. Mike Pandey will be one of the participants."

The festival will also highlight wildlife issues. "There will also be a session on the Supreme Court's earlier judgment to ban tourism from the core areas of tiger sanctuaries. Personally, I feel that we need to give space to tigers in their sanctuaries, especially when we have seen the ugly consequences of irresponsible tourism like stalking the big cats. So we need to go in for responsible tourism."

The festival will celebrate the use of cinematic art as a catalyst for creating awareness on pertinent issues. Several interesting talks by experts and film sessions on environmental, political, social and economic aspects of conservation and sustainable use of biodiversity will be organised during the event. More than 50 conservationists, policy-makers and concerned communities are expected to participate in the deliberations and discourses for five days.

# Water level

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**Madurai** - The water level in Periyar dam on Sunday was 114.50 feet with an inflow of 149 cusecs and a discharge of 344 cusecs.

Water level in Vaigai dam was at 41.08 feet with inflow of 40 cusecs and a discharge of 60 cusecs. Combined storage in Periyar credit was 1,939 mcft.

**No rain** - There was no rainfall in the region in the last 24 hours ending at 8.30 a.m. on Sunday, according to the Public Works Department here.

Water level in the Papanasam dam on Sunday stood at 83.70 feet (maximum level is 143 feet). The dam had an inflow of 236.53 cusecs and 394.75 cusecs water is discharged. The level of Manimuthar dam stood at 71.94 feet (118 feet). The dam had an inflow of 9 cusecs and 430 cusecs is discharged.

**Nagercoil** - The level in the Pechipparai dam stood at 22.40 feet, while it was 56.35 feet in Perunchani, 13.02 feet in Chittar 1, 13.12 feet in Chittar 11, 4.50 feet in Poigai and 54.12 feet in Mamabazathuraiyaru.

# Plum tree in blossom, a welcome treat to visitors

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A sight to behold:Ornamental plum blossoms in Bryant Park in Kodaikanal.

Tourists visiting the hill station this winter will have an opportunity to see the bountiful blossom of ornamental plum tree, technically known as Prunus Genus.

Standing in front of the recently renovated Glass House in the Bryant Park, the ornamental plum tree has started blossoming.

It belonged to the flowering varieties like almond, apricot, cherry, nectarine and peach. Collectively known as stone fruits, these trees produce little or no eating-quality fruit but are prized for their springtime display of blossoms.

Some trees even offer fall foliage colour, as well as an attractive shape. People may not value its tiny plums, but they draw birds in large numbers.





# Weather

Chennai - INDIA

Today's Weather



Partly Cloudy

Rain: 0  
Humidity: 55  
Wind: normal

**Monday, Jan 6**

Max 28° | Min 22°

Sunrise: 06:30  
Sunset: 05:52  
Barometer: 1014

Tomorrow's Forecast



Partly Cloudy

**Tuesday, Jan 7**

Max 29° | Min 23°

Extended Forecast for a week

Wednesday  
**Jan 8**



29° | 24°  
Partly Cloudy

Thursday  
**Jan 9**



28° | 23°  
Cloudy

Friday  
**Jan 10**



29° | 23°  
Sunny

Saturday  
**Jan 11**



28° | 23°  
Cloudy

Sunday  
**Jan 12**



28° | 22°  
Cloudy

## WTO has a point in objecting to India's food security act

Misunderstandings about the World Trade Organization (WTO) are pervasive. The media coverage of the recent WTO meetings at Bali has added to the confusion. The bone of contention was the government procurement of the food grains in India under the National Food Security Act. The final

outcome is a stopgap arrangement that has bought the Indian government some time; most importantly, it does not have to undertake any changes before the parliamentary [elections](#). Some people have celebrated this outcome as a victory. Others have bemoaned it as a capitulation.

It is as if it were a zero-sum game. If the US wins, India loses and vice-versa. What does it even mean when we say that India wins or loses? Is it Indian producers or consumers or both?

Are their interests aligned? Do we have to support the domestic producers in order to protect the poor consumers? What is the rationale for having a measure such as Aggregate Measure of Support (AMS)?

Are the worries of the US and other like-minded countries totally misplaced? Is there a plausible solution that would allow the Indian government to build a safety net for the poor without violating the WTO agreements?

The WTO's mission is to dismantle impediments to free trade and this means disallowing special support by governments to their domestic producers. All the member countries have joined the WTO to ensure that their producers will not be at a disadvantage while competing in the markets of other countries. Therefore, in principle, all member countries would agree with the notion of limiting the level of support to domestic producers



measured by the AMS.

There is, however, a methodological issue. The AMS is calculated as the product of the quantity procured multiplied by the difference between the procurement price and a fixed external price derived from world prices during 1986-88. It is also limited to 10% of the value of agricultural output. Given that international prices have increased substantially since 1986-88, it would make sense to update this benchmark level. Clearly, with such a change in the formula, some cases now judged to be exceeding the allowable support would then be considered legitimate.

However, even after this change, India may have to be cautious about how high it can set the procurement price. The grain procurement required for implementing the food security Act is roughly 25% of the annual output. To satisfy the limit of 10% of the value of the output at the international market price, the procurement price would have to be no more than 50% higher than the market price.

However, the main point of contention is not merely technical. The G33 proposed that procurement from poor farmers should be exempt from this bound. This would have given a blanket exemption to the price support for the farmers in developing countries and predictably the US objected. This was the beginning of the argument that erupted at Bali. Union minister of commerce and industry Anand Sharma argued that India be allowed to exceed the AMS on the grounds that the present system of government procurement and distribution ensures food security to the poor in India. How valid is this argument? Are the developed countries opposed to providing support to poor consumers in India?

First, note that the WTO agreements do not inhibit governments from providing consumer support since that does not harm the interests of producers in other countries. If the Government of India wanted to give direct cash transfers to all the consumers that it deems qualified to receive them, it would not be a WTO issue. It will also not be a WTO issue if the government procured the grain at market prices and distributed it cheaply.

It is a WTO issue only because our present system of delivering food subsidy involves producer support. The central government procures wheat and rice not at market price but at an administered minimum support price (MSP).

There is another WTO issue. Over the last decade it has consistently procured more than it has dispensed through its public distribution system. The stocks thus have grown way beyond what would be necessary for dampening price volatility. Such massive stocks are perceived as a threat by other countries because India could be dumping them in the international market. These are legitimate fears as India is a big player in the world grain market.

By sucking out the supply of grain from the market, excessive stocks are harmful to consumers. The rising MSP locks the country's resources disproportionately in grain production at the cost of other foods such as pulses, vegetables and fruits. Thus, if the WTO disallows excessive stockpiling, it could hardly be deemed harmful to India as a whole. The crux of the problem is that in India the support to producers is entangled with the protection for consumers. This need not remain so.

Ideally, direct cash transfers to consumers would obviate the need for the government getting into the logistics of storage and distribution and provide a more effective safety net for consumers. If the infrastructure of rural banks is not quite ready for organising cash transfers, the delivery of food subsidy through fair price shops can continue until such infrastructure is ready.

But there is no need for procuring more than the PDS distribution (plus 5 or 6 Mtons required for other social programmes such as mid-day meals) as long as there are enough reserve stocks maintained for dampening price volatility.

There will be no continuous build up of stocks under this system. The MSP does not have to be as high as it is now. It can serve as a price floor and typically the market price will be above it.

To sum up, concentration of price support on select few crops and their excessive stockpiling is in nobody's interest. The need is to disentangle the producer support from the consumer support through cash transfers. This would be a win-win situation par excellence.

Ashok Kotwal is professor at University of British Columbia, Milind Murugkar is policy analyst at Pragati Abhiyan and Bharat Ramaswami is professor at the Indian Statistical Institute

*The views expressed by the authors are personal*

- See more at: <http://www.hindustantimes.com/comment/analysis/wto-has-a-point-in-objecting-to-india-s-food-security-act/article1-1169742.aspx#sthash.HnL9aQHZ.dpuf>

THE TIMES OF INDIA

## Fresh from farm on display in Bhubaneswar

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BHUBANESWAR: Flowers, leafy and green vegetables, tempting fruits, aromatic plants, herbs, vegetable carving, tips on food preservation, nutrition and plenty of competitions. There was something for everyone at the state-level flower and vegetable show-2014 organised by the directorate of [horticulture](#) here on Saturday.

Farmers, housewives and students participated in different sections of the show. More than 209 flowers and 2,208 varieties of vegetables and their products were on display. The pavilion on the [Centre of Excellence](#) at Deras was the major attraction.

"We have developed a Centre of Excellence with technical knowhow from Israel using ultra modern machines at an estimated cost of Rs 20 crore to produce high-quality seedlings of many crops. These seedlings will be sold to farmers," said director, horticulture, Sanjiv Chadha.

Odisha has over 40 lakh hectare of high and medium land suitable for horticultural crops. Vegetables are being cultivated over seven lakh hectare. About 95 lakh metric tonne are produced every year. Similarly, flowers are cultivated on 7,500 hectare.

The three-day show also has exquisite flower arrangements on display.

THE  NEW  
INDIAN EXPRESS

## Teenager Turns Crusader against Fast Food

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Abhijith who has won award for the best student agricultural talent in the Balakrishisasthra Congress (Students' Agriculture and Science Congress) at Kanakakkunnu.



Imagine a teenager who is not a fast food fan. Abhijith belongs to this rare group. A student farmer and a tenth standard student at the Boys Higher Secondary School, Neyyattinkara, Abhijith presented a project with his findings on the ill-effects of fast food consumption which won him the award for the best student agricultural talent in the Balakrishisasthra Congress (Students' Agriculture and Science Congress) which

concluded at Kanakakkunnu here on Sunday.

Abhijith, who bagged the award for the second consecutive year, selected hotels, wayside eateries, tea shops and bakeries in his home village Mariyapuram near Neyyattinkara and those in one-km radius of the Neyyattinkara town for his study. "The unhygienic and unhealthy way of preparing food at the fast food shops was shocking. I wanted the project to be an eye-opener to the youth and as an attempt to make the people in general aware of the adverse impact of consuming fast food," Abhijith told 'Express.'

Professors of the Agricultural University Kamalam and Sreekumar, who evaluated the project, opined that Abhijith excelled in the selection of the subject, collection of details and analysis of the study.

Abhijith cultivates elephant foot yam (chena), colocasia (chembu) and tapioca near his home at Mariyapuram. The cultivation is on the land in which farming has been carried out by 'Abhiram Agriculture Club', an initiative of students. "I did not have the confidence till sixth standard to do anything of my own. It was Sister Sujitha of Christu Kiran School of Thevanapara who boosted my confidence," said Abhijith.

Abhijith has been participating in the Congress since its commencement five years ago. While studying in the Christu Kiran school, Abhijith, along with his friends, envisaged the 'Cheeragramam' project. Abhijith and friends visited 100 houses to enquire whether they had a spade. They could not find it in a single house which they visited. This led to the birth of Cheeragramam, which prompted the people of those houses to cultivate amaranthus on the premises of their houses.

Abhijith views farming as a passion and he is least bothered that he does not get ample time to play like the other children of his age for he has to spend more time for cultivation. "I want to be engaged in farming forever and want to secure a job in the Agriculture Department," he said.

## Farmers' Market a Big Draw in City



It was altogether a different experience for the buyers and sellers. A group of farmers, belonging to the 'Yuvajanakarshaka Sangham', a gathering of more than 300 farmers based in the district, came with their produce to the city on Sunday to participate in the 'Kambolam' organised as part of Balakrishisasthra Congress (Students' Agriculture and Science Congress)

at Kanakakkunnu.

Farmers from Anad, Mariyapuram, Pullanpara and Nandiyode panchayats took part in the Kambolam. There were different types of vegetables and plantains for sale. For the consumers, mostly city dwellers, it was a rare opportunity to buy fresh vegetables which were cultivated organically. "We do not use fertilisers or pesticides," said Harilal, a farmer from Nandiyode who is a member of the farmers' group.

The congress, which concluded on Sunday, also witnessed the valedictory of the agriculture literacy programme organised jointly by State Youth Welfare Board and Agrifriends Krishi Samskarika Vedi, working among students to inculcate interest of farming in them, for 25 selected National Service Scheme volunteers of the district.



Lissy, a teacher at Panavally LPS Alappuzha, bagged the award for the best teacher in the congress. She was chosen for the award for her efforts to teach the students farming through education. Koothuparamba Government High School bagged the award for the best school in agricultural activities and Kottummal HSS in Thiruvananthapuram was chosen as the best school in farm exhibition.

The congress is organised by Agrifriends Krishi Samskarika Vedi in association with the departments of agriculture, education, health and environment and climate change and various agriculture and science agencies.



## Silkworms fed dyed mulberry leaves to produce coloured silk

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**Indian researchers have successfully developed an eco-friendly method to help silkworms spin naturally fluorescent, coloured silk - by feeding them dyed mulberry leaves.**

For some 5,000 years, cultivated silkworms have been spinning luxurious white silk fibres destined for use in the finest clothing. However, current dyeing practices produce wastewater that contains potentially harmful toxins, so scientists are now turning to a new, “greener” dyeing method in which they coax already-coloured fibres from the caterpillars by feeding them dyed leaves.

Anuya Nisal, Kanika Trivedy and colleagues from the National Chemical Laboratory in Pune point out that dyeing textile fabrics is one of today’s most polluting industries. The process requires huge quantities of water for bleaching, washing and rinsing, and it results in a stream of harmful wastewater that needs to be treated effectively before release into the environment, researchers wrote in the study published in the American Chemical Society (ACS)’s journal Sustainable Chemistry & Engineering.

To make the industry greener and more environmentally friendly, researchers have been developing less toxic methods, including feeding dyed leaves to silkworms so they spin coloured - rather than white - cocoons. However, so far, this technique has only been tested with one type of dye, which is too pricey for large-scale production. Thus, the team turned to azo dyes, which are inexpensive and account for more than half of the textile dyes used today. They dipped or sprayed mulberry leaves, the silkworm’s food of choice, with azo dyes to see which ones, when consumed, would transfer to the silk. Of the seven dyes they tested, three were incorporated into the caterpillars’ silk, and none seemed to affect the worms’ growth.

## Cashew body targets to double biz with Saudi Arabia

**Kochi, Jan. 5:** The Cashew Export Promotion Council's hopes have been rekindled after its participation in the Jeddah International Trade Fair recently.

The council is hopeful of doubling cashew business with Saudi Arabia.

With adequate follow up, the quantum of exports to Saudi Arabia could be increased from the current 5,862 tonnes a year valued at Rs 231.34 crore, said T.K. Shahal Hassan Musaliar, Chairman of the council.

According to him, the council's participation in the 25 {+t} {+h} fair has helped to create awareness about Indian cashews among prospective consumers.

The fair attracted businessmen from across the Kingdom and neighbouring Gulf States.

Musaliar also attended a meeting at the Indian Consulate office and discussed various trade issues relating to cashew.

Saudi Arabia is a fastest growing economy in West Asia with potential better than other countries in the region. Exports of cashew kernels from India to the UAE last year were 13,625 tonnes valued at Rs 550.18 crore. With a view to generating interest and educate the advantages of consuming the nuts, he said cashew kernels plain and flavoured were offered as samples to visitors.

The quality and crispness of Indian cashew drew appreciation in general at the stall.

There were also increasing enquiries, especially from buyers of bulk, on the availability of quality and different grades of cashews, he said. Brochure in Arabic and English with general/nutrition information and the council's promotional shopping bags carrying the message "zero cholesterol" were distributed at the venue.

In addition to the council's stall, 11 cashew exporting firms also participated in the fair.

## Scientists, exporters script \$5-billion success story in basmati



**Gaining steam:** Comparison of paddy (first row), milled rice (second row) and cooked rice (third row) across basmati varieties.

**New Delhi, Jan. 5:** Pusa-1121 and now Pusa-1509 are proof of continued vibrancy in the country's indigenous

basmati breeding programme, even as public sector farm research, in general, is seen to be floundering.

One reason for it has to do with the scientists involved in basmati varietal development working in close collaboration with farmers and the exporting community right from the start.

In 2012-13, India exported 3.46 million tonnes (mt) of basmati rice valued at \$3.56 billion. During the current fiscal from April till October, 2.11 mt got shipped out fetching \$2.64 billion. The latter figure could well touch \$5 billion at the end of 2013-14.

### **Private catalyst**

Anil Kumar Mittal, CMD of KRBL Ltd, estimates the share of Pusa-1121 – a variety developed by the Indian Agricultural Research Institute (IARI) – in total basmati exports at “70 to 75 per cent”.

Pusa-1121's commercial success, in fact, owed a lot to KRBL. The company took the initiative to undertake large-scale multiplication of the nucleus seeds supplied by its chief breeder V.P. Singh and test-market the milled rice among prospective customers in West Asia. KRBL further created a special India Gate Classic brand for the new basmati variety that was officially released in 2003. It took another three years for other companies to also start marketing this rice in a big way.

But the above tradition of working closely with the industry goes back even earlier from the 1970s. The focus of IARI scientists, then, was on collecting traditional basmati cultivars from farmers' fields and screening these for uniformity of plant height, maturity and grain quality. It is through such 'pure line selection' that Taraori was identified as a superior traditional variety over Basmati-370, Type-3 and Dehraduni. Taraori gained prominence when United Riceland Ltd, from 1984, began exporting it under the Tilda brand.

### **drawbacks**

But the major problem with the traditional cultivars for all their unique basmati grain attributes – aroma, non-stickiness and elongation upon cooking – was very low paddy yields of around 10 quintals an acre.

“It was because the plants were tall, about 160 cm, and prone to lodging. So, you couldn't apply fertilisers either,” said Ashok K. Singh, who now heads IARI's basmati breeding programme.

The real breakthrough came with the release of Pusa Basmati-1 in 1989.

This was an evolved basmati derived from crossing Taraori with Pusa-150, a high-yielding non-basmati line. The aim here was to combine the distinct grain quality traits of traditional basmati with the high-yielding background of modern dwarf varieties.

Pusa Basmati-1 was only 110 cm in height, yielded 25 quintals/acre, and matured in 140 days compared with 160 days for traditional varieties.

Although the new variety had a milder aroma, its rice grains elongated to roughly 16 mm and recorded four times volume expansion on cooking, as against 14 mm and 3.5 times for Taraori.

By 2000-01, India's basmati exports averaged 0.6-0.7 mt and worth about \$450 million – 60 per cent of it from Pusa Basmati-1.

### **1121 revolution**

The big bang, however, happened with Pusa-1121. It had lower yields (20 quintals) and more plant height (120 cm) than Pusa Basmati-1.

But where it scored was grain elongation – 22 mm on cooking – and volume expansion: A cup of milled rice gave nearly five cups of cooked rice.

“Pusa-1121 was a hit, especially in Iran. The fact you could fill up whole plates with fewer grains was enough to trigger huge demand,” noted Mittal. Pusa-1121 today accounts for 78 per cent of India's total basmati acreage of 1.8 million hectares. The downside: its growing susceptibility to bacterial blight, blast and brown plant hopper attacks.

“We are hoping to address these through Pusa-1509, which also has other advantages such as lower cropping duration, reduced lodging and higher yields. The grain quality is also quite comparable with that of Pusa-1121,” claimed Singh.

IARI has already tied up with some 15 companies – including Kaveri Seeds, Bioseed, Metahelix and KRBL – for multiplication of breeder and foundation seeds of Pusa-1509 under a public-private-partnership programme. “Our objective is to ensure farmers get maximum supplies ahead of the ensuing kharif planting season,” Singh added.



# Frost damages tomato crop, prices rise

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**Karnal, Jan. 5:** Fall in arrivals pushed tomato prices up by Rs 100-200 a quintal on Sunday. In the physical market, around 800 crates (of 25 kg each) of different varieties of tomato arrived at the Karnal vegetable market and were quoted between Rs 1,450 and Rs 2,600 a quintal.

Vikas Sachdeva, a trade expert, told *Business Line* that ground-frost over the last few days has damaged the tomato crop. It was a big loss for farmers as they might not be able to get a fair price for their produce.

About 20,000 hectares of land is under tomato crop in Haryana.

According to the trade experts, tomato prices may increase in coming days but any big rally is unlikely because arrivals from Nasik and steady demand may limit the uptrend. About 40 per cent stock of total arrivals was from Nasik .

Around 1,400 crates of varieties such as 524, Abhilash, Nasik, Himsona and Hybrid arrived. Out of the total arrivals, about 25 per cent stock was of low quality; around 50 per cent medium of superior quality.

Prices of superior quality improved by Rs 200 and quoted at Rs 2,400-2,600 while the prices of Medium quality produce went up by Rs 150 and quoted at 1,800-2,100 while low quality produce was at Rs 1,450-1,600 a quintal, Rs 100 up.

## Pepper markets steady on bearish propaganda

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**Kochi, Jan. 5:** The year that passed by was a rejoicing one for the pepper growers in the country and the prices still continued to be ruling at higher levels on tight availability. Even last week markets remained by and large steady with marginal variations.

This year also the growers will have some thing to cheer about as the output is projected to be less. Of late, the upcountry demand has showed an upsurge but it was met by purchases by inter-State dealers directly from the primary markets through their agents.

Delay in movement of the material by trucks due to foggy weather in north Indian states has compelled many to dispatch pepper by rail on cash-and-carry basis, also allegedly by evading tax. Tamil Nadu-based inter-State dealers were buying through their agents fresh pepper at Rs 490-495 a kg.

But, arrivals continued to remain thin so far sending out the indication that the output would be less as projected by the official sources earlier. This phenomenon has aided the prices to stay above Rs 500 for both garbled and non-garbled.

The pepper prices hit the highest ever levels in 2013 because of the demand-supply mismatch in India and the world market. Spot prices last weekend remained at Rs 50,100 (ungarbled) and Rs 52,100 (garbled) a quintal down by Rs 100 from the previous Saturday. In 2014 also the Indian markets are expected to remain firmer in the first quarter. Indian production in 2014 is estimated at 45,000 tonnes against a projected domestic consumption of 48,300 tonnes.

The stock brought forward from last year is estimated to be below 10,000 tonnes. Thus, the availability is likely to be much less in 2014, keeping the prices firmer. Indian production in 2013 is estimated at 58,000 tonnes.

Indian exports during April-September 2013 stood at 10,200 tonnes valued at Rs 423 crore at the unit value of Rs 414.71 a kg. Whereas, it was at 7,515 tonnes valued at Rs 309.6 crore at the unit value of Rs 411.98 a kg during the first six months of 2012-13.

Meanwhile, local arms of multinational companies were allegedly making propaganda that the investors stocks held in the warehouses would be released by the food safety authorities and that would be available for sale in the market. This move is aimed at pushing the prices down, they claimed.

Fall in prices coupled with weakening of the rupee pushed the Indian export price to \$8,600 cf Europe and \$8,850 tonne cf for the US. However, an overseas report said MG1 eto treated based on the exchange/physical is quoted around \$9,150-9,250.

However, "material that is being released from the reprocessed 'Oil dressed' stocks might be as low as \$8,300-75. But, how much is available and how it will be released remains to be seen.

In the overseas markets all buyers are expected to return from holidays on Monday and "only then we will be able to fully gauge the market.

Chinese New Year holidays to begin from January 28 in Vietnam and Vietnam farmers are anxious to take advantage of high prices and the need for cash for the holidays", the report said. In Brazil southern crop is being harvested now in Espirito Santos which is expected to be 3000 tonnes and is being sold limited quantities below \$8,000 a tonne cf Baltimore.

### **World Pepper Situation**

According to the International Pepper Community (IPC), a decrease in production by 6,300 tonnes is likely in 2014, due to anticipated drastic fall of production in India. Besides, the domestic consumption is expected to be higher than last year.

"As a result, export and stock carryover would be lower. Under this scenario, the price is expected to remain high till the new crop from Vietnam arrives the market," S. Kannan, Executive Director, IPC, told *Business Line* from Jakarta.

## Mixed trend at Kochi tea sale

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**Kochi, Jan. 5:** A mixed trend persisted for almost all varieties at the Kochi Tea auction. In sale no 53, the quantity on offer in CTC dust grades was 14,31,500 kg.

With a good demand, the market opened on a steady to firm level and sometimes dearer by Rs 2-3 a kg for the powdery grades. However, as the sale progressed, the market improved further for the good liquoring varieties. The quantity on offer in the orthodox dust was 11,000 kg and the demand was less. A small quantity of orthodox dust sold was absorbed by exporters and upcountry buyers. In the best CTC dusts, PD varieties quoted Rs 94/111, RD grades fetched Rs 100/140, SRD ruled at Rs 111/150 and SFD stood at Rs 120/171.

The leaf sale also witnessed a mixed trend and the quantity on offer in orthodox grades was 208,000 kg. With a less demand, the market for select best Nilgiri whole leaf barely remained steady. Broken and tippy grades were lower with longer margins of Rs 10-15.

The quantity on offer in CTC grades was 73,000 kg. The market for good liquoring teas was barely remained steady. Others were irregular and lower by Rs 3-5.

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