# Chronicle

#### International Mountain Day: Call to conserve hill cultures

The life of the Kattunayaka tribes reveals how ancient tribes live deep inside the woods in harmony with wildlife.



Enchanting view of the mountain ranges at the Mukurthi National Park near Ooty. (Photo: DC)

**Ooty**: Keeping in line with this year's theme of International Mountain Day, namely, "Mountain Cultures: Celebrating Diversity and Strengthening Identity", the greens here are calling for conserving mountain culture, and learn eco-conservation and traditional knowledge from the tribes and other hill communities in Nilgiris.

Mr V. Sivadass, managing trustee of the Nilgiris Environment and Socio-cultural Trust, said that that mountains are not only nature's life supporting systems, but also the origin of water and fresh air, the two most important parameters for sustenance of life on earth; they are also the origin and abode of ancient culture and tradition with a host of tribes and other hill communities residing in the mountains acting as the connecting link between ancient times and the cyber era.

"Nilgiris is home to six primitive tribes in the country. Their lifestyle, tradition and culture are different but unique to each community. The Toda tribes live in the upper reaches of the hills. Their lifestyle shows their adaptation to extremities of cold weather on the top of the hills. The life of the Kota tribes depicts their crafts and pottery skills. The life of the Kattunayaka tribes reveals how ancient tribes live deep inside the woods in harmony with wildlife. The life of Kurumba tribes tells how they adjusted to make a livelihood with gathering forest produce like honey," he explained.

"Their lives are nature oriented and they live in tune with nature. This is important for modern man to take eco-lessons from them to combat present day environmental challenges," he pointed out.



#### Puducherry, Cuddalore on alert, heavy rain expected



"The rainfall intensity will increase gradually becoming heavy to very heavy rainfall (7-19 cm) at a few places and isolated extremely heavy rainfall (greater than 20 cm) over Chennai, Tiruvallur and Kancheepuram districts of Tamil Nadu, and Nellore and Prakasam districts of Andhra Pradesh on December 12," the official noted.

#### Wind speed to increase

Squally wind speed reaching 40-50 kmph gusting to 60 kmph would prevail along and off Andhra Pradesh and adjoining north Tamil Nadu coasts. It will gradually increase becoming 80-90 kmph gusting to 100 kmph during the time of landfall along and off Chennai, Tiruvallur and Kancheepuram districts of Tamil Nadu, Puducherry, Nellore and Prakasam districts of Andhra Pradesh.

The official added that they anticipate damage to thatched huts, minor damage to power and communication lines due to breaking of branches, and damage of crops and trees in Puducherry as well.

Cyclone 'Vardah': Dos and don'ts during a cyclone



- 1. Stock adequate food, medicines and drinking water at home and use them judiciously. Keep overhead tanks, particularly in multistoried buildings, filled up, so as to plan for the contingency of power disruption due to rain.
- **2.** Keep emergency lights and mobile phones charged. Stock adequate quantities of candles and matches.
- **3.** Go to relief centres as and when advised to do so by officials.
- **4.** Avoid using personal vehicles like two wheelers and cars.

#### Weekly cattle markets in NK hit by demonetisation



The weekly market normally records a business of around Rs. 10 lakh with the arrival of over 2,000 head of cattle.

"The business has come to almost a grinding halt after demonetisation. With the buyers facing acute financial crunch, farmers are unable to sell cattle for a good price. The business in Amingad market has now reduced to only around Rs. 3 lakh," Shivappa Kaligouda, a cattle agent who is into this business for nearly two decades, said.

He said that the farmers were forced to either sell the cattle for half the price or take them back which would cost them a bomb.

Not just farmers, even mutton sellers say that their business has been hit by demonetisation.

Moulali Kolhar, a mutton seller, said that before demonetisation, he used to buy around a dozen goats a week, but now he could buy only around five to six.

Speaking to *The Hindu*, Sayed Istiyak Hamid, an expert in agriculture marketing, said that cattle trade was an intrinsic part of rural economy which was facing a major blow after demonetisation.

"For farmers, the livestock acts as additional source of revenue while for shepherds it is the only source of earning. The rural economy predominantly deals in cash and with no cash, the economy has literally crippled," he added.

#### AIR Kalaburagi celebrates 50 years

Minister for Information and Broadcasting M. Venkaiah Naidu has decried the tendency of giving prominence to sensationalisation of news by the electronic and print media and said that news should be treated objectively.

He was here on Sunday to inaugurate the golden jubilee celebrations of All India Radio Kalaburagi.

Mr. Naidu did not mince words while expressing his views about sensationalisation of news and said that anchors should avoid expressing their views as news and provide viewers the actual news.

Referring to the constructive role played by All India Radio and Doordarshan in retaining standards in the media, he said that though hundreds of new television channels had been launched in English and Indian languages, none could maintain the standards and impartiality of AIR and Doordarshan. He said that AIR and Doordarshan were the only ones which gave importance to agriculture, education and development sectors.

The programmes aired by AIR Kalaburagi including 'phone-in', talks on agriculture, health, and education, and interactions with agriculture scientists and progressive farmers had educated people belonging to different walks of life. Many programmes started by AIR Kalaburagi were copied by other stations. "It shows that radio still plays an important role in the lives of the people," he added. Hailing the contribution of the region, Mr. Naidu said that the region was also home to the author of the first classical Kannada text 'Kavirajamarga', King Amoghavarsha Nrupatunga .12th reformer Basaveshwara, century philosopher and social Allamaprabhu, Akkamahadevi and 14th century Sufi saint Hazrat Khaja Banda Nawaz fought for social justice and struggled against patriarchy to extend equal rights for women, Mr. Naidu added.

He said that Hyderabad Karnataka region was known for its rich historical heritage with dynasties such as Rashtrakutas, Kalachris, Chalukyas, Vijayanagara, Bahamani, and Adil Shahi and the Hyderabad Nizams ruling it.

Mr. Naidu released a souvenir to mark 50 years of AIR Kalaburagi and a CD of Pandit Siddaram Jambaldini. Congress leader M. Mallikarjun Kharge urged Mr. Naidu to include Kalaburagi in the list of smart cities. Director-General of AIR F. Sheheryar and Basavaraj Patil Sedam, MP, were present.

#### Centre's market intervention scheme for areca evokes mixed response

The announcement by the Union Government to procure arecanut at minimum support price (MSP) under market intervention scheme (MIS) in the State has evoked mixed response in the district. The Union government on December 7 had issued a notification to purchase 40,000 tonne of arecanut (28,000 tonne of chali variety and 12,000 tonne of red variety) under MIS. The Union government has fixed Rs. 25,100 per quintal as MSP for chali and Rs. 27,000 for the red variety. MIS will be

implemented by five cooperative organisations involved in marketing of arecanut, including The Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd. and the Malnad Arecanut Marketing Cooperative Society. The scheme will conclude on December 31.

The former MLA, Araga Jnanendra, who is also the president of the Arecanut Growers' Cell of the BJP State unit has said that the announcement on procurement at MSP will have a positive impact on the arecanut market. Earlier, the announcement by the Union government to enhance the minimum import price of arecanut from Rs. 75 to Rs. 110 per kg in May 2013 and from Rs. 110 per kg to Rs. 162 in June 2015 had triggered an upward movement in arecanut prices. The announcement to procure arecanut under MIS will have a similar positive impact on the arecanut market from which the farmers will be benefited, he said.

B.A. Ramesh Hegde, president of the Shivamogga Adike Belegarara Sangha, an organisation of arecanut growers, said that the decision by the Union government will not have much impact on the price of the produce. If the MSP is higher than the prevailing market price, it will have a positive impact on the market and farmers will be benefited from it. However, there is no much difference between the prevailing market price of arecanut and the MSP fixed by the Centre, he said. Mr. Hegde has expressed displeasure against the ceiling of 40,000 tonne fixed for procurement. In Karnataka, the annual production of arecanut is around 2.30 lakh tonne. The quantum of arecanut fixed for procurement is too less compared to the actual production. The Centre has fixed December 31 as the last date for procurement under MSP. The harvesting and processing of arecanut in Karnataka has commenced now and will continue till the end of February. The period of procurement should also be extended, he said.

#### Whiteflies plaguing coconut plantations in south India



Farmers reported the insect first in July in Palakkad and Pollachi. In November, after morphological and molecular identification by researchers from NBAIR and the Institute of Wood Science and Technology, it was proved that it was a previously unseen insect, Rugose Whitefly.

The Whitefly, which has a lifespan of barely 40 days, was discovered in 2004 in Latin America. Since then, it has rapidly spread to Florida, where researchers have found that over 100 species of plants — ornamental and edible — can host the insect.

NBAIR director Chandish R. Ballal believes the fly may have entered the country through the seedling of ornamental plants, and judging by the severity of damage, it perhaps experienced its first outbreak in Palakkad. Around the region, it is found to have damaged more than 25 hectares of plantations.

#### **Containment measures**

Biopesticides and natural weather changes may be the best chance now to contain the spread of the destructive insects.

Initial observations show that the insect spreads rapidly when the weather is warm and humid — aggravated this year owing to failed monsoons. The northeast rain bringing down temperatures and the imminent arrival of winter may help contain the insect.

Moreover, researchers say there has been marked improvement in the fight against the pest in plantations that have not been sprayed with chemicals. "When they spray pesticides, it kills the Green lacewing (*Chrysoperla* zastrowi *sillemi*), which is a natural predator of the whitefly. We have told farmers to use only biological agents such as starch powder or neem spray instead of chemicals," said Dr. Ballal.



#### Cyclone Vardah LIVE updates: Tamil Nadu, Andhra Pradesh on high alert

Cyclone Vardah: Follow for the latest updates on the situation in Andhra Pradesh and Tamil Nadu as the cyclone hits parts of south India.



Director of MeT department S Balachandran on Monday said that the severe cyclonic storm Vardah, which is currently lying 180 kilometers east of Chennai, is expected to cross near the region by afternoon. Tamil Nadu and Andhra Pradesh are expected to

be hit by Vardah on Monday and precautionary measures have been taken by the authorities. Tamil Nadu, which is receiving heavy rainfall, has been under alert for last ten days.

Balachandran also said that rainfall will continue at multiple places for next 36 hours. Schools and colleges in Kanchipuram and Tiruvallur have also been ordered to remain close on Monday. Fishermen were also asked to not venture out into the sea since November 30.

#### Here is all you need to know

Originating in Southern Thailand, cyclone Vardah had led to the death of about a dozen people there, before crawling towards India.



Tamil Nadu and Andhra Pradesh are expected to be hit by severe cyclonic storm, Vardah on Monday. Centering about 440 kms east of Chennai, the storm is expected to move towards Chennai by Monday afternoon. Currently experiencing large amount of rainfall, the state of Tamil Nadu has been under alert for about ten days regarding the possibility of being struck by a cyclone. Fishermen along the coasts of Tamil Nadu

and Puducherry have been asked not venture out into the sea since November 30. In Chennai, the emergency number is: Control Rooms of Police (100/103) and GCC (044-25619206/9445477206)

#### What is cyclone Vardah?

Originating in Southern Thailand, cyclone Vardah is a large scale air mass that had led to the death of about a dozen people there, before crawling towards India. In the past few days, the disturbances ensued in the islands of Andaman and Nicobar resulting in several tourists getting stranded there.

It had been moving away from the islands towards the coast of Tamil Nadu and Andhra Pradesh with a speed of 4 km per hour, that strengthened over time. Very rough sea conditions are expected in Tamil Nadu on Sunday night.

#### Cyclone Vardah: Storm likely to cross Tamil Nadu, Andhra Pradesh coasts today

As the cyclone advances, people have been asked to stay indoors as a precautionary measure.



Tamil Nadu and Andhra Pradesh are on high alert as the severe cyclonic storm, Vardah over west central and adjoining southwest Bay of Bengal moved further nearly west-southwest-wards and lay centred at about 180 km east-northeast of Chennai and 250 km east-southeast of Nellore according to Cyclone Warning Centre in Visakhapatnam. As the cyclone advances, people have been asked to stay indoors as a precautionary measure. Educational institutions in four districts will remain closed for Monday.

#### Cyclone Vardah: Storm may not weaken much when it makes landfall

Cyclone Vardah: By the time it makes a landfall, its wind speed is expected to be 100-110 kmph with winds gusting up to 120 kmph.



Cyclonic storm Vardah, which was earlier expected to weaken considerably, may not see its intensity going down when it makes landfall near Chennai today. According to the Cyclone Warning Division of the India Meteorological Department, (IMD), Vardah, which is currently, a very severe cyclonic storm, will weaken, but only to a severe cyclonic storm. The earlier forecast made by the IMD was that it would weaken into a cyclonic storm, thereby reducing its intensity considerably.

At 9:30 AM, the cyclone was lay centered around 105 kms east-northeast of Chennai. By the time it makes a landfall, its wind speed is expected to be 100-110 kmph with winds gusting up to 120 kmph.

The wind speed during a very severe cyclonic storm is 120 to 130 kmph. In a severe cyclonic storm the wind speed is somewhere between 110 to 80 kmph.

One of the major reasons for destruction in any cyclone is the wind velocity, apart from heavy to heavy rains and flooding.

## THE TIMES OF INDIA

#### As Ganga water level dips, farmers encroach land for farming

As <u>Ganga</u> water level has started dipping, farmers living in villages along the river have started encroaching on the flood plains to sow wheat. Not just farmers from Bijnor, land <u>sharks</u> from Haryana, Saharanpur, Muzaffarnagar, Meerut and other areas too encroach the riverbed to sow wheat. Such activities destroy habitats of wild animals.

At present, the Ganga water flow has dropped to 650 cusec and thousands of bighas are now dry land, on which farmers cultivate wheat illegally.

After the district administration made farmers aware of organic farming, especially along the banks of the Ganga, people have started carrying farming practices using pesticides and other artificial methods along the riverbanks, including on encroached government land. This goes against the Centre's commitment to make the Ganga a clean river

According to sources, the land along the river belongs to the forest and irrigation departments. "Why is the forest department not taking action against the encroachers?" asked Mohammad Ehsan, a resident of Maksudanpur Haphiz village. "These farmers sow wheat crop on government land every year. I had complained several times about the matter but no action has been taken yet," he added.

These areas are the habitat of wild animals such as the nilgai and barasingha and when the land is encroached, these animals move towards human settlements, leading to man-animal conflict.

#### 6 natural foods that boost brain health

#### 1. Boost your brain health

Eating the right foods does more than whittle your waistline – it pays off with powerful benefits for your brain. New research, unveiled at the American Chemical Society's (ACS) annual conference, suggests that certain natural foods may stave off Alzheimer's disease and other forms of dementia. Key nutrients are the power players, helping keep brain cells healthy and potentially preventing brain-damaging inflammation.

Several natural foods have emerged as potential allies in improving brain health. Have a look!

#### 2. Maple Syrup

A new study found that an extract of pure maple syrup from Canada may help prevent the misfolding and clumping of two types of proteins found in brain cells – beta amyloid and tau peptide. When cellular proteins fold improperly and clump together, they accumulate and form plaque that is involved in the pathogenesis of Alzheimer's and other brain diseases.

#### 3. Blueberries

Recent findings suggest that supplementation with flavonoid-rich blueberry offers the possibility of risk reduction in the advance of dementia.

#### 4. Extra Virgin Olive Oil

A naturally occurring phenolic compound in extra virgin olive oil, called oleocanthahl, might have the potential to prevent and/or hold the progression of Alzheimer's disease by targeting multiple pathological processes associated with the disease.

#### 5. Curcumin

A study found that healthy older individuals that were given a curcumin supplement had improved working memory and attention based on the results of a series of cognitive tests.

#### 6. Walnuts

New research on mice found that supplementation with walnuts showed improvement in memory, learning skills and motor development, compared to the group that did not receive the walnuts.

#### 7. Pomegranate extract

Recent studies show that pomegranate extract, which is a rich source of disease-fighting polyphenols, can help protect against the development of Alzheimer's disease. So, having a pomegranate daily is indeed beneficial

## **Business Standard**

#### Budget mantra: Rural outlay may go up 23% to reduce pains of demonetisation

The Budget, likely to be tabled in the first week of February, may also introduce a new scheme to pull the poor in the rural areas out of poverty.

The Union Budget is expected to increase allocation to the ministry of rural development by over 23 per cent to Rs 1.06 lakh crore. The allocation in the Budget estimates of 2016-17 was a little over Rs 86,000 crore. The Budget, likely to be tabled

in the first week of February, may also introduce a new scheme to pull the poor in the rural areas out of poverty. The Budget's focus on rural development could lessen the pains of demonetisation in villages. According to senior officials, if things go according to plan, there could be a rise in allocations.

#### Did Centre scrap wheat import duties to safeguard PDS next year?

In 2016-17, wheat procurement dropped to 23 MT against a targeted 28 MT because actual harvest failed govt estimates

The Centre's decision to cut the import duty on wheat from 10 per cent to zero during the peak sowing season might look like an anti-farmer measure. But, officials and traders say that with stocks in government godowns falling, the move is to prevent any chance of import on government account to run the public distribution system (PDS) next year (2017-18) India annually requires 27-30 million tonnes of wheat to run its PDS, which should not be difficult to procure if private players have adequate stocks in their pipeline.

#### Demonetisation impact? Wheat acreage 0.5 million hectares less than normal

Despite Centre's assertion, the acute cash crunch in rural India is having some impact on sowing of crops



Wheat the most sown food grains during the rabi season was planted in around 22.56 million hectares of land till Friday. Although it was nearly 2.33 million hectares more than last year, which was a drought period, it was over 0.5 million hectares lower than the normal acreage during this time of the year.

Normal acreage is the average area covered in the last five years.

Experts said that with 2014 and 2015 being drought years, acreage of 2016 rabi crops should be compared with 2013 and not in the years in between.

In 2013, when India had a normal monsoon, the area covered under wheat till December 8, 2016, was around 25.13 million hectares, which was 2.6 million hectares more than 2016.

This shows that despite Centre's assertion, the acute <u>cash crunch</u> in rural India is having some impact on <u>sowing</u> of crops.

The <u>crop</u> condition in many places is also not of the highest quality, while there is also a possibility of temperatures rising around the <u>harvest</u> time. The above factors might have compelled the Centre to waive off the import duty on wheat on Thursday, within months of lowering it to 10%.

Overall, across all crops, the total area covered till Friday (December 9, 2016) was around 47.24 million hectares, which is 7.64% more than the area covered during the same period in 2015 and just 0.56% less than the normal acreage.

Meanwhile, agriculture minister Radha Mohan Singh on Friday reiterated that India's rabi <u>sowing</u>has not been hampered due to demonetization.

In a statement issued on Friday, Singh said that the latest <u>sowing</u> data shows that rabi acreage has been more than last year and hence there has been no impact of <u>demonetisation</u> on rabi crops.

The India Meteorological Department (IMD), meanwhile, in its weekly winter update, said, "the minimum temperatures very likely to be normal to above normal over most parts of northwest, east & northeast India during the 1st week over and over northwest India during first half of the 2nd week. These will be normal or below normal over rest parts of the country during second week."

#### China's grain output shrinks by 5.2 mn tonnes

China's grain production stood at around 616 mn tonnes this year



<u>China</u> is likely to import more grains after its output dipped by about 5.2 million tonnes this year compared with last year as the <u>planting area</u> shrank and the <u>per unit</u> <u>yield</u>edged down, according to official data.

National grain output stood at about 616 million tonnes in 2016, down by about 5.2 million tonnes, about 0.8 per cent, compared with last year, data released by the National Bureau of Statistics (NBS) said.

Grain <u>planting area</u> has shrunk by 3.15 lakh hectares, while the <u>per unit yield</u> dropped by 30.7 kilograms per hectare, it said.

Facing unbalanced supply and demand among grain varieties, many areas reduced corn planting in favour of soy and used the grain for feedstuff and oil, to Huang Bingxin, a senior statistician with NBS said.

The reduction in the <u>planting area</u> impacted high-yield grain and severe national extreme weather such as drought and heavy rain also dented grain productivity, Huang was quoted as saying by state-run Xinhua news agency on Thursday.

As it resorted to massive urbanisation, converting the largely agrarian country into urban settlements, China's agricultural output slowed over the years with the Communist nation resorting to massive grain imports in recent years not commensurate with the growth of population which is over 1.3 billion.

<u>Grain production</u> last year was over 621 million tonnes, higher than 2014's 607 million tonnes.

Excluding imports the supply was 25 million tonnes less than what was needed, China's Agricultural MinisterHan Changfu said.

"More people will live in cities. Compared with rural residents, urban dwellers eat less rice, but consume more meat, eggs, milk, fruits and vegetables. Based on our calculation, a person living in cities generally consumes far more agricultural products than a person living in villages," he was quoted as saying by Hong Kong media in March this year.

Han said that the large amount of grain imports were due to the shortage of specific products and lower prices in international market.

Among the 120 million tonnes of grain imported, more than 80 million tonnes were beans that came mainly from the US and Brazil. The rest were mostly cereals.

During the 13th five-year plan, which started this year the country will not pursue a continuous growth of grain output, but a bigger capacity, the minister said.

## BusinessLine

Turbines may boost crop growth



Washington, December 11:

Wind turbines in farms not only capture renewable energy, but may also help crops grow more efficiently, a new study has found. Tall wind turbines disbursed throughout a field create air turbulence that may help plants by affecting variables such as temperature and carbon dioxide concentrations, said Professor Gene Takle of Iowa State University in the US.

Scientists installed research towers on a 200-turbine wind farm. The research towers collected data from 2010 to 2013 on wind speeds and directions, temperature, humidity, turbulence, gas content and precipitation. The project aimed to discover how the turbulence created when wind moves through the turbines affects conditions at ground level where crops grow.

The data show that the wind turbines have a measurable impact on several key variables that affect growing conditions.



#### Puducherry, Cuddalore on alert, heavy rain expected



"The rainfall intensity will increase gradually becoming heavy to very heavy rainfall (7-19 cm) at a few places and isolated extremely heavy rainfall (greater than 20 cm) over Chennai, Tiruvallur and Kancheepuram districts of Tamil Nadu, and Nellore and Prakasam districts of Andhra Pradesh on December 12," the official noted.

#### Wind speed to increase

Squally wind speed reaching 40-50 kmph gusting to 60 kmph would prevail along and off Andhra Pradesh and adjoining north Tamil Nadu coasts. It will gradually increase becoming 80-90 kmph gusting to 100 kmph during the time of landfall along and off Chennai, Tiruvallur and Kancheepuram districts of Tamil Nadu, Puducherry, Nellore and Prakasam districts of Andhra Pradesh.

The official added that they anticipate damage to thatched huts, minor damage to power and communication lines due to breaking of branches, and damage of crops and trees in Puducherry as well.

#### Cyclone 'Vardah': Dos and don'ts during a cyclone



- 2. Stock adequate food, medicines and drinking water at home and use them judiciously. Keep overhead tanks, particularly in multistoried buildings, filled up, so as to plan for the contingency of power disruption due to rain.
- **3.** Keep emergency lights and mobile phones charged. Stock adequate quantities of candles and matches.
- **4.** Go to relief centres as and when advised to do so by officials.
- **5.** Avoid using personal vehicles like two wheelers and cars.

#### Weekly cattle markets in NK hit by demonetisation



The weekly market normally records a business of around Rs. 10 lakh with the arrival of over 2,000 head of cattle.

"The business has come to almost a grinding halt after demonetisation. With the buyers facing acute financial crunch, farmers are unable to sell cattle for a good price. The business in Amingad market has now reduced to only around Rs. 3 lakh," Shivappa Kaligouda, a cattle agent who is into this business for nearly two decades, said.

He said that the farmers were forced to either sell the cattle for half the price or take them back which would cost them a bomb.

Not just farmers, even mutton sellers say that their business has been hit by demonetisation.

Moulali Kolhar, a mutton seller, said that before demonetisation, he used to buy around a dozen goats a week, but now he could buy only around five to six.

Speaking to *The Hindu*, Sayed Istiyak Hamid, an expert in agriculture marketing, said that cattle trade was an intrinsic part of rural economy which was facing a major blow after demonetisation.

"For farmers, the livestock acts as additional source of revenue while for shepherds it is the only source of earning. The rural economy predominantly deals in cash and with no cash, the economy has literally crippled," he added.

#### AIR Kalaburagi celebrates 50 years

Minister for Information and Broadcasting M. Venkaiah Naidu has decried the tendency of giving prominence to sensationalisation of news by the electronic and print media and said that news should be treated objectively.

He was here on Sunday to inaugurate the golden jubilee celebrations of All India Radio Kalaburagi.

Mr. Naidu did not mince words while expressing his views about sensationalisation of news and said that anchors should avoid expressing their views as news and provide viewers the actual news.

Referring to the constructive role played by All India Radio and Doordarshan in retaining standards in the media, he said that though hundreds of new television channels had been launched in English and Indian languages, none could maintain the standards and impartiality of AIR and Doordarshan. He said that AIR and Doordarshan were the only ones which gave importance to agriculture, education and development sectors.

The programmes aired by AIR Kalaburagi including 'phone-in', talks on agriculture, health, and education, and interactions with agriculture scientists and progressive farmers had educated people belonging to different walks of life. Many programmes started by AIR Kalaburagi were copied by other stations. "It shows that radio still plays an important role in the lives of the people," he added. Hailing the contribution of the region, Mr. Naidu said that the region was also home to the author of the first classical Kannada text 'Kavirajamarga', King Amoghavarsha Nrupatunga .12th reformer century philosopher and Basaveshwara, social Allamaprabhu, Akkamahadevi and 14th century Sufi saint Hazrat Khaja Banda Nawaz fought for social justice and struggled against patriarchy to extend equal rights for women, Mr. Naidu added.

He said that Hyderabad Karnataka region was known for its rich historical heritage with dynasties such as Rashtrakutas, Kalachris, Chalukyas, Vijayanagara, Bahamani, and Adil Shahi and the Hyderabad Nizams ruling it.

Mr. Naidu released a souvenir to mark 50 years of AIR Kalaburagi and a CD of Pandit Siddaram Jambaldini. Congress leader M. Mallikarjun Kharge urged Mr. Naidu to include Kalaburagi in the list of smart cities. Director-General of AIR F. Sheheryar and Basavaraj Patil Sedam, MP, were present.

#### Centre's market intervention scheme for areca evokes mixed response

The announcement by the Union Government to procure arecanut at minimum support price (MSP) under market intervention scheme (MIS) in the State has evoked

mixed response in the district. The Union government on December 7 had issued a notification to purchase 40,000 tonne of arecanut (28,000 tonne of chali variety and 12,000 tonne of red variety) under MIS. The Union government has fixed Rs. 25,100 per quintal as MSP for chali and Rs. 27,000 for the red variety. MIS will be implemented by five cooperative organisations involved in marketing of arecanut, including The Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd. and the Malnad Arecanut Marketing Cooperative Society. The scheme will conclude on December 31.

The former MLA, Araga Jnanendra, who is also the president of the Arecanut Growers' Cell of the BJP State unit has said that the announcement on procurement at MSP will have a positive impact on the arecanut market. Earlier, the announcement by the Union government to enhance the minimum import price of arecanut from Rs. 75 to Rs. 110 per kg in May 2013 and from Rs. 110 per kg to Rs. 162 in June 2015 had triggered an upward movement in arecanut prices. The announcement to procure arecanut under MIS will have a similar positive impact on the arecanut market from which the farmers will be benefited, he said.

B.A. Ramesh Hegde, president of the Shivamogga Adike Belegarara Sangha, an organisation of arecanut growers, said that the decision by the Union government will not have much impact on the price of the produce. If the MSP is higher than the prevailing market price, it will have a positive impact on the market and farmers will be benefited from it. However, there is no much difference between the prevailing market price of arecanut and the MSP fixed by the Centre, he said. Mr. Hegde has expressed displeasure against the ceiling of 40,000 tonne fixed for procurement. In Karnataka, the annual production of arecanut is around 2.30 lakh tonne. The quantum of arecanut fixed for procurement is too less compared to the actual production. The Centre has fixed December 31 as the last date for procurement under MSP. The harvesting and processing of arecanut in Karnataka has commenced now and will continue till the end of February. The period of procurement should also be extended, he said.

#### Whiteflies plaguing coconut plantations in south India



Farmers reported the insect first in July in Palakkad and Pollachi. In November, after morphological and molecular identification by researchers from NBAIR and the Institute of Wood Science and Technology, it was proved that it was a previously unseen insect, Rugose Whitefly.

The Whitefly, which has a lifespan of barely 40 days, was discovered in 2004 in Latin America. Since then, it has rapidly spread to Florida, where researchers have found that over 100 species of plants — ornamental and edible — can host the insect.

NBAIR director Chandish R. Ballal believes the fly may have entered the country through the seedling of ornamental plants, and judging by the severity of damage, it perhaps experienced its first outbreak in Palakkad. Around the region, it is found to have damaged more than 25 hectares of plantations.

#### **Containment measures**

Biopesticides and natural weather changes may be the best chance now to contain the spread of the destructive insects.

Initial observations show that the insect spreads rapidly when the weather is warm and humid — aggravated this year owing to failed monsoons. The northeast rain bringing down temperatures and the imminent arrival of winter may help contain the insect.

Moreover, researchers say there has been marked improvement in the fight against the pest in plantations that have not been sprayed with chemicals. "When they spray pesticides, it kills the Green lacewing (*Chrysoperla* zastrowi *sillemi*), which is a natural predator of the whitefly. We have told farmers to use only biological agents such as starch powder or neem spray instead of chemicals," said Dr. Ballal.



#### Cyclone Vardah LIVE updates: Tamil Nadu, Andhra Pradesh on high alert

Cyclone Vardah: Follow for the latest updates on the situation in Andhra Pradesh and Tamil Nadu as the cyclone hits parts of south India.



Director of MeT department S Balachandran on Monday said that the severe cyclonic storm Vardah, which is currently lying 180 kilometers east of Chennai, is expected to cross near the region by afternoon. Tamil Nadu and Andhra Pradesh are expected to be hit by Vardah on Monday and precautionary measures have been taken by the authorities. Tamil Nadu, which is receiving heavy rainfall, has been under alert for last ten days.

Balachandran also said that rainfall will continue at multiple places for next 36 hours. Schools and colleges in Kanchipuram and Tiruvallur have also been ordered to remain close on Monday. Fishermen were also asked to not venture out into the sea since November 30.

#### Here is all you need to know

Originating in Southern Thailand, cyclone Vardah had led to the death of about a dozen people there, before crawling towards India.



Tamil Nadu and Andhra Pradesh are expected to be hit by severe cyclonic storm, Vardah on Monday. Centering about 440 kms east of Chennai, the storm is expected to move towards Chennai by Monday afternoon. Currently experiencing large amount of rainfall, the state of Tamil Nadu has been under alert for about ten days regarding the possibility of being struck by a cyclone. Fishermen along the coasts of Tamil Nadu and Puducherry have been asked not venture out into the sea since November 30.

In Chennai, the emergency number is: Control Rooms of Police (100/103) and GCC (044-25619206/9445477206)

Andhra Pradesh: 0866-2488000

#### What is cyclone Vardah?

Originating in Southern Thailand, cyclone Vardah is a large scale air mass that had led to the death of about a dozen people there, before crawling towards India. In the past few days, the disturbances ensued in the islands of Andaman and Nicobar resulting in several tourists getting stranded there.

It had been moving away from the islands towards the coast of Tamil Nadu and Andhra Pradesh with a speed of 4 km per hour, that strengthened over time. Very rough sea conditions are expected in Tamil Nadu on Sunday night.

#### Cyclone Vardah: Storm likely to cross Tamil Nadu, Andhra Pradesh coasts today

As the cyclone advances, people have been asked to stay indoors as a precautionary measure.



Tamil Nadu and Andhra Pradesh are on high alert as the severe cyclonic storm, Vardah over west central and adjoining southwest Bay of Bengal moved further nearly west-southwest-wards and lay centred at about 180 km east-northeast of Chennai and 250 km east-southeast of Nellore according to Cyclone Warning Centre in Visakhapatnam. As the cyclone advances, people have been asked to stay indoors as a precautionary measure. Educational institutions in four districts will remain closed for Monday.

#### Cyclone Vardah: Storm may not weaken much when it makes landfall

Cyclone Vardah: By the time it makes a landfall, its wind speed is expected to be 100-110 kmph with winds gusting up to 120 kmph.



Cyclonic storm Vardah, which was earlier expected to weaken considerably, may not see its intensity going down when it makes landfall near Chennai today. According to the Cyclone Warning Division of the India Meteorological Department, (IMD), Vardah, which is currently, a very severe cyclonic storm, will weaken, but only to a severe cyclonic storm. The earlier forecast made by the IMD was that it would weaken into a cyclonic storm, thereby reducing its intensity considerably.

At 9:30 AM, the cyclone was lay centered around 105 kms east-northeast of Chennai. By the time it makes a landfall, its wind speed is expected to be 100-110 kmph with winds gusting up to 120 kmph.

The wind speed during a very severe cyclonic storm is 120 to 130 kmph. In a severe cyclonic storm the wind speed is somewhere between 110 to 80 kmph.

One of the major reasons for destruction in any cyclone is the wind velocity, apart from heavy to heavy rains and flooding.

## THE TIMES OF INDIA

#### As Ganga water level dips, farmers encroach land for farming

As <u>Ganga</u> water level has started dipping, farmers living in villages along the river have started encroaching on the flood plains to sow wheat. Not just farmers from Bijnor, land <u>sharks</u> from Haryana, Saharanpur, Muzaffarnagar, Meerut and other areas too encroach the riverbed to sow wheat. Such activities destroy habitats of wild animals

At present, the Ganga water flow has dropped to 650 cusec and thousands of bighas are now dry land, on which farmers cultivate wheat illegally.

After the district administration made farmers aware of organic farming, especially along the banks of the Ganga, people have started carrying farming practices using pesticides and other artificial methods along the riverbanks, including on encroached government land. This goes against the Centre's commitment to make the Ganga a clean river.

According to sources, the land along the river belongs to the forest and irrigation departments. "Why is the forest department not taking action against the encroachers?" asked Mohammad Ehsan, a resident of Maksudanpur Haphiz village. "These farmers sow wheat crop on government land every year. I had complained several times about the matter but no action has been taken yet," he added.

These areas are the habitat of wild animals such as the nilgai and barasingha and when the land is encroached, these animals move towards human settlements, leading to man-animal conflict.

#### 6 natural foods that boost brain health

#### 1. Boost your brain health

Eating the right foods does more than whittle your waistline – it pays off with powerful benefits for your brain. New research, unveiled at the American Chemical Society's (ACS) annual conference, suggests that certain natural foods may stave off Alzheimer's disease and other forms of dementia. Key nutrients are the power players, helping keep brain cells healthy and potentially preventing brain-damaging inflammation.

Several natural foods have emerged as potential allies in improving brain health. Have a look!

#### 2. Maple Syrup

A new study found that an extract of pure maple syrup from Canada may help prevent the misfolding and clumping of two types of proteins found in brain cells – beta amyloid and tau peptide. When cellular proteins fold improperly and clump together, they accumulate and form plaque that is involved in the pathogenesis of Alzheimer's and other brain diseases.

#### 3. Blueberries

Recent findings suggest that supplementation with flavonoid-rich blueberry offers the possibility of risk reduction in the advance of dementia.

#### 4. Extra Virgin Olive Oil

A naturally occurring phenolic compound in extra virgin olive oil, called oleocanthahl, might have the potential to prevent and/or hold the progression of Alzheimer's disease by targeting multiple pathological processes associated with the disease.

#### 5. Curcumin

A study found that healthy older individuals that were given a curcumin supplement had improved working memory and attention based on the results of a series of cognitive tests.

#### 6. Walnuts

New research on mice found that supplementation with walnuts showed improvement in memory, learning skills and motor development, compared to the group that did not receive the walnuts.

#### 7. Pomegranate extract

Recent studies show that pomegranate extract, which is a rich source of disease-fighting polyphenols, can help protect against the development of Alzheimer's disease. So, having a pomegranate daily is indeed beneficial

## **Business Standard**

Budget mantra: Rural outlay may go up 23% to reduce pains of demonetisation

The Budget, likely to be tabled in the first week of February, may also introduce a new scheme to pull the poor in the rural areas out of poverty.

The Union Budget is expected to increase allocation to the ministry of rural development by over 23 per cent to Rs 1.06 lakh crore. The allocation in the Budget estimates of 2016-17 was a little over Rs 86,000 crore. The Budget, likely to be tabled in the first week of February, may also introduce a new scheme to pull the poor in the

rural areas out of poverty. The Budget's focus on rural development could lessen the pains of demonetisation in villages. According to senior officials, if things go according to plan, there could be a rise in allocations.

#### Did Centre scrap wheat import duties to safeguard PDS next year?

In 2016-17, wheat procurement dropped to 23 MT against a targeted 28 MT because actual harvest failed govt estimates

The Centre's decision to cut the import duty on wheat from 10 per cent to zero during the peak sowing season might look like an anti-farmer measure. But, officials and traders say that with stocks in government godowns falling, the move is to prevent any chance of import on government account to run the public distribution system (PDS) next year (2017-18) India annually requires 27-30 million tonnes of wheat to run its PDS, which should not be difficult to procure if private players have adequate stocks in their pipeline.

#### Demonetisation impact? Wheat acreage 0.5 million hectares less than normal

Despite Centre's assertion, the acute cash crunch in rural India is having some impact on sowing of crops



Wheat the most sown food grains during the rabi season was planted in around 22.56 million hectares of land till Friday. Although it was nearly 2.33 million hectares more than last year, which was a drought period, it was over 0.5 million hectares lower than the normal acreage during this time of the year.

Normal acreage is the average area covered in the last five years.

Experts said that with 2014 and 2015 being drought years, acreage of 2016 rabi crops should be compared with 2013 and not in the years in between.

In 2013, when India had a normal monsoon, the area covered under wheat till December 8, 2016, was around 25.13 million hectares, which was 2.6 million hectares more than 2016.

This shows that despite Centre's assertion, the acute <u>cash crunch</u> in rural India is having some impact on <u>sowing</u> of crops.

The <u>crop</u> condition in many places is also not of the highest quality, while there is also a possibility of temperatures rising around the <u>harvest</u> time. The above factors might have compelled the Centre to waive off the import duty on wheat on Thursday, within months of lowering it to 10%.

Overall, across all crops, the total area covered till Friday (December 9, 2016) was around 47.24 million hectares, which is 7.64% more than the area covered during the same period in 2015 and just 0.56% less than the normal acreage.

Meanwhile, agriculture minister Radha Mohan Singh on Friday reiterated that India's rabi <u>sowing</u>has not been hampered due to demonetization.

In a statement issued on Friday, Singh said that the latest <u>sowing</u> data shows that rabi acreage has been more than last year and hence there has been no impact of <u>demonetisation</u> on rabi crops.

The India Meteorological Department (IMD), meanwhile, in its weekly winter update, said, "the minimum temperatures very likely to be normal to above normal over most parts of northwest, east & northeast India during the 1st week over and over northwest India during first half of the 2nd week. These will be normal or below normal over rest parts of the country during second week."

China's grain output shrinks by 5.2 mn tonnes

China's grain production stood at around 616 mn tonnes this year



<u>China</u> is likely to import more grains after its output dipped by about 5.2 million tonnes this year compared with last year as the <u>planting area</u> shrank and the <u>per unit yield</u>edged down, according to official data.

National grain output stood at about 616 million tonnes in 2016, down by about 5.2 million tonnes, about 0.8 per cent, compared with last year, data released by the National Bureau of Statistics (NBS) said.

Grain <u>planting area</u> has shrunk by 3.15 lakh hectares, while the <u>per unit yield</u> dropped by 30.7 kilograms per hectare, it said.

Facing unbalanced supply and demand among grain varieties, many areas reduced corn planting in favour of soy and used the grain for feedstuff and oil, to Huang Bingxin, a senior statistician with NBS said.

The reduction in the <u>planting area</u> impacted high-yield grain and severe national extreme weather such as drought and heavy rain also dented grain productivity, Huang was quoted as saying by state-run Xinhua news agency on Thursday.

As it resorted to massive urbanisation, converting the largely agrarian country into urban settlements, China's agricultural output slowed over the years with the Communist nation resorting to massive grain imports in recent years not commensurate with the growth of population which is over 1.3 billion.

<u>Grain production</u> last year was over 621 million tonnes, higher than 2014's 607 million tonnes

Excluding imports the supply was 25 million tonnes less than what was needed, China's Agricultural MinisterHan Changfu said.

"More people will live in cities. Compared with rural residents, urban dwellers eat less rice, but consume more meat, eggs, milk, fruits and vegetables. Based on our calculation, a person living in cities generally consumes far more agricultural products than a person living in villages," he was quoted as saying by Hong Kong media in March this year.

Han said that the large amount of grain imports were due to the shortage of specific products and lower prices in international market.

Among the 120 million tonnes of grain imported, more than 80 million tonnes were beans that came mainly from the US and Brazil. The rest were mostly cereals.

During the 13th five-year plan, which started this year the country will not pursue a continuous growth of grain output, but a bigger capacity, the minister said.

## BusinessLine

#### Turbines may boost crop growth



#### Washington, December 11:

Wind turbines in farms not only capture renewable energy, but may also help crops grow more efficiently, a new study has found. Tall wind turbines disbursed throughout a field create air turbulence that may help plants by affecting variables such as temperature and carbon dioxide concentrations, said Professor Gene Takle of Iowa State University in the US.

Scientists installed research towers on a 200-turbine wind farm. The research towers collected data from 2010 to 2013 on wind speeds and directions, temperature, humidity, turbulence, gas content and precipitation. The project aimed to discover how the turbulence created when wind moves through the turbines affects conditions at ground level where crops grow.

The data show that the wind turbines have a measurable impact on several key variables that affect growing conditions.