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# THE HINDU

## **Best farmer awards for two**

Best farmer awards were given to two farmers who adopted latest technologies and got better yield in rain-fed areas. Senthil Kumar, who adopted advanced technologies in value addition and post-harvesting works properly under Agriculture Technology Management Agency Scheme received the award. Similarly, another farmer, Tirupathi, was awarded for recording the highest yield in groundnut crop in rain-fed area, said V. Arul Arasu, Assistant Director of Agriculture, here on Tuesday.

## **Promoting traditional seeds**

*In yet another rare occurrence, a school dropout, Jayaraman, has made a name in preserving several paddy seeds.*

Last week, we saw how individuals across the country have been doing sterling work in preserving many of the rice varieties that are native to our country. Jayaraman is one of them.

Mr. Jayaraman, who dropped out of school when he was in Class VIII, is now an organic farming crusader. A native of Adirangam village in Tiruvarur district, Tamil Nadu, Jayaraman has worked tirelessly to promote the cause of preserving native paddy seeds.

Seeing the enthusiastic work of Jayaraman, a NRI Narasimman, (also a native of Adhirangam) donated nine acres of his land for crop cultivation and a building to organise training programmes for the farming community.

As the Cauvery Delta districts are predominant with paddy cultivation, his initial interest was in organic rice production. Later, he realised that the coastal districts are prone to the climate variations and every year farmers faced problems either with flood or cyclone.

## **Identifying varieties**

After four to five years of tireless work, he was able to find 15 traditional paddy varieties in 2004 and cultivated in the farm with the aim of multiplying the

traditional seeds and making it available to more number of farmers. In 2005, he organised a first ever traditional paddy seed festival in the farm by an individual. That year, he distributed two kg of traditional paddy seeds of 15 varieties to more than 300 farmers. With the overwhelming responses to the seed, festival has motivated him to organise traditional paddy seed festival every year and also increase the traditional paddy varieties every year.

The seed festival in May 2012 at Adhirangam was 8th in a row and in which 64 different traditional varieties were distributed to more than 1000 farmers across Tamil Nadu. He distributes these varieties to the farmers with a promise that they have to return two fold quantity of the seeds in the next season. He maintains records of farmers who have benefited from the seed festival.

Mr. Jayaraman attracted the attention of many bank officials and convinced them to support his initiatives continuously. Till date he has trained a team of farmers and regularly update them on the current issues that are affecting farmers. Last year, he received the State Award for best organic farmer for his contribution to organic farming.

Apart from this, he is involved in organising safe food campaign in schools and colleges, consumer forums like Rotary club and Lion's club on the health impacts of chemicals used in agriculture. He has delivered talks in more than 300 schools and colleges and is also helping the farmers to form Farmer's Club. He was invited by the Philippines Government to give a talk at the International Rice Research Institute on his work and mission.

*(M.J. Prabu is The Hindu's Agriculture correspondent. He writes the popular Farmer's Notebook. Write to him at [prabu.mj@thehindu.co.in](mailto:prabu.mj@thehindu.co.in))*

***Some of the important traditional seed varieties***

***Kattuyanam – best suited for flood condition***

***Poongkar – suited for saline soil***

***Kuzhiyadichan – for alkaline soil***

***Karunguruvai - Seeraga Samba – best for making biriyani,***

***Kudavaalai, Gauvuni, Mappillai Samba – for high energy***

***Samba Mosanam – best suited for making flat rice***

## **Use new tapioca variety, farmers told**

*It has an yield potential of 49.50 tonnes a hectare*

Farmers in the district are told to use the high-yielding tapioca that is available with the Tapioca and Castor Research Station in Yethapur.

A press release from the research station said that tapioca or cassava can withstand any adverse conditions and can be successfully cultivated in marginal soils. Tamil Nadu account for about 80 per cent of the total acreage of the crop in India and is cultivated in an area of 1.96 lakh hectares with the production of 38.81 lakh tonnes.

Cassava is mainly cultivated in Salem, Namakkal, Erode, Cuddalore, Villupuram, Dharmapuri, and Kanyakumari districts of Tamil Nadu.

There are about more than 300 sago factories are involved in the extraction of starch from the tubers.

The value added products starch, sago, vermicelli, and chips are being prepared from tapioca. Tapioca YTP-1 released by the Tamil Nadu Agricultural University, Tapioca and Castor Research Station, Yethapur has a yield potential of 49.50 tonnes a hectare with a starch content of 25 per cent to 27 per cent.

For details contact the Professor and Head, Tapioca and Castor Research Station, Yethapur, Salem district-636 119; phone: 04282-293526 or e-mail:arsyethapur@tnau.ac.in.

## **Egg price to move up**

The National Egg Coordination Committee, Namakkal Zone has expressed confidence that the wholesale price of egg would not drop further and would start increasing from Wednesday.

A meeting was held on Sunday in which members from NECC, Tamil Nadu Poultry Owners Association, Namakkal Zone Egg Producers Society, Namakkal Egg Traders Union and from Tamil Nadu Poultry Farmers Association participated.

Chairman of NECC P. Selvaraj said that the wholesale price of egg was reduced on Friday, Saturday, and Sunday by 30 paise and the price stood at Rs. 3.46.

The fear of bird flu outbreak was over. Sabarimala pilgrimage season too was getting over.

Sale of eggs has started to improve in Tamil Nadu and Kerala, he said. Intense cold condition in North India has prompted higher demand for egg. Bulk orders for eggs for cake preparations for Christmas and New Year has been placed.

### **Organic farming panacea for pollution, says expert**

All pollution-related problems of the country can be resolved by shifting to 100 per cent organic farming, former Director of Agriculture Paladhi Lakshmi Narayana has said.

#### **‘Organic waste a major source of pollution’**

Delivering the keynote address at a seminar on “Scientific farming practices” organised by the Natural Organic Farmers Association (NOFA) for farmers from Krishna, Guntur, West Godavari and other districts here on Tuesday Mr Lakshmi Narayana said that organic waste which was being dumped and scattered indiscriminately was a major source of pollution.

Storm water drains, canals and rivers were being polluted because of the dumping of liquid and solid organic waste.

All crops could be organically farmed if the organic waste was utilised for generating manure.

#### **Land productivity**

He said agriculture using chemical fertilisers was not sustainable because the land gradually loses its productivity. Lands continued to be productive because they practised organic farming from the beginning in China. Sewage water containing human waste was also used for cultivation.

Human waste along with animal waste was utilised in making manure there. Human waste was, however, not used for making manure either in India or in the West. In the West, animal waste such as cattle dung and poultry droppings were put to good use.

#### **Harmful chemicals**

He recalled the disciplined way people in the West had different bins for organic, recyclable and non-recyclable waste. Mr. Lakshmi Narayana said that

chemical fertilisers were meant only to make agriculture sustainable and their use should have been discontinued two or three decades ago. The use of chemical fertilisers was forcing farmers to utilise pesticides also. Their use should have been discouraged long ago, he said.

NOFA treasurer Ch.R.K. Prasad welcomed the gathering. Former NABARD general manager Mohannaiah, Krishna NABARD AGM Madhumurthi and others spoke.

*‘Agriculture using chemical fertilisers is not sustainable because the land gradually loses its productivity’*

### **Inspired village makes a change**

The villagers of Amarambedu on the outskirts of Gummidipoondi, near Chennai, have always taken pride in their jasmine crop.

They supply the flowers to the Koyambedu market. But visitors to the village have always been bothered by a stench in the air due to the practice of open defecation that was prevalent until recently.

When a team led by Rotary Club of Madras visited Amarambedu in August, the villagers began to understand the public health issues arising out of the lack of toilets. Change occurred: vision, perception and behaviour transformed significantly.

“We did not have toilets in our village. Open defecation was common even among the educated. Volunteers of the Sanitation Project triggered a sense of disgust and shame about open defecation,” says Murugan (49), who stopped the practice a few weeks ago.

Five members of Murugan’s household have a toilet now. Pollution of farmlands has reduced and the fragrance of flowers continues to hang fresh in the air.

As the 128-household village also grows paddy, volunteers of Feedback Foundation proved to them that flies contaminated cooked rice because of open defecation and caused diarrhoea. “The youth were inspired. They started building toilets,” says Murugan. Each toilet funded by Rotary Club of Madras costs Rs. 15,000 with the labour of villagers.

Feedback Foundation CEO Ajay Sinha says the project has been successful in many countries. “Six million in India defecate in the open. Nearly 90% of our water resources are contaminated because of open defecation. About 45% of our children are malnourished because of the practice. At least, 1,000 children die daily due to diarrhoea caused by open defecation,” he says.

President of Rotary Club of Madras S.N. Srikanth says the project has brought about attitudinal change among villagers.

“The villagers have taken ownership,” he says, even as Actor Jiiva stressed the need for dissemination of information on the lives of such villagers through films, at a recent function.

### Extension network to boost farm activities in A.P.

**Farmer-friendly INITIATIVE** 6,354 MPEOS, ONE EACH FOR EVERY 1,000 HECTARES, TO BE APPOINTED ON CONTRACT BASIS

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- They will be paid a consolidated honorarium of **Rs. 8,000** a month
- MPEOs should accordingly reside in the cluster headquarters
- They should assist the extension functionaries
- Selection will be made on the basis of merit
- RMGs will function as interface between agriculture extension system and farmers



#### *Govt. to appoint qualified multi-purpose extension officers*

The State government has firmed up plans for giving a boost to the agricultural activities in the State through, what it claimed, a well organised agriculture extension network with qualified multi-purpose extension system.

Accordingly, the government has decided to appoint qualified Multi-Purpose Extension Officers numbering 6,354, one each for every 1,000 hectares of the net cropped area of 63.54 lakh hectares on contract basis. In addition, Rythu Mithra Groups, one each for every 100 hectares, would be formed with

objective of facilitating extension reach to farming community, address the immediate needs of farmers in case of adverse seasonal conditions and sensitise farmers on the steps needed to enhance productivity.

The government's order comes in the light of abolition of the Adarsha Rythu, model farmers scheme, initiated by the then Chief Minister late Y.S. Rajasekhara Reddy that faced criticism of corruption and nepotism.

The MPEOs would be paid a consolidated honorarium of Rs. 8,000 a month and preference would be given to those with B.Sc (Ag) and B.Sc (Hort) followed by agriculture polytechnic diploma holders (recognised by the ANGRAU) and science graduates with specialisation in Botany. The selection would be made on the basis of merit (80 per cent) and interview (20 per cent).

The government had issued a series of guidelines relating to the functioning of the MPEOs. The MPEOs should accordingly reside in the cluster headquarters as decided by the district administration and sensitise farmers on different issues related to crops. They should assist the extension functionaries in communicating needy information to farming community with regard to different departmental schemes and latest/improved technologies besides maintaining the record of the acreage under his/her area.

The RMGs on their part would function as the interface between the agriculture extension system and farmers for transfer of technology, access to market information and other farm related advice. They should act as clearing house for the pooling of ideas on scientific agriculture, asses input requirement and act as conduit in the process of knowledge, training and information as also transfer of technologies to all members of the group to achieve maximum production and productivity

### **Bird flu: govt. plans action plan**

Agriculture Minister K.P. Mohanan told the Assembly on Tuesday that an action plan would be formulated soon to help the farmers affected by the outbreak of avian flu and the subsequent culling of birds in Alappuzha, Kottayam, and Pathanamthitta.

Replying to a submission by G. Sudhakaran, he said an amount of Rs.3.56 crore had been distributed as compensation to the farmers. He said the culling of birds was carried out in accordance with the protocol specified by the Central government.

Chief Minister Oommen Chandy said the government would seek the response of youth organisations to enhance the retirement age of physically challenged employees. Replying to a submission by K. Muraleedharan seeking extension of service up to 62 years for the physically challenged employees, he said the issue would be brought up during discussions with youth bodies.

The government had regularised the services of 2,677 disabled persons who had put in 179 days as casual employees. Responding to Mr. Muraleedharan's point that many of them had only a short period of service left, Mr. Chandy said it had been decided to provide pension for those who had completed two years and one day of service.

□ *Rs.3.56 crore given as compensation*

*to farmers*

□ *Culling of birds in accordance with Centre's protocol*

**‘Fix rent for paddy combine harvester’**

Chairing a special meeting of agriculture officers, regional transport officers, the police and office bearers' of the Krishik Samaj here on Tuesday, Ms. Shikha directed the Joint Director of Agriculture Mahantesh to urge the Agriculture University to study the operation cost while hiring combine harvesters.

She said the district administration wanted to make sure that farmers were not exploited this year by PCH operators who demanded 'exorbitant rent' last year.

She asked the regional transport officers and the police to help the Agriculture Department impose the stipulated rent on PCHs in the district during the harvest season.

The PCH is a machine that helps harvests grain crops particularly paddy. Combine harvesters is one of the most economical labour-saving invention, Ms. Shikha said.

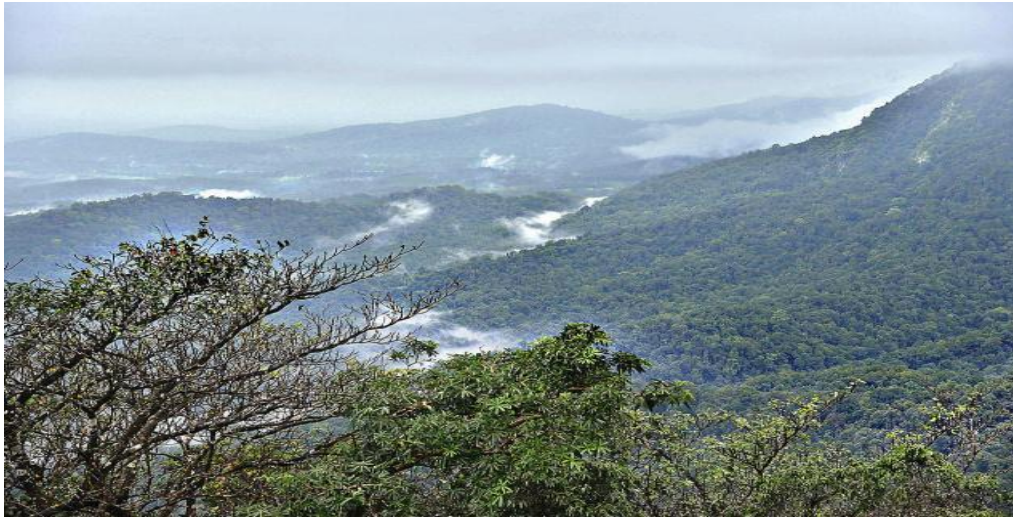
Paddy is grown in over 1,02,000 hectares in the district and farmers are expected to take up harvesting in the next 10 days across the district.

***The district administration will ensure farmers are not exploited this year***

***C. Shikha, Deputy Commissioner***



## Samiti calls for 'Hebri Bandh'



The Hindu

The Kasturirangan Varadi Virodhi Horata Samiti claims that those preparing the report have not visited the villages. File Photo

*'The implementation of Kasturirangan report will affect people'*

The Kasturirangan Varadi Virodhi Horata Samiti (Anti-Kasturirangan Report Committee) has called for a 'Hebri Bandh' on Wednesday, to protest against the recommendations of the panel for the conservation of Western Ghats.

Naveen Adyanthaya, president of the samiti, told reporters here on Tuesday that the bandh will be effective from 6 a.m. to 6 p.m. A protest meeting will be held at the Hebri Bus Stand at 10 a.m. on Wednesday. The implementation of the recommendations of the report will affect the people living in Hebri-Chara, Belanje-Kuchur, Nadpal and Kabbinala villages, he said.

The people in these four villages have been involved in agriculture and horticulture for generations. The report does not permit the use of chemical fertilisers, and it is not possible to survive by just organic farming, he said.

There were many rice mills and cashew factories in the region. These factories will have to be closed as these four villages had been marked under the orange zone. This will throw thousands of youth working in these mills and factories out of work. The report will have a catastrophic impact on the local economy, he said.

The people of these villages were not against the conservation of Western Ghats. But the report had been prepared merely on the basis of satellite images. Those preparing the report had not visited the villages or taken the opinions of the people. “Hence, the government should keep these four villages outside the ambit of the report,” he said.

The government could however bring the areas under reserve forests and the Someshwara Wildlife Sanctuary in these four villages, under the jurisdiction of the report, he said. Honorary president of the Samiti Bhaskar Jois, vice-president Prasanna Kumar, secretary Dinesh Shetty and joint-secretary Sudhakar Hegde were present.

### Krishna Delta farmers in for an ‘uncertain’ rabi season

**In a BIND** Uncertainty over decision of allowing rabi cultivation this year has put Krishna delta farmers in a fix

- Conflicting statements of people's representatives add to farmers' confusion
- Rabi crop was cancelled owing to delta modernisation works in **2012, 2013**

**INORDINATE DELAY**

- Even as rabi season is around the corner, the govt. is yet to call IAB meeting which will take a call on whether to allow rabi crop this year

If govt. decides to cancel rabi crop, it will be the third consecutive year that farmers have to forego the second crop.

**“** Irrigation Minister should make an official statement on rabi crop immediately. He should clear the air on the amount of water that would be released into canals so that farmers can plan their crop **”**

**KOLANUKONDA SIVAJI**  
Krishna Delta Protection Committee convenor

*Govt. yet to take a call on allowing the second crop this year*

Even as rabi season is around the corner, the prevailing uncertainty over the government’s decision of allowing the cultivation of second crop has put the delta farmers in a fix.

If the government decides to cancel rabi crop this year, it will be the third consecutive year that farmers have to forgo the second crop. Farmers had to forgo the second crop for two consecutive years—2012 and 2013—to facilitate Krishna Delta Modernisation works. Despite this, the progress in the execution of the works has been far behind of the schedule all these years.

Adding to this, what is adding to the confusion of farmers is the conflicting statements being made by the elected representatives. Such statements are also confusing irrigation officials who are running from pillar to post in an attempt to be prepared for any eventuality. Though kharif harvesting is at its fag end in Krishna district, the government has not called for the Irrigation Advisory Board meeting.

### Cane-crushing season begins



Sugarcane being transported on bullock carts to Vuyyuru crushing unit in Krishna district.—File photo: V. Raju

Nearly 2,000 acres of land has been additionally brought under sugarcane cultivation in Krishna district within a year as farmers are keen for crop diversification to reap profits.

According to the KCP Sugar and Industries Company Limited officials, the total extent of land under sugarcane cultivation was above 31,000 acres by the beginning of the cane crushing season 2014-15.

The cane crushing season has begun in the first week of December at KCP's Vuyyuru factory.

“This season, at least 8.3 lakh tonnes of cane is expected to be crushed at maximum cane recovery rate 10.3 per cent per tonne at Vuyyuru Unit whereas nearly three lakh tonnes is expected at Laxmipuram unit, where crushing is scheduled to begin from Monday midnight,” KCP Sugars General Manager G. Venkateswara Rao told *The Hindu* .

The total yield per acre is being expected to be between 36 and 37 tonnes as against maximum of 39 tonnes per acre in the last crushing season that ended in April 2014. The fair and remunerative price offered per tonne by the KCP Sugar and Industries Company Limited was Rs. 2,482 at Vuyyuru unit and Rs. 2,432

at Laxmipuram unit. Subsidy of Rs. 10,000 to Rs. 13,000 per acre for cultivation of sugarcane is assured to encourage the farmers in addition to various incentives.

“We are also offering special incentives for those farmers depending on manual labour and machinery for cane cultivation,” added Mr. Venkateswara Rao. The cane crushing season 2014-15 will complete by the end of April in the two units in Krishna district.

### **Climate deal commits every nation**

*The Lima Accord is the first time that all nations --rich and poor --have agreed to cut back on burning oil, gas and coal.*



After more than 36 straight hours of negotiations, top officials from nearly 200 nations agreed to the first deal committing every country in the world to reducing the fossil fuel emissions that cause global warming.

In its structure, the deal represents a breakthrough in the two-decade effort to forge a significant global pact to fight climate change. The Lima Accord, as it is known, is the first time that all nations rich and poor have agreed to cut back on the burning oil, gas and coal.

The Accord does not include legally binding requirements that countries cut their emissions by any particular amount. Instead, each nation will agree to enact domestic laws to reduce carbon emissions and put forth a plan by March 31, laying out how much it will cut after 2020, and what domestic policies it will pass to achieve the cuts.

Countries that miss the March deadline will be expected to put forth their plans by June.

## **Drawback**

But with no language requiring the significant cuts scientists say are needed to stave off the costly effects of global warming, countries can put forth weak plans that amount to little more than business as usual. Countries can even choose to ignore deal and submit no plan at all.

If a country doesn't submit a plan, there will be no punishment, no fine. Under the Lima Accord, all countries must submit plans that would be posted on a U.N. website and made available to the public.

A requirement that all countries submit plans using identical metrics, for easy comparison, was deleted from the accord due to the objection of developing nations.— New York Times News Service

□ *All nations will be asked to submit plans for curbing greenhouse gas emissions, known as "Intended Nationally Determined Contributions," or INDCs, to the United Nations by an informal deadline of March 31, 2015, as the core of a Paris deal.*

□ *The text invites actions by all nations to combat warming, blurring a distinction in a 1992 climate convention that split the world into two camps of rich and poor - under which the rich had to lead the way.*

□ *Developed countries to provide financial support to "vulnerable" developing nations*

□ *One of the elements is to set a long-term goal of a cut in greenhouse gas emissions to "net zero by 2050,"*

□ *Many developing nations wanted help to adapt to climate change, for instance helping farmers to grow drought- or flood-resistant food. Reuters and PTI*

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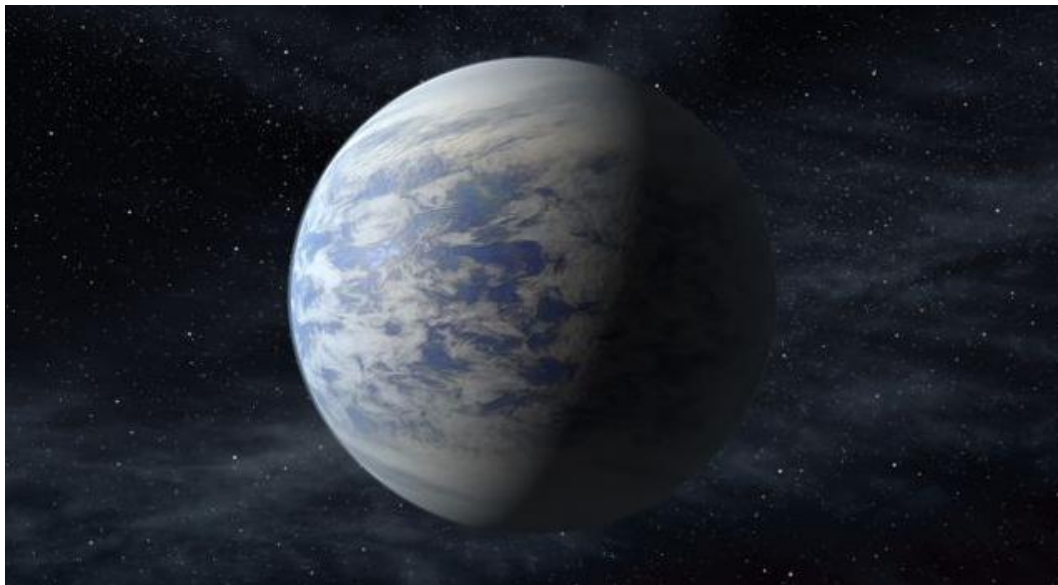
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### Earth on track for hottest year



AP

The combined average temperature over global land and ocean surfaces during November tied with 2008 as the seventh highest for the month.

The world is still heading for the hottest year on record although last month was only the seventh warmest November since 1880, the US National Oceanic and Atmospheric Administration (NOAA) said on Monday.

The combined average temperature over global land and ocean surfaces during November tied with 2008 as the seventh highest for the month, at 0.65 degrees Celcius above the 20th century average, the NOAA said in its monthly report, according to Xinhua.

This ends a streak of three consecutive months with a record warm monthly global temperature, but the average temperatures for September-November as well as the first 11 months were still both the highest on record for such periods, it said.

If December is at least 0.42 degrees Celcius warmer than the 20th century average, 2014 will be the hottest year on record, the NOAA said.

The previous three warmest years on record are 2010, 2005 and 1998.

### **How to talk climate change in Paris**

The United States and China, the two biggest emitters of greenhouse gases, have recently agreed on a timetable to limit their emissions. Under the agreement, the U.S. has agreed to emit 26-28 per cent less carbon in 2025 than it did in 2005 while China will peak its emissions by 2030 and increase the share of non-fossil fuels in its primary energy mix to 20 per cent by 2030. The U.S.-China agreement came soon after a proposal by the European Union (EU) — the third largest emitter — to reduce its emissions to 40 per cent below 1990 levels by 2030, conditional on whether other countries would make similar commitments at the Paris summit in December 2015. The EU also proposes to raise its share of renewable sources to 27 per cent in total energy consumption by 2030. Following the U.S.-China deal, the U.S. President, Barack Obama, said on the sidelines of the G20 summit in Brisbane, “If China and the U.S. can agree on this, then the world can agree on this — we can get this done ....” Announcing a \$3-billion contribution to the U.N.-backed climate change mitigation fund, he said that the U.S.-China agreement showed the way forward.

### **The U.S.-China agreement**

A closer look at what the agreement really means shows that, first, it does not lay out a road map for meeting the targets. Second, it is bilateral and voluntary. Thus, there are no penalties if either the U.S. or China misses the targets. The fact that Japan, Australia, Canada and Russia are doing less than what they had promised to do under the Kyoto Protocol is a case in point. The 26-28 per cent reduction, now agreed upon, from 2005 levels is less than the 30 per cent reduction from the 2005 levels the U.S. had promised earlier in compliance with the Copenhagen Accord. Third, it allows China unlimited emission expansion until 2030. China had already set itself a goal of raising the share of renewables in its energy use to 15 per cent by 2020. Raising it by an additional 5 per cent in the next 10 years is more or less a continuation of an existing policy.

The U.N.’s Intergovernmental Panel on Climate Change (IPCC) says a 2°C pathway — seen by most scientists as necessary in preventing catastrophic

climate effects — requires annual greenhouse gas cuts of 40-70 per cent by 2050, compared to levels in 2010 and to zero or below by 2100. Thus the pledges by the three biggest emitters for 2025 and 2030 are not sufficient for limiting climate change to 2°C above the preindustrial average temperature and much less than what they can or should do.

### **What the facts are**

Despite that, some commentators say that the U.S.-China agreement has shifted the focus to developing countries, especially India, which is the fourth largest emitter. Should India be then concerned and fear isolation at the Paris summit if it does not agree to cut its emissions?

India has already committed itself to a 20-25 per cent reduction in intensity of carbon emissions (tonnes of carbon dioxide divided by GDP) below 2005 levels by 2020. But the U.S.-China agreement may put renewed pressure on India to do more. Does India really need to do more? And what can it do to deflect the focus away from it and back to the three largest emitters who indeed need to do more if climate change is to be limited to less than 2°C?

Country-wise estimates for annual emissions of the largest six emitters vary depending on the source and the year. But in 2012, they were estimated to be roughly 8,500 million metric tons (MMT) for China, 5,400 MMT for the U.S., 3,800 MMT for the EU, 1,900 MMT for India, 1,800 MMT for Russia, and 1,300 MMT for Japan. These figures reveal two striking facts. First, India may be the fourth largest emitter, but its emissions are less than a fourth of China, about a third of the U.S., and about half of the EU. Second, they are roughly equal to those of Russia and not a lot higher than those of Japan. Russia and Japan are also among the industrialised countries which went back on the commitments they made under the Kyoto Protocol. Yet, the U.S.-China agreement is expected to shift the focus to India and not to Russia and Japan. Nothing can be more wrong. India's emissions, even if it grows robustly, are expected to be about 4,000-5,000 MMT by 2030 — still well below the emissions pledged either by the U.S. or China under the agreement. In fact, they will continue to be so for a long time to come and perhaps forever as China's greenhouse gas emissions have been estimated by the International Energy Agency to further rise by 20 per cent by 2030 from 2012 levels.

India may be the fourth largest emitter, but it is a relatively small emitter despite having a large population. Its cumulative emissions have been low: less than a



third of China and a tenth of the U.S. Its per capita emissions are roughly a tenth of the U.S., less than a sixth of the EU, less than a fourth of China, and about a seventh of Russia. Thus, there is absolutely no case for India to agree to cut its emissions at the 2015 summit in Paris. On the contrary, there is a strong case for it to press the three biggest emitters to do more as there is still a huge gap between what the three top emitters have pledged and what is required by science and their historical responsibilities (the cumulative emissions). It is irrelevant that India is the fourth largest emitter. The fact is that India is still in its early stages of development and has a long way to go before its emissions stabilise.

### **India's strategy**

Though there is absolutely no case for India to curb its emissions, it is in its self-interest to increase the share of renewables in its primary energy mix — which can also be justified as its contribution towards controlling climate change and provide it greater energy security. Given our low per-capita energy consumption, we do need to go out of our way to shore up energy efficiency across the board and also purposefully boost green energy. Reports in *The New York Times* last week suggest that renewable energy prices are falling so rapidly that they could compete soon with coal and natural gas even without subsidies. Moreover, increasing the share of renewables will prevent India from a lock-in in outdated and fossil-fuel dependent technologies as fossil fuels are fast depleting and will become more costly as the years go by.

While the Union Minister of State for Environment and Forest, Prakash Javadekar, refused to comment on the U.S.-China climate agreement, there are indications that the government is seized of the matter as it realises that the international community — rightly or wrongly — will want India to make some firm commitments for 2025 and 2030. What should India's strategy be then as it approaches the 2015 summit at which a global climate treaty is expected to be concluded?

First, India should insist that there should be no reference to its annual emissions reduction till it achieves stabilisation as developed countries did and China proposes to do. Unlike China, India has a young population and it can grow till after 2050 when its urban transition and industrialisation will be almost complete and its annual emissions will stabilise. Thus, India may propose to peak its emissions in 2050. Second, India may commit itself to a 25-30 per cent

reduction in intensity of carbon emissions below 2005 levels by 2025, higher than the already promised 20-25 per cent reduction in intensity below 2005 levels by 2020. Third, India may propose to raise its share of renewable sources to 20 per cent — the same as China — in its total energy consumption by 2030. This seems achievable as India will have access to the same technologies as China. In its final report, the Planning Commission's expert group on low carbon growth strategy had projected that the contribution of solar, wind, and biomass to electricity supply can realistically increase from the present 6 per cent to 18 per cent by 2030.

The newly reconstituted National Council on Climate Change chaired by the Prime Minister can accept this target and announce it as India's objective both domestically and internationally. He may also announce India's plans to ramp up solar power capacity fivefold to 1,00,000 MW by 2030. Third, India should take the lead in securing timelines and commitments on finance and technology, both crucial to addressing climate change. This would help keep intact its support among vulnerable developing countries and the small island states, which have been demanding that more concrete action be taken rather than efforts to just reduce emissions. Finally, India must put renewed pressure on the three biggest emitters to cut their annual greenhouse gas emissions by 40-70 per cent by 2050, compared to levels in 2010.

*(Parkash Chander is professor and executive director, Center For Environmental Economics And Climate Change, Jindal School of Government and Public Policy.)*

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***to cut its emissions at the 2015 climate change summit. Instead, it has a strong case to press the three biggest emitters to do more as there is still***

***a huge gap between what they have pledged and what is required by science and their historical responsibilities***

## SAARC policy makers, scientists discuss climate change

Policymakers and scientists from SAARC countries have begun deliberations on climate change, which is adversely affecting Ocean and marine life in the region.

The five-day-long workshop, which began on Sunday at Port Blair, set in motion the discussions on this crucial topic.

The workshop has been organised by National Institute of Oceanography (NIO) for SAARC Coastal Zone Management Centre.

Policymakers from four SAARC countries- India, Bangladesh, Maldives and Sri Lanka-are participating in it.

“In the Arabian Sea, the rate of warming after mid 90s is much higher than the previous three decades,” said NIO’s Chief Scientist Dr Prasanna Kumar, who is heading the team of scientists there presenting various studies on climate change.

Kumar said global warming and climate change is real and one of the greatest threat faced by humanity in the present century.

“Climate change has two parts - the natural and that forced by anthropogenic activities such as emission of fossil fuel, land use pattern changes and others,” he said.

He said the human factors are contributing in a large way compared to natural ones to induce the climate change.

“The humans are contributing largely through increased carbon dioxide emissions and also through changes in land use pattern due to urbanisation,” he added.

Kumar said that ocean plays an important role in absorbing almost 50 per cent of the carbon dioxide that is released into the atmosphere by human activities.

“Though carbon dioxide forcing is global, the climate change impact could have regional differentiation. For example, the rate of warming of the Indian Ocean is different from that of the Pacific and Atlantic,” he added.

The scientist, however, said that “We can’t say right now, whether climate change is hitting danger levels. The changes have resulted in warming of the

oceans. The rate of warming of Indian Ocean is 0.5 degree Celsius per 100 years for the period of 1900-2000“.

NIO’s four-member resource team comprising Kumar, co-ordinator J Ravindran and senior scientist Mahua Saha and Mani Murali is guiding deliberations with various policymakers, experts and researchers from SAARC countries.



### Christmas Recipe: How to make Chocolate Peanut Bar



Chocolate Peanut Bar (Source: nishamadhulika.com)

It’s the time to gorge on cakes, chocolates and cookies. The Christmas week is about to begin and nothing tastes better than homemade goodies. Here’s a recipe of Chocolate peanut bar.

#### **Chocolate Peanut Bar**

#### **INGREDIENTS**

- 1 cup peanuts (200 grams – roasted and peeled)
- 1 cup dark chocolate (dark compound- 200 grams)
- 2 tbsp butter
- 2 tbsp powdered sugar
- 2 green cardamom (peel and make powder)

## METHOD

### STEP 1: HOW TO MAKE BAR

- \* For making chocolate peanut bar, grind the peanuts finely in mixture grinder.
- \* Take out powdered peanuts in a separate bowl.
- \* Now add powdered sugar into it.
- \* For this grind the sugar finely in mixture grinder.



Mix cardamom powder in this mixture. (Source: nishamadhulika.com)

- \* Mix cardamom powder in this mixture.
- \* Melt butter and add little at a time in the mixture and mix well.
- \* We have to bind the mixture with hands (like ladoo) to make peanut bar. So add this much butter only so that it remains easy in binding the mixture.
- \* Mixture is now ready.
- \* Now take little amount of mixture in your hands, press it gently in your hands and give the shape of a bar.



Now take little amount of mixture in your hands, press it gently in your hands (Source: nishamadhulika.com)

\* You can also set it in a plate (like barfi) and then cut into bar shape.

\* Like wise prepare peanut bars from rest of the mixture and place them in a separate plate. After this place peanut bars in a fridge for 10 minutes so that they get set.



Like wise prepare peanut bars from rest of the mixture and place them in a separate plate. (Source: nishamadhulika.com)

## **STEP 2: MELTING CHOCOLATE**

- \* For this you can use either double boiler or microwave.
- \* For melting chocolate in microwave, take chocolate in a microwave safe bowl and microwave it for 1 minute on maximum temperature.
- \* Take out the bowl and stir the chocolate with help of a spoon. If you find that chocolate is not melted properly then microwave it for 20-25 seconds more.
- \* Take out the bowl and stir again nicely.
- \* If the chocolate is having pouring consistency that means chocolate is melted completely.



If the chocolate is having pouring consistency that means chocolate is melted completely. (Source: nishamadhulika.com)

- \* Microwave chocolate for 1 minute first and then for 10-20 seconds as per requirement as chocolate might start burning due to over heating.
- \* Stir melted chocolate constantly with the help of a spoon so that it can be handled with bare hands. Spread a butter paper over a tray.
- \* Peanut bars are now set.
- \* Take one peanut bar and dip it into melted chocolate.



Take one peanut bar and dip it into melted chocolate. (Source: nishamadhulika.com)

\* Now with help of fork, lift out the chocolate coated bar from bowl and place it in the tray with butter paper.

\* Likewise prepare all peanut bars and place them on butter paper.



Prepare all peanut bars and place them on butter paper (Source: nishamadhulika.com)

\* Keep the peanuts bar in fridge for 10 minutes so that they get set.

\* Chocolate peanut bar is ready; take it out from butter paper. If you find additional chocolate layer on the bar then remove it with help of a knife.



### **STEP 3: WRAPPING CHOCOLATE PEANUT BAR**

\* For wrapping them, cut the wrapping papers in equal size.



For wrapping them, cut the wrapping papers in equal size. (Source: nishamadhulika.com)

\* Now take one wrapper, place the bar over it and wrap nicely.

\* Also cover both the ends. Like wise wrap all chocolate bars.

\* Tasty chocolate peanut bars are ready.

\* Store in refrigerator for up to 1 month and enjoy eating.

#### **Suggestions:**

\* You can add less or more sugar as per your preference.

\* Finer the pieces of chocolate are, the less time it will take to melt.

\* The utensil to be used for melting chocolate should be clean and dry. Even one drop of water could hamper the chocolate melting process.

## weather

Chennai - INDIA

### Today's Weather

**Wednesday, Dec 17**

Clear

Max Min

29° | 24°

Rain: 0

Sunrise: 06:22

Humidity: 89

Sunset: 05:44

Wind: normal

Barometer: 1014

### Tomorrow's Forecast

**Thursday, Dec 18**



Cloudy

Max Min

30° | 25°

### Extended Forecast for a week

**Friday  
Dec 19**



29° | 23°

Partly  
Cloudy

**Saturday  
Dec 20**



29° | 23°

Cloudy

**Sunday  
Dec 21**



26° | 24°

Partly  
Cloudy

**Monday  
Dec 22**



26° | 24°

Partly  
Cloudy

**Tuesday  
Dec 23**



26° | 24°

Partly  
Cloudy

# THE TIMES OF INDIA

## 5 reasons to include blueberries in your diet

*Blueberries are rich in antioxidants that help you stay away from several diseases. Not only are they tasty but they're also low in fat. Here's a low-down on how blueberries can help you stay hale and hearty.*

**Vitamin C:** Blueberries contain Vitamin C, which builds your immune system. It decreases the chances of developing various eye problems that damage the optic nerve. Hence, doctors often prescribe blueberries in your diet.

**Reduces Cancer risk:** Blueberries help attack cancer-causing radicals and can even block tumour cells from forming. Researchers have suggested that the fruit can act as a therapeutic agent for the early stage of prostate cancer.

**Regulates blood sugar:** Those having type 2 diabetes can have a problem in regulating their blood sugar levels. Studies suggest that blueberries can help such patients as they maintain the blood glucose levels.

**Boosts brain health:** According to scientists, blueberries help brain functions. In fact, studies performed suggest that adults who were given blueberries did well on memory tests. It is also said that blueberries act as a preventive method for cognitive decline.

**Fights Urinary Tract Infections:** Urinary tract infections are caused by bacteria. Blueberries contain compounds that prevent bacteria from sticking to bladder walls. Hence, blueberries are highly recommended for those with such infections.

## How to control blood sugar

*Diabetes is one of the bigger diseases of our time. However, the silver lining to the condition is that Type-2 diabetes can be controlled and even prevented, if one adapts a few simple but effective lifestyle changes. Keeping in mind a few of these things can be helpful.*

### **Eat Healthy**

A low calorie diet that has minimal saturated fats is shown to help prevent diabetes. It has been observed that restricting fat intake to 10% of your diet while including more vegetables, fresh fruits, dairy products, whole grains and a healthy fiber in it, can help keep your weight in check and prevent the disease.

### **Regular tests**

A great preventive measure is the awareness whether you're close to acquiring the disease or are prediabetic. So, regular blood sugar tests can help you indicate that and motivate you to take preventive measures.

### **Reduce meal size**

It is proven that reducing meal size and having many small meals compared to having two or three big meals, helps your metabolism and keeps your weight in check and not cause your blood sugar levels to fluctuate violently

### **Lifestyle changes**

Include physical activity in your life. Practise yoga, workouts in the gym or engage in cardio exercise to avoid a sedentary lifestyle which can help control the condition.

## 9 natural detoxifying foods

*Press instant restart on your system by signing up for a detoxification program designed by nature*

The need to detoxify your body regularly is critical in the time of fast food and faster burnout. Detox mantras may differ — pop star Rihanna drinks coconut water because it "balances out all the other toxic stuff I put into my body," while Hollywood actor Alicia Silverstone prefers to down carrot-apple-lemon-ginger juice cocktails. To help you make a good start, we get you a list of cleansing foods and herbs that will leave you feeling lighter and fresher within a week of including them in your diet.

### **Turmeric**

While recent studies have hailed its antioxidant and anti-inflammatory effects on the body, Ayurveda has valued this spice for centuries for its staggering medicinal properties. What makes it relevant for those wishing to detox is its power to help the liver get rid of harmful compounds. Since the primary purpose of a detoxification exercise is to support the organs of elimination like liver, turmeric comes to the rescue and its antioxidants play a critical role in combating the cell damage that can stack up with age. So, a tablespoon of turmeric a day, is enough to considerably set your insides right.

### **Apples**

Packed with fibre, and especially pectin which helps in cleansing the intestinal tract, apples can clear it of accumulated toxins and undigested food particles. This assumes more significance considering how essential it is to include a variety of fibres in the diet to maximise detoxification.

### **Garlic**

Garlic's high sulphur content not only tones the skin and makes your hair more lustrous, it also fires up the detoxification process. The liver must neutralise toxins with sulphur until it is excreted in a process called sulfation. To smoothen this process, include more sulphur-rich foods like garlic in your diet. Three cloves per meal should do you good.

## **Lemons**

Never miss a chance to add some fresh lemon juice to the water you drink or the food you eat. Lemon gets a lot of credit for warding off the cold, but its ability to aid healthy digestion and elimination is often overlooked. It may be the lemon's tart taste that encourages bile flow which helps digestion. Even its peels are rich in antioxidants that support detoxification.

## **Flaxseeds**

Fibre-powered flaxseeds can help keep many diseases at bay and its mix of nutrients helps internal cleansing. Since flaxseeds contain both soluble and insoluble fibre, they facilitate smooth bowel movement and prevent the re-absorption of cholesterol from the colon. Sprinkle a few tablespoons into your morning smoothie or salad.

## **Coriander**

While the seed of coriander or cilantro plant can help digestion and maintain normal cholesterol levels, the leaves are said to detoxify heavy metals like lead and mercury that can accumulate in the body over time. So go ahead and throw a handful of coriander into salads, or as garnish on cooked vegetables, dals and curries.

## **Broccoli**

To add to its reputation of being among the healthiest foods, these crucifers play their part in internal cleansing too. Upon digestion, broccoli releases a nutrient known to possess properties that help detoxify the 'bad' oestrogens in the body. One small cup of broccoli a day can fight them off, keeping you safe from weight gain, PMS and even cancer.

## **Artichokes**

The heart and the base of the outer leaves, which are the edible portions of the artichoke, are known to boost liver health. Artichokes promote the flow of bile and fat to and from the liver. Since the role of bile is to emulsify fats and transport toxins and waste from the liver into the small intestine, be wise and toss in a medium artichoke into your next bowl of salad.

## **Beets**

Beetroot is loaded with plant pigments that are known to have antioxidant and liver-supporting abilities. You may be relishing the beetroot, but the greens of the beet are often missed for their combined might of vitamins, minerals and antioxidants. So put the greens through the mixer, instead of trashing them, for added detox benefits. Include half a cup of beetroot or one cup of greens in your juice, and you've done your system a huge favour.

## **Recipe: Dal keema, fresh tomato salad**



*Inspired from the Hyderabadi Heleem (meat cooked with lentils and porridge over slow fire for hours), this is a much simpler, quicker, easier recipe.*

**Preparation time:** 10 minutes

**Cooking time:** 40 minutes

**Serves:** 4

### **Ingredients:**

1 red onion, sliced

300g mutton mince

1 tsp garam masala powder

½ tsp red chili powder

½ tsp cumin powder

1 tsp garlic paste

1 tsp ginger paste

100g dried red lentils (masoor dal)

1 tbsp oil

700ml stock or water

3 tomatoes  
handful coriander leaves  
1tsp lemon juice  
4 mini naans

### **Method:**

- Heat 1tbsp oil in a non-stick frying pan. Fry onion in the oil till lightly golden. Add the ginger garlic pastes and saute for 2 minutes and add mince.
- Stir fry over a high heat for 2 minutes, breaking up the mince as you go.
- Stir in the red chili powder, cumin powder, garam masala powder and lentils, pour in stock( or water), then fiercely simmer for 10 minutes.
- Cover and cook till the dal (lentils) is tender.
- While the mince is cooking, dice the tomatoes and roughly chop the coriander, then mix together with the lemon juice in a small bowl. Put the naans briefly in a toaster to warm through, then pop one on each plate.
- Spoon a quarter of the mince over each naans, then top with a spoonful of the fresh tomato and coriander salad.

### **Recipe: Chicken drumsticks**



*An all time favourite chicken preparation.*

**Preparation time:** 1hr

**Cooking time:** 1 hr. + Marinating time

**Serves:** 4



## **Ingredients :**

Tomato ketchup 4 tbsp

Clear honey 2 tbsp

Worcestershire sauce 2 tbsp

Garlic 2 cloves, crushed

Chicken drumsticks 8 (800g weight raw chicken with bone no skin)

Salt to taste

## **Method:**

-Mix everything but the chicken in a large bowl. Pull off the skin from the drumstick starting from the widest part. Slash through the thickest part with a knife 2-3 times. Toss with the sauce and season. Marinate in the fridge for an hour.

-Heat the oven to 200C/fan 180C/gas 6. Arrange the chicken in a single layer in a roasting tin lined with foil. Brush with half the marinade. Bake for 15 minutes then brush with a little more marinade. Cook for another 30 minutes brushing with the rest of the marinade after 15 minutes. Serve warm or cold.

## **Recipe: Cherry shortbread**

### **Ingredients**

1 cup plus 2 tablespoons flour

1 stick (4 ounces) unsalted butter, sliced and chilled

1/4 cup sugar, plus more for sprinkling

1/4 teaspoon salt

1/4 cup dried cherries

### **Method**

-Position a rack in the center of the oven and preheat to 170 degrees C.

-Line a cookie sheet with parchment paper.

-Mix the flour, butter, sugar and salt.

-Add the chopped cherries and blend.

-Turn out the mixture onto a work surface and gather into a smooth, compact ball.

- On a lightly floured surface, roll the dough into a 7-by-9-inch rectangle, about 1/4 inches thick; cut into 12 rectangles.
- Prick each cookie 3 times with a fork.
- Using a metal spatula, place the cookies about 1 inch apart on the prepared cookie sheet and refrigerate for 20 minutes.
- Bake until light golden-brown (30 to 35 minutes).

## THE HINDU BusinessLine

### Despite higher arrivals, cardamom rules steady

#### **Kochi, December 16:**

Cardamom prices ruled steady last week as demand matched supply at the auctions. Arrivals increased.

As prices were ruling moderately higher, most growers and traders released their produce. As the demand continues, prices ruled steady last week.

The firm trend was attributed to the increase in consumption following a rise in living standards and change in food habits. The per capita consumption is claimed to have moved up, PC Punnoose, General Manager, CPMC, in Kumily said.

At the same time, availability from the lone source, Guatemala, appears to be limited, trade sources said. Aggressive buying by upcountry dealers, especially those from Delhi, has kept the market steady despite an increase in arrivals, Ranganathan, a Bodi-based dealer told *BusinessLine*.

He attributed the “aggressive buying” to dealers’ apprehension of a shortage in supply from other origins. They might be anticipating a squeeze in supply from Guatemala where the crop could be small this year.

Export buying was slack as current prices are higher. However, they have bought an estimated 40 tonnes last week. The current third round of picking will come to a close by the month-end. From the fourth round onwards, arrivals will show a gradual decline and at the same time, quality will also slip.

Supply of 8 mm bold capsules was at 30 per cent of the total volume. However, arrival of extra bold capsules has come down to 20-25 per cent of the bulk against 30-40 per cent until recently, traders said.

At the Sunday auction held by the Kerala Cardamom Processing and Marketing Company, arrivals increased to 121.3 tonnes from 113.4 tonnes at the previous Sunday and the entire quantity was sold out. The maximum price was at Rs. 989 a kg and the minimum was Rs. 441. The auction average was at Rs. 774.04 against Rs. 778.11 the previous Sunday, Punnoose said.

Total arrivals during the season so far stood 9,226 tonnes (10,116 tonnes). The sales were at 9,064 tonnes and 9,782 tonnes respectively. The individual auction average, as on December 14, was at around Rs. 760 a kg ( Rs. 560).

Prices of graded varieties ( Rs. /kg): 8mm bold 970-980; 7mm-8mm 830-840; 6mm-7mm: 750-760; below 6 mm 670-680.

### **Indian farm marketing lesson for Africa**

#### **Chennai, December 16:**

African nations are now being trained in reforming agriculture marketing system, including infrastructure, thanks to the National Institute of Agricultural Marketing (NIAM), Jaipur, which trains delegates from countries such as Kenya, Liberia and Malawi under the USAID, India & Africa Trilateral agreement. The programme aims at strengthening the agricultural marketing and market advisory services in African nations through exposure to Indian training and best practices, a press release from the institute said.

The institute organises two training programmes each for three months with 60 delegates attending each time. Visits undertaken by the delegates to Agricultural Produce Marketing Committee yards in Vadodara and a few in Karnataka have helped them understand the nuances of marketing farm produce.

“Schemes such as Grammen Bhandaran Yojana which are being implemented here may be replicated in these countries and are a prerequisite for attracting private investment in infrastructure development,” said MS Jairath, Director, NIAM.

## Speculative buying heats up copra; coconut oil cools

### **Kochi, December 16:**

Speculative buying lifted copra prices in Kerala and Tamil Nadu this week, after a continuous fall in the last few sessions.

Copra prices touched Rs. 9,200 a quintal in Kerala against Rs. 8,500 quoted last week, while it went up to Rs.8,800 in Tamil Nadu from Rs. 8,000.

Bharat Khona, former Board Member, Cochin Oil Merchants Association (COMA), attributed the surge in prices to the speculative buying by a corporate firm. In spite of that, he said there was no genuine demand either from upcountry buyers or from other corporate companies.

However, Thalath Mahmood, Director, COMA, said that coconut oil market is ruling steady, registering a slight drop in Kerala at Rs. 12,600 a quintal against Rs. 12,700 quoted last week.

But there was a Rs. 600 drop in Tamil Nadu at Rs. 12,200 against the last week level of Rs. 12,800.

According to him, there was no unusual trend in the market and the surge in copra prices was due to the increase in local demand in connection with the Christmas season.

He said that price increase will not sustain and the market is likely to come down in the absence of demand.

The availability of good quality copra from Kerala, Tamil Nadu, and Karnataka with the commencement of the season is expected to revive the market in the New Year.

Corporates are adopting a wait-and-watch mode, he said.

## Rains flood Arabica areas with more trouble, but may shower benefits on robusta growers

Robusta coffee may, however, benefit as the showers provide winter irrigation



### **Bengaluru, December 16:**

The latest spell of unseasonal rains has compounded the woes of beleaguered arabica growers in the key coffee-growing regions of Kodagu and Chikmagalur. The rain, over the past week, has not only hit the ongoing harvest, but is also seen affecting the quality of arabicas, the mild and premium variety of coffee.

“The impact of these untimely rains during picking has been quite significant. It will shrink the arabica crop size even further by at least 10-15 per cent,” said K Kurian, Chairman of the Karnataka Planters Association (KPA), the apex body of growers in the State.

Arabica output has been declining in recent years and the KPA recently pegged this year’s (2014-15) output at between 60,000 and 70,000 tonnes, much lower than the State-run Coffee Board’s 1.05 lakh tonnes estimate. The Board is yet to announce the post-monsoon crop estimates. Coffee Board, in its post-blossom projections, had pegged 2014-15 crop at a record 3.44 lakh tonnes including 2.39 lakh tonnes of robustas.

Kurian said the rain has hit the arabica harvest resulting in fruit droppings and splitting of the ripened berries. Besides, the untimely downpour is seen affecting the quality of the arabicas that’s already harvested and being dried in the yards.

“The rain has raised the prospects of fungus affecting the beans. Also, the colour of the bean, caught under the rain tends to fade affecting quality and

resulting in lower realisations,” said Vasant, a grower from Shanivar Santhe, Kodagu.

It is estimated that about 30-40 per cent of the arabica crop has already been harvested by the growers. “The rain has worsened the plight of arabica growers. It is an added insult. The crop is down by almost half the initial estimates,” said N Bose Mandanna, a large grower and former Vice-Chairman of Coffee Board.

Mandanna said that the increase in coffee droppings due to the rains would result in higher costs for the growers as gathering such berries from the ground is expensive when compared to picking from the bushes.

However, the rains are seen beneficial for the robusta variety which will come up for harvest sometime in February. “The rains are a kind of winter irrigation for the robustas,” Mandanna said.

The growers are unlikely to gain from a reduced arabica crop as the prices are linked to the global markets. Arabicas prices are on a downward trend in the global market. From around \$1.98 per pound in mid November, the ICE Arabica futures have declined by about 13 per cent to around \$1.72. Farm gate prices of arabicas have dropped to around Rs. 10,400 per 50-kg bag of Arabica parchment and Rs.4,950 for arabica cherry.

From a peak of 1.21 lakh tonnes in 2001-02, the production of arabicas has declined over the years to around 1.02 lakh tonnes in 2013-14, mainly on account of the white stem borer. In the current year, the arabica crop has seen berry droppings caused by excess rainfall and diseases such as leaf rot and stalk rot among others.

# Business Standard

## **Kharif oilseed output to decline 6%: COOIT**

[Oilseed](#) output in India is likely to decline six per cent on lower acreage and yield due to delay in the monsoon rainfall this kharif harvesting season.

Data collated by the apex trade body, the Central Organisation for Oil Industry & Trade (COOIT), showed India's oilseed output at 27.64 million tonnes during the ongoing kharif harvesting season as compared to 29.35 million tonnes in the same season last year.

[Soybean](#) sowing reported a decline of 1.2 million hectares to 11.02 million and [groundnut](#) recorded a fall by 0.6 million hectares to 3.73 million hectares. [COOIT](#) estimates output of soybean and groundnut, the two leading varieties, at 9.17 million tonnes and 3.57 million tonnes this season as against 9.5 million tonnes and 4.72 million tonnes in the same season the previous year.