

DATE:09.01.2015

# THE HINDU

## Testing the waters for gardening



The Hindu

Vijayakumar Narayanan at his aquaponics farm at his home in Palakkad

*Vijayakumar Narayanan says 'aquaponics', a system of cultivation, is the future of agriculture*

The premise that one needs ground for a garden does not hold water anymore. Not if you are into aquaponics! And to help you take to it as a duck to water is Vijayakumar Narayanan.

“Aquaponics is the future of agriculture,” Vijayakumar Narayanan says. In fact, he calls himself an ‘Aquaponics Futurist’, having successfully experimented with the aquaponics system of farming on his land. Vijayakumar is now in the city with the working model of an aquaponics farm that will be exhibited at the Flower Show that begins today at Kanakakkunnu and Suryakanthi grounds.

Under his guidance, aquaponics farms have come up in Idukki, Ernakulam, Kozhikode, Telangana, and Coimbatore, one of them being the farm of actor Sreenivasan.

He trains people in this method of cultivation which integrates aquaculture (growing fish) and hydroponic (growing soil-less plants) systems. His confidence stems from his farm – Nanniode Aquaponics Research and Development Centre on two cents of land at his home Nanniode in Palakkad district. “You can have an aquaponics system on an area as small as 50 sq ft. It is a double treat, since you can use the fish and the produce from the system. In larger systems, you can raise an income from both,” says 44-year-old Vijayakumar.

Vijayakumar learnt about aquaponics via Internet. He was a teacher with the Army Education Corps before he went to Muscat to work in a BPO and returned to Kerala with no concrete plans about his next step.

But things changed when the huge mango tree in his backyard got uprooted. He didn't know what to do with the huge pit left behind. “We made a swimming pool, but got bored after a week. I searched on the Internet to find what we could do with this water body and that's when I chanced upon aquaponics,” he says.

He takes pride in the fact that our aquaponic systems are more affordable when compared to those installed in foreign countries. “Even those living in a one bed room flat can have pesticide free and organic food,” he says.

Visit his Facebook page <https://www.facebook.com/aquaponicsfuturist> or contact 8129219282.

### **Highlights**

Herbs, greens, vegetables, fruit bearing and flowering plants can be grown in the system.

A small scale aquaponic unit meant for a family costs Rs. 50,000. If you can breed 200 kg fish, you can harvest 800 kg vegetables, per annum.

Though Tilapia is commonly bred in the system, these days varieties such as sea bass, prawns, cat fish, mullet and fresh water mussels can also be bred.

### **Floral feast**

Flower Show is back after a gap of four years and the organisers promise that it would be the biggest of its kind. “We have the participation of a number of departments. Check out the wide selection of roses, nearly 200 varieties, cut

flower arrangement, bonsais, nearly 5,000 rare plants and polyhouses, ” says G. Raghavan Pillai, convener of the exhibition committee. Kerala Agri-Horticultural Society, Kerala Rose Society, City Corporation, State Horticulture Mission, Departments of Agriculture and Tourism, have joined hands to organise the show that is on till January 18. Time: 9 a.m. to 8 p.m.

**‘Work hard to achieve goal’**



K. Ramasamy, Vice-Chancellor of Tamil Nadu Agricultural University, releasing a book at the college day celebrations of FCRI in Tuticorin on Wednesday.— Photo: N. Rajesh

Fisheries College and Research Institute (FCRI), Tuticorin, a constituent college of Tamil Nadu Fisheries University (TNFU), celebrated college day here on Wednesday evening. G. Sugumar, Dean (in-charge), welcomed the gathering.

Vice-Chancellor of Tamil Nadu Agricultural University K. Ramasamy, in his address, appealed to the students to study well and work hard to achieve their goals.

Vice-Chancellor of TNFU Baskaran Manimaran presided over the programme.

K. Karal Marx, vice-president of students’ association, presented the annual report of activities carried out.

The FCRI students enthralled the audience with their performances.

### **Events**

Onstage events such as classical solo, western solo, adzap, skit and talent show were organised.

Besides, offstage events, including quiz, face painting, cooking without fire, vegetable and fruit carving, flower arrangement, painting, elocution, mehendi, hair dressing, photography, poetry writing and presentation, were also organised.

### **Award**

S. Jerusha, final-year student of Bachelor of Fisheries Science (B.F.Sc), received the best student award.

While Tamil Selvan, a second-year student of B.F.Sc won Mr Fisheries title, Miss Fisheries title was bagged by Nandhini of the same class.

The third-year students of the course won the overall runners shield and the second-year students secured the winner's trophy.

P. Pasupathi, general secretary of the students' association. proposed a vote of thanks.

### **A complete meal**

*While ven pongal is a popular breakfast in Tamil Nadu, the sweet pongal or chakara pongal is traditionally made during the harvest festival*



No sumptuous meal, in most Indian homes, is complete without rice. The diet-conscious may give it a go-by, but even they will agree that dal-chawal or rasam-rice (with a drop of ghee) is one of the tastiest dishes in the world.

The most important crop in India, an agriculture-based civilisation, is rice. In fact, rice is a synonym for food here and archaeological evidence dates rice cultivation back to 6,000-9,000 years. Did you know that newly-harvested rice was never eaten in days gone by? It was stored for at least three years before it was considered healthy.

It is quite likely that our mothers and grandmothers knew a great deal about what nutritionists all over the world are propounding today — combine complex carbohydrates with protein for a complete meal. Legumes (lentils, beans and peas included) are a wonderful source of protein, calcium, phosphorous, vitamin B and iron. They are also rich in dietary fibre, which helps in lowering cholesterol. And when we combine rice and legumes, we arrive at a dish linked with the South Indian festival, Pongal. It is interesting to note that the dish must have evolved keeping nutrition in mind, though not much is known about its origins. Pongal literally means ‘boiling over’ of milk, rice and lentils.

Traditionally, this dish is made during the harvest festival which falls in mid-January. Today, however, the salted version is a popular breakfast dish served in various avatars across the country.

In many homes, green gram or husked moong dal — which is not only nourishing, but also easy to digest — is used to make the dish. Its essential nature is alkaline, so much so that Ayurveda categorises it as a “cooling food.”

For the sweet pongal, an essential ingredient is jaggery, a derivative of sugarcane. It offers nutrients like iron, calcium and vitamin B2. So, add rice, moong dal, jaggery, some nuts, raisins and elaichi, and voila, you have chakkara pongal!

### **Social media the next buzz for farming**

*‘Plans being readied to make Chittoor horticulture hub in five years’*



Chittoor Collector Siddharth Jain checking a mango food product during the horticulture workshop at Vadamalapeta near Puttur on Thursday .- PHOTO: By Arrangement

Collector Siddharth Jain has asserted that proposals were being prepared to transform the district into a horticulture hub in the coming five years.

Addressing mango growers in Vadamalapeta mandal headquarters near Puttur on Thursday, the Collector said the district administration would take to the social media to bridge the gap between farmers and allied departments of agriculture, adding that Chittoor district had a big potential for quality produce of mangoes, papaya, sugarcane and sericulture.

Mr. Jain said that despite scientific revolution in the field of agriculture, farmers were still reluctant to utilise the innovations, leading to disappointing yields.

“The State government is all set to provide the best ambiance to farmers, taking the scientific knowledge to their doorsteps. It is high time all farmers should register their mobile numbers with the departments concerned to receive information through social networks on latest trends in farming, including fighting pests, water management and fertilizers. The government is ready to provide the best marketing facilities and pack houses, which will effectively curb the menace of middlemen,” Mr Jain said.

He asked officials to expedite the process of holding sessions with farmers on new crops, drip irrigation, power supply, subsidy and related aspects. Scientists from Indian Institute of Horticulture Research, Bangalore and Citrus Research Project, Tirupati; took part in the programme.

### **KRIBHCO's neem-coated urea available**

*It is 10 to 15 p.c. more efficient than conventional urea*

A day after the Centre lifted the 35 per cent cap on production of neem-coated urea, the country's premier fertilizer-producing co-operative, Krishak Bharati Co-operative Ltd., is set to launch this product in Bengaluru on Friday.

KRIBHCO State Marketing Manager H.E. Mariswamy told *The Hindu* that the product — KRIBHCO neem-coated urea — will be launched by Union Minister for Chemicals and Fertilizers Ananth Kumar in the presence of Union

Agriculture Minister Radha Mohan Singh at the University of Agricultural Sciences-Bengaluru.

Explaining the advantages of eco-friendly urea, Professor C.A. Srinivasamurthy of the UAS-B's Soil Sciences and Agriculture Chemistry, said this product is 10 to 15 per cent more efficient .

### **Tobacco ryots to be felicitated**

Thirty farmers cultivating Flue Cured Virginia tobacco using the best agricultural practices will be felicitated at the 11th formation day celebrations of Tobacco Board being held here at Indian Tobacco Association (ITA) hall at Guntur on Friday.

The Board would also felicitate best traders, dealers, buyer and packers and present them with a cash award of Rs.5,000 besides a certificate of appreciation.

### **Farmers submit affidavits**

*They have not raised any objection on land pooling*



Farmers giving consent letter for land pooling to Ministers P. Narayana and P. Pulla Rao at Malkapuram village on Thursday. MLAs T. Sravan Kumar and N. Anand Babu are seen.— Photo: T. Vijaya Kumar

Even as the police picket in the villages that witnessed burning of farm fields and equipment continues, farmers of the river front villages started submitting signed affidavits giving their consent to land pooling at a meeting attended by Municipal Administration Minister P. Narayana.

The absence of any discordant note from farmers was surprising given that they had offered spirited resistance to land pooling till recently. There was a series of fire in six villages. The residents alleged that a massive police force swooped on

the six villages, setting up check points and farmers were picked up on the pretext of investigation.

The situation has changed ever since with farmers not raising any questions on Thursday on land pooling. Over 150 farmers attended the meetings at Malkapuram, Rayapudi and Mandhadam and said they would give away their lands as part of land pooling.

Buoyed by the farmers' response, the Minister said the State government was keen to set up a temporary capital by the end of June.

The identification of the site would be decided by January 14 and an announcement would be made by Chief Minister N. Chandrababu Naidu when he was expected to visit Thullur for Sankranthi festival.

Short term tenders would be invited for construction of a temporary capital and the work would begin by the end of the month, he said. The government would acquire 30,000 acres in the first phase which would be divided into five sectors. Minister for Agriculture P. Pulla Rao too allayed concerns of the farmers and said the land pooling was the best available option and promised farmers to extend all support.

Collector Kantilal Dande said farmers who do not have land records or pass books could obtain them from the competent authorities residing in the villages. Instructions were given to provide manual pass books, he said.

### **Farmers' Day on January 12**

A district-level 'Farmers Day' will be celebrated under the auspices of Agriculture Department at Kudumiyamalai near here on January 12.

In a release here on Thursday, K.M. Shajahan, Joint Director of Agriculture, said that a special seminar on "conventional agricultural produce" and exhibition on various agricultural produce will form part of the celebrations. — Special Correspondent.

### **Rs. 1.02 crore sanctioned for subsidy-based farm mechanisation**

A sum of Rs. 1.02 crore has been sanctioned under the National Agriculture Development Programme (NADP) to the district this financial year for improving mechanisation in farming, said S. Ganesh, Collector. Addressing beneficiaries of NADP at a function to mark the distribution of farm implements



here on Thursday, he said that farm mechanisation aimed at enhancing quality in agricultural operation. A target of 209 farmers had been fixed for the implementation of the subsidy-based programme this financial year.

Subsidy was available for the purchase of power sprayer, trans-planter, and other implements.

Earlier, the Collector distributed the implements worth Rs. 29.23 lakh to 21 farmers.

Loganathan, Superintending Engineer, Agricultural Engineering Department, the subsidy for the implements distributed today stood at Rs. 13.29 lakh.

### **Foundation seeds of new rice variety ready**

“Anna (R) 4”, a new drought-resistant paddy variety developed and released by Parakamudi-based Agriculture Research Station a couple of years ago, is all set to receive certified seed tag as the Seed Certification Department has successfully developed foundation seeds of the variety.

After scientists at the research station developed nuclear seeds of the high-yielding short-duration crop which is best suited for drought-prone Ramanathapuram district, the variety was raised in breeder seed farms last year, and developed as foundation seeds this year and linked in the seed chain.

“It has crossed crucial phases to be raised as foundation seed and it will be raised on about 100 hectares next year to be tagged as certified seeds,” said Assistant Director of Seed Certification S.S. Shaiek Abdullah.

P. Ramakrishnan, a progressive farmer, raised the foundation seeds on two acres at his farm in N. Valayanandal in Paramakudi block under the supervision of Seed Certification Department officials.

Mr Abdullah said the department would procure the entire quantity of paddy (seeds) – about five tonnes. After standardisation, the seeds would be distributed to farmers as foundation seeds during 2015-16 for producing certified seeds, he said.

“Anna (R) 4, the white, long, slender rice, weighing 25.7 grams per 1,000 grains, is expected to do well in the market,” Mr Abdullah said. It would become an alternative to the existing short-duration (105 days) crops such as IR 36 and ADT 36, which were released in 1982.

Besides, the farmers were cultivating superfine paddy varieties NLR 34449 and BPT 5404 in Tiruvadana and R.S. Mangalam blocks, he added.

***“It has crossed crucial phases to be raised as foundation seed and it will be raised on about 100 hectares next year to be tagged as certified seeds.”***

### **Silent revolution in producing millets despite water shortage**

*Farmers from dry Veda sandur block have turned role models*



Agriculture officials inspecting fox tail millet farm at Thoppupatti in Dindigul district on Thursday.— PHOTO: G. KARTHIKEYAN.

Braving poor rain and shortage of water, small farmers in Thoppupatti, Thoddanaickanur and nearby villages in Veda sandur block have started a silent revolution in minor millets production.

Thoppupatti and Thoddanaickanur are some of the dry belts of Veda sandur forecasting a bleak future to farmers. Acute drought and monsoon failure for three consecutive years forced farmers to abandon farm activities and shift to other works for survival. At this juncture, minor millets came in handy to a few tireless farmers.

R. Manoharan of Thoppupatti was the first to spearhead minor millet revolution.

He raised fox tail millet on one acre. Yield in the last season was 800 kg that brought him the best farmer award with a cash prize of Rs 10,000. His success quickly snowballed into a revolution in Thoppupatti area. The farmers formed a minor millet cluster under the banner of Veda sandur Block Millet Producers' Association to raise minor millets in large scale. Now, they have become certified seed producers of CO 7 Thinai (fox tail millet) to the government.

Cluster formation has also brought several benefits. To encourage them, the government has agreed to offer destoner-cum-grading-cum aspirator and de-huller machines worth Rs 2.2 lakh to this cluster free of cost. With this facility, they can tap retail market directly for better margin, says Deputy Director for Agriculture M. Thangasamy.

“We have plans to set up 430 demonstration plots for ‘samai’, ‘varagu’, ‘kudiraivaali’ and ‘thinai’ in the district before March-end to promote minor millets. We expect a yield of 800 kg at this village this season,” he hopes.

Seeds collected from them will be utilised to propagate millet cultivation in Karur, Theni, Tirunelveli, Tirupur and Sivaganga, besides Dindigul districts. The government offers Rs 40 per kg of seed and Rs 10 for packing expenses, says P. Suruliappan, Assistant Director of Agriculture.

Another progressive farmer, K. Ravi, has raised kudiraivaali, varagu and fox tail millet on five acres. Kudiraivaali can be harvested thrice from single plant in 25 days’ gap. More branches will form in single plant, he adds. The total investment is just Rs 5,000 for thinai and return is Rs 32,000 per acre in 90 days, says Association president S. Appavu.

### **High moisture content in ragi hits Bargur farmers**

High moisture content in ragi crop, the mainstay of farmers in Bargur hills, has dashed all their hopes for economic emancipation, after successive droughts for two years.

Helped by favourable monsoon, farmers, most of them in heavy debts, cultivated the crop with enormous eagerness. But, untimely rain last month drenched the harvested crops left by farmers on the field to dry. In very many fields, even sprouts had appeared, according to Ganesan, a cultivator who had also suffered heavy loss.

Sadly for them, the damage to the ragi crop happened at a time when it commanded a price of Rs. 2,500 for a 100 kg bag, considered remunerative by farmers. Letting harvested ragi crop to dry on the fields has been a traditional practice. Farmers stock the dried plants at their homes and carry out need-based threshing for their self-consumption over the year. Ragi, the only source of nutrition for the tribal people, is cultivated in over 1,600 hectares on the Bargur hills, and nearly half of the harvested crop suffered damage due to the untimely rain, farmers say.

Official sources said the extent of damaged crop was much lesser, citing a spot assessment carried out by a team of senior officials recently following representations by affected farmers to the district administration for relief.

Officials acknowledge the problems caused by untimely rain, but maintain that the loss is not much. Not all farmers who had left the harvested ragi plants on the fields. Most of them had taken the crop home and safeguarded the plants from the rain, according to official sources.

The productivity was good and the farmers were initiated into sowing high-yielding varieties under the Millet Mission Scheme that entails provision of attractive subsidy and supply of bio fertilizers, the sources said.

Nevertheless, ragi cultivators who had suffered losses need to be identified and compensated suitably for sustaining their future dependence on agriculture for survival, local farmers emphasise.

***Officials say loss is not much***

***Farmers seek compensation***

**National-level science contest attracts over 150 models**

*Students, science enthusiasts flock to Jignyasa in Hubballi*



Students explaining about their multipurpose power generation model at Jignyasa, a national-level science model contest, in Hubballi on Thursday.—  
Photo: Kiran Bakale

Jignyasa, a national-level science model competition, that began at Nehru Stadium in Hubballi on Wednesday is attracting students and science enthusiasts in large numbers.

The second day of the national-level event saw students lining up in front of the venue to have a look at the various science exhibits.

As they moved on watching the various models, the contestants enthusiastically explained to them the basic concepts on which their models worked.

More than 400 students from 18 States have taken part in the event and over 150 models are displayed.

The models are based on different concepts in physics, chemistry, biology, mathematics and also those regarding conventional and non-conventional energy sources.

Among the highlights include models on converting mechanical and wind energy to electrical energy, innovative water pump and manual grinder, wireless energy transfer, automatic agriculture pump for drawing water, fire-resistant structure, wind mobile charger, production of electricity from waste, solar cycle for generating power, vertical car parking system, multipurpose power generation, farmer-friendly solar three-in-one farm equipment.

Roshan Pinto, a teacher from Bantwal in Dakshin Kannada, displayed a wind mobile charger made from a DC motor, a small wind turbine, a stand regulator IC and a mobile charger.

Mr. Roshan, who spent Rs. 200 on the model, said the model will provide low-cost portable, continuous energy. The innovative cycle pump of Prathyush A. Heebbar of Sudana Residential School, Puttur, was the centre of attraction at the exhibition.

The pump designed using an old bicycle, cycle pump and valves can pump water to an overhead tank using mechanical energy.

According to the organisers over 5,000 persons, mainly students, have come for the event so far and the overwhelming reaction was that such events were necessary to motivate students to come up with ideas that might be helpful to the society.

In addition to the exhibits, the students have been provided a platform to showcase their talents during the event.

The event will conclude on Friday evening and the best models would be rewarded with cash prizes.

## **Vaccine for bluetongue disease launched**

*The disease affects lakhs of sheep, goats and cattle countrywide*

The Gachibowli facility of Indian Immunologicals Limited (IIL) will counter the deadly ‘bluetongue’ disease that affects lakhs of sheep, goats and cattle countrywide. On Thursday, the ‘Raksha Blu’ vaccine was launched with an aim to minimise the economic loss of the animal farming community due to the disease. The vaccine is a result of the collaborations between IIL, TANUVAS (Tamil Nadu University of Veterinary and Animal Sciences) and ICAR (Indian Council of Agricultural Research) that stretched over a period of three years. Priced at Rs. 5 for the farmers, the vaccine has been developed to protect the animals against five strains of the ‘bluetongue’ virus prevalent in the country.

Speaking at the launch, K.V. Balasubramaniam, Managing Director, IIL said that the country tops in the animal diseases and it was important to involve the rural community in the various initiatives to improve the situation. The chief guest of the event and Additional Director General of ICAR, Gaya Prasad, said that the vaccine was very important in the Indian context because the country has a population of 70 million sheep.

## **Special package sought for farmers**

The District Agriculture Department has sought a special relief package worth Rs.87,30,450 for paddy farmers who had suffered a huge post-harvest loss owing to the unseasonal rain that lashed many parts of the district during the ‘Naja’(winter crop) harvesting season last month.

In a letter to the State government, Principal Agriculture officer (in-charge) M. Lakshmi Devi said that the unseasonal rainfall in various parts of the district from December 8 to December 15 last had caused a loss to the tune of Rs.1.55 crore to paddy crops that had been cultivated on 388.42 hectares of land under 140 Padasekhara samitis in the district.


Though the rain-related calamities had affected as many as 1,033 farmers, they were yet to get any compensation owing to the current norms set by the government.

According to the norms, the farmers who have insured their crops will get a compensation of Rs.12,500 a hectare, if any crop loss occurs owing to natural calamity till the harvesting stage.

Farmers who have not insured their crops are also entitled to a compensation of Rs.10,000 a hectare. But the loss to the standing crop only will be considered for compensation, not the post-harvest loss. Hence, a favourable decision of the Cabinet was required to provide compensation to farmers, Ms. Lakshmi Devi said in the letter.

## Chemical fertilizers to be banned from 2016

*Implementation in a phased manner: Mohanan*

<ul style="list-style-type: none"> <li>▪ State switches over to <b>organic farming</b> by 2016</li> <li>▪ <b>20 panchayats</b> to become organic by April</li> </ul> <p>Procurement of farm produce in 100 agriculture offices across the State</p> <p>Bid to <b>promote farming</b> among younger generations</p>	<p><b>TOWARDS ORGANIC KERALA</b></p> <p><b>BAN IN A PHASED MANNER FROM NEXT YEAR</b></p> 	<p><b>BENEFITS</b></p> <ul style="list-style-type: none"> <li>▪ Farming becomes rewarding</li> <li>▪ Sustains soil fertility</li> <li>▪ Protects biodiversity</li> <li>▪ Promotes water conservation</li> <li>▪ Uses renewable energy resources</li> <li>▪ Reduces the cost of production</li> </ul>
--	---	--

Agriculture Minister K.P. Mohanan has said that the government is seriously considering a ban on use of chemical fertilizers in the State.

He was inaugurating an exhibition-cum-sale of dairy, agricultural, and industrial products organised by the Chengannur block panchayat here on Wednesday evening.

Mr. Mohanan said the government was mulling over implementing the ban in a phased manner from next year.

He said a study conducted by the Agriculture Department had found that 96 per cent of the vegetables were cultivated using organic manure.

## Fully organic State

The proposed move would be linked with steps being taken to ensure that the State switched over to organic farming completely by 2016. As many as 20 panchayats would be declared fully organic panchayats by April, he said.

He said the department had begun the procurement of agricultural products taking into consideration the difficulty of farmers in finding markets. Such products were being procured in 100 agriculture offices across the State.

### **Popular among youth**

He said the State government was focussing on making cultivation popular among the younger generation. A significant progress in this regard had been visible since the distribution of vegetable seeds among schoolchildren in 2012.

He said the foray of political organisations into the farm sector was beneficial for the country. In fact, most parties had come into existence with the aim of uplift of those engaged in agriculture.

P.C. Vishnunath, MLA, presided over the function. Chengannur block panchayat president Bindu Kaladharan; Chengannur municipal chairperson Valsamma Abraham; district panchayat members Omanakutty Amma and K. Anandavalli Amma; Agriculture Department assistant director Suja George; and Block Development Officer V.J. Sreekumar participated in the inaugural function.

### **‘Demand-driven innovation key to fighting poverty’**

“Inclusive and demand-driven innovation is the key to fighting poverty, eradicating hunger and malnutrition, and providing environmentally-sustainable solutions to the most pressing challenges faced by smallholder farmers in the dry lands,” opined David Bergvinson, Director General of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), who took charge on January 1.

“In tackling poverty in the dry lands of Asia and sub-Saharan Africa, innovation has to be driven by the demands of farmers and markets, and we must recognise the important role of women and youth to enable inclusive market-oriented development,” he emphasised.

Addressing the senior management, scientists and staff at the ICRISAT global headquarters in Hyderabad, Dr. Bergvinson said: “I am highly committed to the success of ICRISAT. We are on a journey together to lift smallholder farmers in the dry lands out of poverty by leveraging the very best that science and innovation can offer them.”



## **Rich experience**

Prior to his appointment as Director General of ICRISAT, Dr. Bergvinson was with the Bill & Melinda Gates Foundation in Seattle, USA, as Senior Program Officer, Crop Value Chains and Digital Design for Agriculture Development.

## **Hybrid orchids to be on show**

: The 40<sup>th</sup> Flower Show, organised jointly by the Department of Tourism, Department of Agriculture, city Corporation, Kerala Rose Society and Kerala Agri-Horticultural Society, will begin at the Kanakakunnu Palace on Friday with the formal inauguration by Governor P. Sathasivam. The highlight of this year's show will be the presence of Pop Diana, Arantha and Sonia, all hybrid varieties of orchid. Tulip, Anthurium, Alstroemeria and liatris flowers imported from Thailand, Holland, and Bangkok would form part of the show, a release said.

An aqua show featuring a variety of ornamental fishes would be organised on the premises with the help of the Central Marine Fisheries Research Institute, the Fisheries Department and Matsyafed.

## **Coffee cultivation to be extended to 4,000 hectares**



Coffee Board Chairman Jawaid Akthar visiting a demonstration plot of the Coffee Board at Chundale in Wayanad on Thursday.

Coffee Board Chairman Jawaid Akthar has said the Board is planning to extend coffee cultivation to 4,000 hectares during the current fiscal.

He was addressing the media here on Thursday after inaugurating a day-long programme to acquaint coffee growers with modern agriculture practices at the Regional Coffee Research Station (RCRS) at Chundale. The Board had identified 1,000 hectares in the traditional coffee growing regions of Kerala, Karnataka and Tamil Nadu and 3,000 hectares in non-conventional coffee

cultivating regions of Orissa and north-eastern States for the purpose. The Board would provide 25 per cent subsidy to the new growers, he said.

Many tribesmen in the North East and conventional arecanut farmers in Karnataka had shown interest in cultivating coffee, Mr. Akthar said.

As part of improving the productivity of coffee plantations in the country, the Board focussed on developing a drought tolerant Robusta coffee variety for Wayanad and intensified research to tackle the increasing pest attack in the Arabica variety, he said.

The Board would put pressure on the Union Commerce Ministry to execute a price stabilisation mechanism for the domestic farmers to counter the fluctuating prices in the international markets, he added.

Admission to the flower and aquarium show will be from 9 a.m. till 1 p.m. and from 3 p.m. till 9 p.m. The ticket rates will be Rs.20 a person in the morning and Rs.30 in the evening. School children will be charged Rs.10. Already 20,000 tickets have been distributed to students through schools.

Contests would be held in various categories. In all, 52 rolling trophies in the name of institutions and cash prizes await winners in various events.

### **Biodiversity awards**

The Kerala State Biodiversity Board has invited applications for biodiversity awards in different categories for the year 2014. Awards will be given for the best biodiversity farmer, conservationist, conservator of traditional seeds and crops, protector of agricultural folk wisdom and for journalists (TV and Press), who write and report/film for the cause of biodiversity conservation.

Awards will also be given for the best biodiversity clubs, environmental organisations and educational institutions with green activities among other categories. Details and application forms can be downloaded from the board's site [www.keralabiodiversity.org](http://www.keralabiodiversity.org).

## Post-monsoon coffee production forecast at 3.31 lakh tonnes



Coffee areas experienced continuous heavy rainfall, in Karnataka.— File Photo

After taking into consideration the post-blossom coffee loss, the Coffee Board has placed the post-monsoon crop estimate for 2014-15 at 3,31,000 tonnes , according to statistics released by the board on Thursday.

There is a reduction of 13,750 tonnes (3.99 per cent) compared to the crop assessments carried out for 2014-15 during the post-blossom stage, which was 3,44,750 tonnes. Initially, the post-blossom estimate was put at an all-time high of 3,50,000 tonnes for the year, but owing to delay in receiving backing showers, many coffee areas in the State witnessed an abnormally long dry period. Due to this, the Arabica crop saw an increased white stem borer infestation, resulting in heavy losses.

Of the total estimate of 3,31,000 tonnes, the Arabica production is estimated at 99,600 tonnes, while that of Robusta is 2,31,400 tonnes. The Arabica production estimate has shown a decline of 5,900 tonnes (5.59 p.c.) while Robusta declined by 7,850 tonnes (3.28 p.c.) over the post-blossom estimate of 2014-15.

Similar to last year, after witnessing a long period of drought (after receiving backing showers), the coffee areas experienced continuous heavy rainfall especially in Karnataka, resulting in soil saturation and wet feet conditions. Defoliation and incidences of stalk rot and black rot led to crop losses, especially in Robusta in Karnataka.

When compared to the final estimate of 2013-14 (which was placed at 3,04,500 tonnes), the present post-monsoon estimate (2014-15) shows an overall increase of 26,500 tonnes (8.7 p.c.). However, in terms of Arabica, the production estimate has shown a marginal decline of 2,600 tonnes, while Robusta has shown an increase of 29,100 tonnes.

### **Foundation seeds of new rice variety ready**

“Anna (R) 4”, a new drought-resistant paddy variety developed and released by Parakamudi-based Agriculture Research Station a couple of years ago, is all set to receive certified seed tag as the Seed Certification Department has successfully developed foundation seeds of the variety.

After scientists at the research station developed nuclear seeds of the high-yielding short-duration crop which is best suited for drought-prone Ramanathapuram district, the variety was raised in breeder seed farms last year, and developed as foundation seeds this year and linked in the seed chain.

“It has crossed crucial phases to be raised as foundation seed and it will be raised on about 100 hectares next year to be tagged as certified seeds,” said Assistant Director of Seed Certification S.S. Shaiek Abdullah.

P. Ramakrishnan, a progressive farmer, raised the foundation seeds on two acres at his farm in N. Valayanendal in Paramakudi block under the supervision of Seed Certification Department officials.

Mr Abdullah said the department would procure the entire quantity of paddy (seeds) – about five tonnes. After standardisation, the seeds would be distributed to farmers as foundation seeds during 2015-16 for producing certified seeds, he said.

“Anna (R) 4, the white, long, slender rice, weighing 25.7 grams per 1,000 grains, is expected to do well in the market,” Mr Abdullah said. It would become an alternative to the existing short-duration (105 days) crops such as IR 36 and ADT 36, which were released in 1982.

Besides, the farmers were cultivating superfine paddy varieties NLR 34449 and BPT 5404 in Tiruvadana and R.S. Mangalam blocks, he added.

***“It has crossed crucial phases to be raised as foundation seed and it will be raised on about 100 hectares next year to be tagged as certified seeds.”***

## Farmers go bananas in Byndoor, Cherkady



The nendranbale variety of banana plants being cultivated at a field at Byndoor in Udupi district.

Byndoor and Cherkady are all set to emerge as centres of banana production in Udupi district as farmers have taken to the cultivation of ‘nendranbale’ (plantain) and ‘puttabale’ (*poovan* varieties) bananas in these two villages, respectively.

Though many farmers have cultivated bananas in these places earlier, it got a further boost after the Department of Horticulture decided to give subsidies and better techniques for cultivation of these two varieties of bananas last year under the Integrated Horticulture Development Scheme.

The department expanded the area under nendranbale cultivation to 101 acres in Byndoor by creating a cluster of 62 farmers and providing them subsidy to the tune of Rs. 37.92 lakh. The department pushed puttabale cultivation by 50 acres in Cherkady village by giving subsidy of Rs. 19.75 lakh to 43 farmers.

This strategy has paid off and the farmers have got good returns this year. The nendranbale farmers have been selling their produce not just in Mangaluru but also in Kerala and Mumbai.

Aliyas Abraham, a farmer, who grows 2,500 nendranbale plants in 3.5 acres of land in Byndoor, said he spent about Rs. 150 per plant for water, fertilizers and maintenance. Each plant yielded about 20 kg of bananas. “I make a profit of Rs. 650 per plant. If there are no strong winds or unseasonal rains, I should make a profit of about Rs. 13.5 lakh,” he said.

Another farmer Manjayya Poojary from Yelajit near Byndoor, who cultivated bananas in five acres, said the departmental officials had shown him techniques

of getting better yield and proper usage of fertilizers. “This has improved the yield,” he said.

Govinda Marathi, who cultivated bananas in his 2.8 acres in Byndoor, said he had made a clean profit of Rs. 1.2 lakh. “I could have made more money. But I was cultivating it for the first time,” he said.

The story is no different in Cherkady. Baburaya Acharya, a farmer who cultivated puttabale in an acre of land, said he had got 400 kg of banana from the present crop. He hoped to get 600 kg of banana from the next crop. He sold puttabale in the local markets, he said.

According to Reshma, Assistant Horticulture Officer in-charge, at Farmers Contact Centre, Byndoor, said farmers were earlier reluctant to use drip irrigation for banana cultivation. “But after a lot of coaxing, they used it. After seeing the results, they got hooked to it,” he said.

Besides proper care to the crop, the other factors which affect the yield are improper use of water, strong winds, unseasonal rains and wild animals. “Ninety banana plants in my field were destroyed by wild boars recently,” said Mr. Marathi.

***They are cultivating ‘nendranbale’ and ‘puttabale’ under Integrated Horticulture Department Scheme***



### **Eating almonds decreases belly fat**



Including almonds in your daily diet could help reduce belly fat, a well-established heart disease risk factor, says a study. (Source: Thinkstock Images)

Including almonds in your daily diet could help reduce belly fat, a well-established heart disease risk factor, says a study.

A daily snack of 1.5 ounces (42 gram) of almonds instead of a high-carbohydrate muffin, eaten as part of an overall healthy diet, improved a number of heart disease risk factors in study participants.

“Our research found that substituting almonds for a high-carbohydrate snack improved numerous heart health risk factors, including the new finding that eating almonds reduced belly fat,” said lead researcher of the study Claire Berryman from Pennsylvania State University.

“Choosing almonds as a snack may be a simple way to help fight the onset of metabolic and cardiovascular diseases,” Berryman said.

The twelve-week, randomised, controlled clinical study, was conducted in 52 overweight, middle-aged adults who had high total and LDL (low-density lipoprotein) or “bad” cholesterol but were otherwise healthy.

Participants ate cholesterol-lowering diets that were identical except that one group was given a daily snack of 42 gram of whole natural almonds, while the other group was given a banana muffin that provided the same number of calories.

Participants were provided all meals and snacks in amounts based on their calorie needs to maintain body weight, and followed each diet for six weeks.

The results showed the diet containing the almond snack, compared to the muffin snack, decreased abdominal fat, total cholesterol, LDL-cholesterol non-HDL-cholesterol and other blood fats. In addition, the diet with the muffin snack reduced HDL (good) cholesterol more than the almond diet.

The study appeared in the Journal of the American Heart Association.

## Express recipe: How to make Subzi Stir Fry



Not sure what to make for lunch today? Try this quick recipe at home.

### **Subzi Stir Fry**

The Indian stir fry.

Serves 4

### **Ingredients**

Mix together

4 tbsp yogurt

2 tbsp tomato puree

1 tsp coriander (dhania) powder, ¼ tsp garam masala powder, ½ tsp chilli powder

½ tsp coarsely crushed pepper, ¾ tsp salt

Seeds of 3 green cardamoms (chhoti illaichi) – crushed

### **Other ingredients**

1 medium potato – cut into 8 pieces

1 carrot – cut into thin round slices

8-10 French beans – cut into 2” pieces

8-10 pieces cauliflower – cut into medium florets

1 tbsp butter, 1 tsp oil

1 bay leaf (tej patta)

1” piece cinnamon (dalchini)

1 onion – chopped

1 tsp chopped garlic, 1 tsp chopped ginger

2 green chillies – chopped



## **Method**

\* Boil 4 cups of water. Add 1 tsp of salt. Add potato. Boil for about 10 minutes till tender. Check with a knife. When the potatoes are done, remove from water. Add carrot, beans and cauliflower to the boiling water. Boil for 1 minute. Leave in hot water for 2 minutes till the vegetables turn crisp-tender. Strain and keep aside.

\* Mix together in a cup – curd, tomato puree, coriander powder, garam masala, chilli powder, pepper powder, salt and cardamon seeds. Keep aside.

\* Heat butter and oil in a kadhai, add bay leaf and cinnamon. Stir and add onions. Cook till light pink and add garlic, ginger and green chillies. Cook for ½ minute.

\* Reduce heat. Add the yogurt mixed with spices and stir fry for 1 minute till slightly thick.

\* Add the vegetables, stir on low flame to coat the masala on the vegetables. Mix well, serve hot with toasts or chapati.

Chennai

Chennai - INDIA

Today's Weather



Partly Cloudy

**Friday, Jan 9**

Max 29° | Min 24°

Rain: 0  
Humidity: 66  
Wind: normal

Sunrise: 06:32  
Sunset: 05:55  
Barometer: 1013

Tomorrow's Forecast



Partly Cloudy

**Saturday, Jan 10**

Max 29° | Min 24°

Extended Forecast for a week

Sunday Jan 11	Monday Jan 12	Tuesday Jan 13	Wednesday Jan 14	Thursday Jan 15
29°   22° Sunny	30°   22° Partly Cloudy	30°   22° Partly Cloudy	24°   22° Partly Cloudy	24°   22° Partly Cloudy



## THE TIMES OF INDIA

### Best winter warmers? Soup and tea!

*Hungry? How about a piping hot, meaty or vegetable broth infused with fresh ginger or cardamom? Foodies will tell you there's nothing like a steaming cup of hot soup to cut into the cold air, that the city is currently feeling. And it's healthy too — soup is not called a 'meal on its own' for nothing. We suggest you go shopping for the season's freshest produce, put the pot to boil and get ready to get warmed up. Read on...*

## **Why it works...**

Experts say one must have five portions of fruit and vegetables a day. But as it can be difficult to hit that target, a single bowl of soup might solve that. It is an apt way to ensure you're getting at least two of those portions.

## **Mushroom chai**

This one is not quite like its name. The Wild Mushroom Chai, served at an eatery at Juhu, is actually a soup. Here, truffle oil is converted into powder using molecular gastronomy to resemble a 'creamer', a teaspoon of which is added to the tea cup with dehydrated mushrooms (which look like dried tea leaves). The 'tea pot', comprising a consomme of varied mushrooms is then poured into the cup.

## **Asian noodle soup**

How about some hearty Far Eastern fare? Says food blogger Purabi Naha, "When it is cold outside, you just need a bowl of this 'Asian vegetarian noodle soup' to warm you up. The heat from sriracha, the goodness of carrots, the refreshing smell of lemongrass, the flavour of mushrooms and the wholesomeness of tofu come together in this easy and hearty instant-noodle soup. The broth itself is so comforting! Made with easily available ingredients, this soup is my go-to recipe, these days." Here is her method...

## **How to make it:**

Mix sriracha sauce, brown rice vinegar and honey, and coat tofu with this. Reserve the rest of the mixture. Grill the tofu for five minutes. Remove and set aside. Add light soy and hoisin sauces to water. Make a basic stock by boiling this for 10 minutes with garlic paste, spring onions, mushrooms, carrots, red bell pepper and lemongrass. Filter the stock. With a spoon, transfer the mushrooms, carrots and bell pepper back to the clear stock, leaving aside the lemongrass and spring onions. Add noodles to it and heat until done.

## **Firehouse chilly soup**

**Ingredients:**

Tomato puree — 35 g  
Chipotle sauce — 15 g  
Tomato concasse — 10 g  
Red capsicum — 5 g  
Yellow capsicum — 5 g  
Onion — 3 g  
Green zucchini — 3 g  
Refried beans — 5 g  
Black bean — 5 g  
Yellow cheddar — 6 g  
Sour cream — 4 g  
Garlic — 5 g  
Clove — 1  
Water — 200 ml  
Olive oil — 10 ml  
Salt, pepper — to taste  
Tortilla chips, for garnish  
Spring onion, for garnish

**Method:**

Saute garlic, clove and onion in olive oil. Add red capsicum, yellow capsicum and zucchini, saute again. Add tomato puree, water, chipotle sauce, tomato concasse and cook for two minutes. Add refried beans, black beans, salt and pepper. Cook for five more minutes. Garnish with yellow cheddar, sour cream and spring onions. Serve tortilla chips on the side.

**Healthy dal soup**

Very little compares to a comforting bowl of lentil soup. Packed with protein and flavoured with cilantro and fresh ginger, it makes for a strengthening bite. Lentils are a powerful source of calcium, potassium, zinc, niacin and vitamin K as well as dietary fiber, folate and iron. Use moong dal (green or yellow) or masoor dal.

**How much?** A cup of cooked dal gives 20 gms protein per cup, with less than 1 gram of fat, and zero cholesterol. Enjoy it with crusty garlic bread.

## Using spring onion in winter

*This is the time of the year when the wonderful chives are easily available. So give the regular onion a break and let the spring onion add more flavour to your dishes.*

An element of difference is what a new ingredient adds to your dish. Adding the spring onion is one such example with another layer of taste. There are various ways to using the spring onion. Here's how:

**1. Spanish omelette:** Chopped spring onion, sauteed along with sliced potatoes, makes for a sumptuous breakfast in the morning. The green touch of the onion only enhancing the taste.

**2. Sambar:** Along with the regular onions, adding sliced and chopped spring onion simply adds more nourishment value to the sambar.

**2. Dal:** Adding the chopped spring onions in the tadka and cooking dal along with spring garlic will not only make the daal taste yummy, but also will make the dish look more interesting.

**3. Soup:** Your hot and sour soup can be made more tasty by adding chopped spring onion and spring garlic.

**4. Mixed vegetable curry:** Adding spring onion to the mixed vegetable curry that includes cauliflower, green peas, carrot and potato peps up the taste.

**5. Onion chutney:** Jaggery, sauteed spring onion, a dash of roasted urad daal, pinch of salt, pinch of red chilli powder, and bingo, this is definitely a tongue tickler.

## Eating almonds decreases belly fat

*Including almonds in your daily diet could help reduce belly fat, a well-established heart disease risk factor, says a study.*

A daily snack of 1.5 ounces (42 gram) of almonds instead of a high-carbohydrate muffin, eaten as part of an overall healthy diet, improved a number of heart disease risk factors in study participants.

"Our research found that substituting almonds for a high-carbohydrate snack improved numerous heart health risk factors, including the new finding that eating almonds reduced belly fat," said lead researcher of the study Claire Berryman from Pennsylvania State University.

"Choosing almonds as a snack may be a simple way to help fight the onset of metabolic and cardiovascular diseases," Berryman said.

The twelve-week, randomised, controlled clinical study, was conducted in 52 overweight, middle-aged adults who had high total and LDL (low-density lipoprotein) or "bad" cholesterol but were otherwise healthy.

Participants ate cholesterol-lowering diets that were identical except that one group was given a daily snack of 42 gram of whole natural almonds, while the other group was given a banana muffin that provided the same number of calories.

Participants were provided all meals and snacks in amounts based on their calorie needs to maintain body weight, and followed each diet for six weeks.

The results showed the diet containing the almond snack, compared to the muffin snack, decreased abdominal fat, total cholesterol, LDL-cholesterol non-HDL-cholesterol and other blood fats. In addition, the diet with the muffin snack reduced HDL (good) cholesterol more than the almond diet.

### **Is meat for breakfast a good option for weight loss?**

*Meat is one thing we wish to consume at every meal, because of its delicious taste and finger-licking goodness. However, is consuming a lean rump steak or chicken breast for breakfast is a good idea? Nutritionist and Freelance Writer at Travellers Dietition - Kara Landau, shares the real secret behind the mystery for successful weight loss.*

The main immediate response that motivates people to eat the most important meal of the day is - it should 'wake them up' and get their head back in the game at work. Many people skip their breakfast and thus start their morning at a 'slow' pace. In order to pick up pace, as soon as they get to work they have a morning coffee or something to eat, so that they get a 'ready to go' feeling.

The quick kick-start after drinking a cup of coffee is not really a surprise. Most people crave for a daily dose of caffeine as their breakfast. "This is where most of us go wrong, if we take a step back, and think about what we actually need in our body to help make us feel alert, it is a healthy dose of protein to boost our dopamine release (which helps with concentration) "- says Kara.

Kara further adds- "Then on the other hand, at night, before we go to sleep, having more serotonin released in our body, help us feel relaxed and fall asleep. This would make more sense than pumping our body with the fuel to bump up dopamine release."

The main dietary production of serotonin in the body is carbohydrates. Therefore, it makes more sense to have that wholegrain toast or cereal in the evening as a light meal before bed, compared with the lean meat and vegetables, for a light relaxed good night sleep.

Having an early dinner, which was not filling enough can lead to unhealthy snacking, this can later play havoc with your healthy eating plan or total calorie intake for the day. Thus, aim to eat a higher protein diet during the day, this will help you to stay full till your dinner time and also reduce the portion size and having lighter meal can actually work well for your weight loss.

Consuming protein rich dinner can have a negative effect on your sleeping patterns, as it will make it hard for you to fall asleep. Besides, you will also get an overeating feeling due to the thermic effect of protein breakdown (heat is a by-product of its breakdown, and protein has a higher thermic effect than carbohydrates and fats).

### **The benefits of having protein earlier in the day are:**

You will feel more alert when you are trying to "wake up" and concentrate at work.

You will actually feel full for the entire morning, which could prevent you from snacking on unhealthy refined snacks.

You will feel fuller by the end of the day, and therefore not be as ravenous in the evening, which could prevent over eating and a disrupted sleeping pattern.

Here are few quick fixes, to start your mornings with a super-protein breakfast-making egg muffins or frittatas with salmon or lean ham off the bone, and vegetables which are portable and you can take with you to work are all a good mix of protein and fibre, use high protein cereals such as Protein 1st, or make up your own mix by using any variety of soy flakes, amaranth, LSA mix, chia seeds and hemp seed, you could make some muffins using coconut flour and mix in a little bit of hemp protein powder for a natural high protein mix.

## THE HINDU BusinessLine

### Ground frost threat looms large over rabi crops in North-West



Crops such as mustard are sensitive to frost.

#### **Thiruvananthapuram, January 8:**

A dip in minimum (night) temperature may sustain a cold wave over parts of central Indian and trigger ground frost in north Rajasthan, Haryana and Punjab over the next three days.

Night temperatures are already trending southwards with Churu in Rajasthan and Najibabad in Uttar Pradesh recording a low of 2 degree Celsius on Wednesday night.

#### **Colder winds**

India Met Department forecasts suggest that this could plunge to zero degree in the plains. This is because colder northerly to north-westerly winds are heading straight into the plains bringing with them the icy chill from the snow-bound Himalayas.



That there is no usual resistance offered by a western disturbance and its associated warmth and clouds has made it easy for these winds to fill the air and head down across central India even into parts of the peninsula.

Meanwhile, forecasts indicate that dense to very dense fog will continue to hang over the plains even as they await the first few sprinkling showers of the New Year.

The wait will extend into early next week when the next weather-altering western disturbance is expected to roll in from across the Indo-Pak border.

Given the 'feeble' nature of the westerly system (lesser intensity and comparably poor moisture carry), there is no expectation about major gains from the system.

The standing rabi crop can do well with a round or two of showers, which will help with their growth.

What is of immediate concern for them is the forecast of ground frost.

Rabi wheat may be less sensitive to frost, but other crops such as mustard, gram and pulses are extremely sensitive, according to agriculture experts.

This is because fog actually helps prevent the settling in of frost, a condition that rabi crops will do better without. Vegetation will not necessarily be damaged on a night where the air cools leaves below their freezing point.

### **Frost threat**

But once frost forms, it is possible that sharp ice crystals may damage leaf cells. Certain bacteria are known to be particularly effective at triggering frost formation.

A three-day forecast by India Met says that fog will roll out at many places over Punjab, Haryana, Delhi, Uttar Pradesh, north Rajasthan, Madhya Pradesh, Bihar, foothills in West Bengal and Sikkim as also in the north-eastern states.

## Sugarcane support price leaves TN farmers, mills bitter

**Chennai, January 8:**

The Tamil Nadu government has fixed the State Advised Price (SAP) of sugarcane for 2014-15 season to September at Rs. 2,650 a tonne, same as last year, attracting the ire of sugar mills and farmers.

Farmers and sugar mills are not happy with the price as it does not cover their cost of production.

While sugar millers say support prices are too high, farmers contend that they are too low. Both agree that having set the sugarcane price without considering their demand, the government should support payments for sugarcane.

In an official announcement, the State government said it has fixed the SAP at Rs. 2,650 a tonne which is Rs.450 a tonne more than the statutory Fair and Remunerative Price (FRP) of Rs. 2,200 set by the Centre. The SAP includes Rs. 100 a tonne as cost for transporting sugar.

Last year, the state had increased the SAP by Rs. 550 including the transport cost, over the FRP of Rs. 2,100, taking the price in the state to Rs. 2,650.

A senior representative in the South Indian Sugar Mills Association said the industry is shocked by the state government's decision. With the sugar prices continuing to decline and currently ruling around Rs.2,600, private sector mills have repeatedly expressed their inability to pay anything more than the FRP announced by the Centre.

Mills are keen on paying a remunerative price for sugarcane to support farmers.

With sugar prices ruling low for two consecutive years now, mills are not even able to recover the cost of production.

Private sector mills have been seeking the government's support to pay SAP to farmers but the industry's plea has been ignored.

An Association representative said last year that when the average sugar price was around Rs. 2,800, the industry had managed to pay the statutory price only after the Centre had come out with an excise duty loan that worked out to about Rs. 300 a tonne of cane.

Mills had paid the farmers around Rs. 2,300- Rs. 2,350 for the cane and had urged the government to pay farmers the rest.

This year, prices are down further by Rs. 300 a quintal. Cash flow will be negative and there is no way mills can pay farmers the SAP.

### **Rubber industry meet to focus on inverted duty structure**

#### **New Delhi, January 8:**

The inverted duty structure and rising prices of natural rubber are likely to be the focus of the 8th India Rubber Expo & Tyre Show 2015 to be held here from January 15 to 17.

Organised by the All India Rubber Industries Association (AIRIA), the event will have over 300 exhibitors from China, South Korea, Germany, Vietnam and Malaysia, among other countries.

“Import duties on rubber in India are one of the highest in the world. The inverted duty structure subjects rubber at 20 per cent while finished rubber goods can be imported at less than half that level,” said Mohinder Gupta, President, AIRIA.

Gupta said the sector, worth around Rs. 60,000 crore, is dominated by lakhs of small and medium enterprises which require a major push from the ‘Make In India’ campaign.

“A duty of over 20 per cent on import of natural rubber is hurting the industry. While there was abundant supply in the last few years, production is expected to take a hit of at least one lakh tonne a month globally with the floods in Thailand and Malaysia,” he said.

According to the Rubber Board, India’s natural rubber imports rose eight per cent to 29,728 tonnes last month compared with the previous year.

Local production fell 36 per cent to 63,000 tonnes while consumption rose 1.4 per cent to 83,500 tonnes.

An expert group is also likely to be set up by the Rubber Board to mitigate conflict arising between growers and tyre manufacturers due to data discrepancies.

## Coffee crop estimate for this season trimmed 4%

<b>Coffee Stats: Production estimates</b>			(in tonnes)
	<b>Post Monsoon 2014-15</b>	<b>Post Blossom 2014-15</b>	<b>Final Estimate 2013-14</b>
<b>Arabica</b>	<b>99,600</b>	<b>1,05,500</b>	<b>1,02,200</b>
<b>Robusta</b>	<b>2,31,400</b>	<b>2,39,250</b>	<b>2,02,300</b>
<b>Total</b>	<b>3,31,000</b>	<b>3,44,750</b>	<b>3,04,500</b>

Source: Coffee Board



Board sees Arabica output hit by pest, weather

### **Bengaluru, January 8:**

The Coffee Board has pegged the crop size for the current season to September at 3.31 lakh tonnes in its post-monsoon estimate.

This is lower by four per cent from the early or post-blossom estimate of 3.44 lakh tonnes.

The crop has been pruned primarily due to a lower Arabica crop which faced a severe pest attack, erratic rainfall and a cyclone. However, the latest estimates are 8.7 per cent higher than last year's crop of 3.04 lakh tonnes.

Arabica output is pegged at 99,600 tonnes, while production of Robusta is expected to be 2.31 lakh tonnes, a drop of 5.6 per cent and 3.28 per cent respectively over the post-blossom estimate.

The Board attributed the revision in the latest crop forecast owing to heavy monsoon lashing key growing regions of Kodagu and Chikmagalur districts in Karnataka, which accounts for two-thirds of the coffee produced in the country.

## **Wet feet effect**

“The continuous showers led to soil saturation and wet feet conditions resulting in defoliation and incidences of stalk rot and black rot leading to crop losses especially in the Robusta variety in Karnataka,” said the Coffee Board in its latest report.

The overall decline in Karnataka is expected to be five per cent at 2.36 lakh tonnes against the earlier estimate of 2.48 lakh tonnes. But compared with last season’s final estimate, it is higher by some 12 per cent, mainly on account of a 20 per cent rise anticipated in Robusta at 1.60 lakh tonne.

The Board said Arabica output in Karnataka is pegged at 76,005 tonnes, some 3.1 per cent lower than last year’s estimate of 78,440 tonnes and 5.8 per cent lower than the post-blossom estimate for the 2014-15 season.

## **Growers differ**

Growers disagree with the Coffee Board’s latest projections. “The actual crop loss in Arabica is much higher than the Coffee Board’s estimate. We expect the total crop for the 2014-15 season to be just around 3 lakh tonnes,” said K Kurian, Chairman of the Karnataka Planters Association, the apex body of growers in the state.

The Board said Kodagu experienced the maximum decline of 9,495 tonnes or 7.13 per cent over the blossom estimate, followed by Hassan at 2.74 per cent and Chikmagalur at 1.89 per cent.

In Kerala, the output has been pegged at 68,225 tonnes, a marginal decline of 650 tonnes from post-blossom estimate.

“The berry development was normal and not much adverse effect on crop was reported,” the Board said. In Tamil Nadu, the projections have been marginally revised downwards to 18,125 tonnes.

In non-traditional areas of Andhra Pradesh and Odisha, which largely grow the Arabica variety, production has been pegged lower by 15 per cent at 8,100 tonnes mainly on account of damages caused by Cyclone Hudhud.