# THE MENDU

# Special council mooted for export of agriproducts



The HinduVisakhapatnam MP K. Haribabu, AU Vice-Chancellor G.S.N. Raju, and Special Consultant of A.P. Study Cirlce U. Subrahmnanyam releasing books written by NHRC member K.S. Chalam (second from left), at a seminar in Visakhapatnam on Tuesday. Photo: C.V. Subrahmanyam

Reiterating the Centre's commitment to implement special packages for the North Andhra and Rayalaseema regions and industrial incentives on the lines of those prevailing in hilly states, MP K. Haribabu has mooted a special council for export of agriculture products.

Speaking at a seminar on development of North Andhra organised by the Uttarandhra Journalists' Front on Tuesday, he said, since Vijayawada achieved its main demand of being the capital for the new State, it should not insist on other benefits, including the new railway zone and its headquarters. Visakhapatnam earned a pride of place after being identified for development as Smart City. Development should be decentralised and the mistakes that led to formation of Telanganga should not be repeated, he said.

Three books penned by National Human Rights Commission member and former member of the UPSC K.S. Chalam on development of North Andhra, Kalingandhra, and Teluguseema were released on the occasion.

Asserting that bifurcation would benefit the new State, Prof. Chalam said that an approach paper with focus on agriculture, industry, and tourism and an outlay of Rs. 40,000 crore was prepared and released in March. Prof. Chalam said since the new capital was proposed to be developed in one-lakh acres of fertile land, water being used there should be diverted to North Andhra.

Andhra University Vice-Chancellor G. S. N. Raju said that besides Tribal University, another university would come up in Vizianagaram.

Special Consultant of A P Study Circle U. Subrahmanyam said IT should play a complementary role in the manufacturing sector to improve job opportunities for poor and semi-skilled persons.

Prof. Chandu Subba Rao reviewed the books released.

UJF president M. R. N. Varma, general secretary N. Nageswara Rao, and senior journalist Sasank Mohan spoke.

# Plough: a farmer's identity



Plough, the T-shaped wooden tool, used for turning the soil in the field, is the most important equipment for a farmer. In fact, plough became a part of a farmer's identity. I am sure many of you would not have seen a plough, as it has practically disappeared in many villages, after tractors were invented for the same purpose.

The plough must have been invented when early man started prodding the ground with sticks to sow seeds. Some sources say that plough was developed thousands of years ago, when man started domesticating animals such as bulls and oxes to do hard labour. Bible has references to the plough, so does Mesopotamian, Egyptian and Harappan civilisations. In fact some say that the Greeks were the first to use different types of plough to till the earth.

Farmers used to leave home early with the plough resting on their shoulders to ready their fields and in the evening they used to assemble at the local blacksmith's shop to sharpen and refine their equipment.

Usually a plough is made from local and hardy wood trees from the area and is fitted with an iron pointer fitted at one end to make it easy for the farmer to break and turn the soil. Selecting the right kind of tree for making the plough is an art. An aged and experienced person or a group of people along with a carpenter and a blacksmith examine several trees before selecting the right one.

Once ready, the plough is attached to a pair of bullocks which is made to move several times in circles in his field to churn the soil well.

Great poets like Subramania Bharati, Rabindranath Tagore and Munshi Premchand have all paid rich tributes to the plough.

The plough represents everything about farming. With technological developments, tractors have taken over the place of ploughs. They plough a field faster and are easier to work with.

(M.J. Prabu is The Hindu's Agriculture correspondent. He writes the popular Farmer's Notebook. Write to the author at prabu73@gmail.com)

#### THINGS TO DO

Ask your teachers to arrange a one day trip to a farm nearby and spend time with a farmer. Ask him about the plough and find out if he has one.

### Listen to your customers

When stakeholders get together, they can make or break your business

Even before it hit the shelves in March 2011, DuPont's new herbicide, Imprelis, was a hot topic of conversation among lawn-care providers on Lawnsite.com, a leading professional forum within the industry.

The first in a new line based on novel chemistry, Imprelis was hailed as a game-changer for weed eradication by the American chemical giant's professional-products division and influential customers alike. Nonetheless, many users logged on to Lawnsite.com to seek and share counsel — including university studies — and peer reviews.

Apart from a few complaints about price, the first reports from the field were enthusiastic. It seemed that DuPont had a big winner on its hands.

At the end of May, though, a Lawnsite.com member reported: "Found off-target damage today ... Anyone else finding problems?"

Initially, users were caught between disbelief and anxiety, but soon they were convinced that Imprelis was killing trees. The forum bristled with photographs of damage, links to the latest university updates, news reports and other information. Within weeks those threads became a national resource as homeowners came on board, lawyers trawled the threads seeking clients, national media sought authoritative sources of information and government regulators tracked the issue. Forum members appeared to know more about the problem than the company did. The end came in August 2011, when the U.S. Environmental Protection Agency forced a recall - after Lawnsite.com members reported that distributors were not complying with DuPont's own, last-ditch recall. DuPont found itself liable for nearly \$1.2 billion in settlements. Instead of growing, the company's professional-products division's reputation with customers had been shredded. In the fall of 2012, Syngenta, a global agriculture business, acquired the unit for only \$125 million.

The Imprelis case is the first we know of in which an entire unit of a multinational firm was essentially destroyed by its own customers. Could DuPont have averted that catastrophe? We think so.

In particular, the company could have pulled the product much earlier. We know that, for people in the company, that would have been a terrible decision to make. They believed that they had a great, environmentally friendly product. When core clients started reporting damage, however, DuPont should have stopped distribution. If the customers were right, as they turned out to be, every drop of product that left the distributors equalled a future problem and a future cost.

A second mistake was trying to find a solution alone, while hoping that customers would wait for answers. That cut DuPont out of the conversation and, thus, out of a growing consensus. By the time DuPont came back into the debate, the firm faced an organized, well-informed community and had lost that community's trust. Viewed from the outside, the response of DuPont's professional-products division was defined by lawyers. That's a by-the-book approach, but it may not be based on the right book anymore. Today's companies need to think about more than liability. They can reduce costs and preserve their businesses more effectively by engaging with customers swiftly and transparently to resolve their problems. Mark Lee Hunter, author of Story-Based Inquiry: A Manual for Investigative Journalists (Unesco, 2011), is an adjunct professor and senior research fellow at the international business school Insead.

#### —The New York Times Syndicate

Companies can reduce costs and preserve their businesses more effectively by engaging with customers swiftly and transparently to resolve their problems

# Harsh Vardhan wants to wean farmers off tobacco crop

India is the second largest tobacco producer and consumer

#### Harsh Vardhan

Opening up another front in the battle against tobacco, Health and Family Welfare Minister Harsh Vardhan now wants farmers to be weaned off growing the tobacco crop and made to switch to alternatives. India is the second largest producer and consumer of tobacco in the world.

In a letter to Agriculture Minister Radha Mohan Singh and Minister of State for Commerce Nirmala Sitharaman, Dr. Vardhan suggested that the three Ministries should make joint efforts to bring down the production and consumption of tobacco, without "economic loss" to farmers.

The Minister pointed out that at a workshop held in Guntur, Andhra Pradesh, the response from farmers to the idea of shifting to alternative crops was "overwhelming," but they demanded monetary and technical support for some time to ensure against losses.

As per government data, in 2008-09 over 85 per cent of the area under tobacco cultivation was centred in Andhra Pradesh, Karnataka and Gujarat, and these three States make up for nearly two-thirds of tobacco production in India.

Since taking over as Health Minister, Dr. Vardhan has been rooting for stringent rules to bring down tobacco use and has called upon the Finance Ministry to levy higher duty on cigarettes and *bidis*.

The proposal to scale down the production of tobacco is likely to be met with resistance both from the farmers as well as the companies exporting the product. "There is a view that the government cannot enforce a ban on cultivation as export of tobacco brings in a substantial amount of foreign exchange," said an official not wishing to be quoted.

Tobacco control is an area that the Health Ministry has been focusing on and a slew of measures have been announced to bring down the use of cigarettes and other tobacco products.

The Health Minister also directed the Cabinet Secretary to chair meetings with Secretaries of all Ministries to follow up on the implementation of various anti-tobacco laws in the country.

India is a signatory to the declaration adopted in the U.N. General Assembly on the prevention and control of non communicable diseases and the call given for reduction in consumption of tobacco. As per Global Adult Tobacco survey, 2010, 35 per cent of the adults in India consume tobacco.

## Self-employment scheme

The Commerce and Industries Department has invited applications to set up service and manufacturing units in rural areas with a maximum project cost of Rs. 10 lakh under the Karnataka Self Employment Scheme. While beneficiaries under general category will be provided a maximum of 25 per cent subsidy, those under special category would get 35 per cent subsidy. The applicant should undergo one week's entrepreneurship programme. Minimum age of the applicant should be 21 and maximum is 35 for general category and 45 for special category. Details and application forms can be had from the District Industrial Centre, Industrial Estate, Yeyyadi, Mangalore, phone 0824 2214021. Last date to submit filled-in application forms is October 31.

#### MPLAD GRANTS RELEASED

A sum of Rs. 50 lakh has been released for the construction of students' hostel by Akhila Bharata Billava Union at Kunjattabail village near Mangalore from the local area development fund of Rajya Sabha Member B.K. Hariprasad. An amount of Rs. 4 lakh each have been released from the grants of Rajya Sabha members R. Ramakrishna and M. Venkaiah Naidu for the construction of Raita Bhavana building of Puttur Taluk Primary Agriculture Credit Cooperative Society, said an official release. Also, Rs. 4 lakh each have been released from the grants of Dakshina Kannada MP Nalin Kumar Kateel for improvement of Papemajalu Bridge Road in Puttur taluk and Srirama School Road in Uppinangadi village respectively.

#### YOGA WORKSHOP

Avishkar Yoga has organised a one-day yoga treatment workshop on October 12 between 9.30 am and 3.20 pm at the A.J. Hopsital auditorium, as a part of its Dasara Yoga Camp, which commenced from Monday. The workshop will feature stress management, and information on yoga for mental and physical ailment, from experts. The Dasara Camp is being held Sharada Vidyalaya, Kodialbail from 6 p.m.; Avishkar Yoga Centre, Bejai, from 5.30 a.m. to 8.30 a.m. in 10 batches; A.J. Hospital's Yoga division from 6 a.m.; Aishwarya Ayurveda Kendra, Attavar from 6 a.m. and Revolution Studio, Surathkal from 6 a.m. and 6 p.m.

#### **CLEANLINESS DRIVE**

Konkan Railway Corporation Ltd. and the Southern Railway conducted shramadaan at Surathkal, Mangalore Central and Mangalore Junction Railway Stations on October 2 as a part of nation-wide cleanliness drive. Hundreds of Railway employees participated in the drive attended by general public, members of non governmental organisations and others.

#### MENTAL HEALTH DAY

World Mental Health Day will be observed on October 10 in collaboration with KMC Hospital, Government Wenlock Hospital and Manaswini, Mangalore, at the conference hall of Wenlock Hospital. The programme will commence at 9 a.m., said an official release.

# Dry land farmers exposed to better management practices

A training programme for farmers was conducted by Agricultural Research Station (ARS), Kovilpatti, under National Initiative on Climate Resilient Agriculture project at Thoppureddiapatti village on Tuesday. Its objective was to implement a real time contingency plan for management of weather aberrations at farmers' holdings and also highlight rainwater harvesting.

D. Jawahar, Head, ARS, in his inaugural address, said that climate resilient agricultural practices would help in minimising the impact of weather aberrations on dry land crops. Minor millets would grow better under weather aberrant situations, he added. S. Elamathi, Agronomist, said that inclusion of horticultural crops, trees and livestock in dry land farming would fetch assured income. V. Sanjivkumar, Soil Scientist, said soil fertility would decline due to inadequate application of organic manure and this could be overcome by preparing vermicompost with crop residues. N. Sritharan, Crop Physiologist, insisted that use of foliar fertilizers, growth regulators and crop boosters would help to induce drought tolerance in crops.

Rajeswari, Agricultural Engineer, said adoption of land configuration practices, rainwater harvesting and recycling would help to conserve soil and water to manage dry spells during cropping season. M. Jeyashekar, Plant Pathologist, wanted farmers to go for mushroom cultivation, which would fetch a good income.

Scientists from Tamil Nadu Agricultural University, officials from Department of Animal Husbandry and farmers from Muthukrishnapuam, Vadakkupatti and Thoppureddiapatti participated. Demonstration of farm machinery was also conducted on the occasion, along with an exhibition of improved production technologies.

# Paddy harvest at Koliakode today

Another harvest is scheduled for Wednesday morning in the paddy fields of Koliakode.

Over 7.5 hectares of land lay barren until the start of this year when National Service Scheme volunteers of the Sree Chitra Tirunal College of Engineering took up conservation of the paddy fields here as one of their main projects.

Their objective was to restore the land by sorting out the irrigation issues here.

After the students conducted the first harvest, they would then support the farmers here to carry on cultivation.

The harvest on Wednesday is the first being carried out by the farmers since the land was abandoned a few years ago.

Agriculture Minister K.P. Mohanan will inaugurate the harvest festival at 10 a.m. Mayor K. Chandrika and district panchayat vice-president Rufus Daniel will attend.

### No child's play this

NHRC takes serious view of child labour in West Godavari and directs the district administration to address the issue immediately. The district administration claimed to have achieved total literacy by ensuring that all out-of-school children were sent back to school through a series of anti-child labour drives.

The National Human Rights Commission (NHRC) has taken a serious view of the incidence of child labour in 'high magnitudes' reported from West Godavari district.

Responding to a petition filed by a Delhi-based child rights activist, the NHRC directed the State government to address the problem immediately. Ironically, the district had received an award for its outstanding decadal achievement in literacy from the Central government a decade ago.

The district administration claimed to have achieved total literacy by ensuring that all out-of-school children were sent back to school through a series of anti-child labour drives.

#### No official data

"There is no official data on the number of children at work owing to absence of official survey since 1997," said T.N. Snehan, chairman of the district Child Welfare Committee (CWC). "The number of child labour schools also came down to 13 from 26 in the last decade for want of regular fund flow," he added.

Child labour is rampant in agriculture and aqua fields, hotels, workshops, shops and other business establishments in the district. Curiously, rehabilitation of child labourers has become difficult, thanks to the Child Labour Prohibition and Regulation Act, 1986, which extends relief only to children engaged in works of hazardous nature.

Even as the NHRC has ordered the settlement of the issue within eight months, the district administration is preparing ground for a month-long drive against child labour, beginning October 15. Joint teams of personnel from the National Child Labour Project (NCLP), Sarwa Siksha Abhiyan and District Child Protection Unit (DCPU) will be shortly constituted for raids on workplaces that engage child workers, Mr. Snehan said. The problem of child labour relapsed in the district, as there were no drives since 2007, he added.

#### LOST IN THE MELEE

No official data regarding the number of child labourers since 1997

Number of child labour schools came down from 26 to 13 in one decade

There is no regular fund flow from the Centre for maintaining child labour schools

#### WHERE CHILD LABOUR IS RAMPANT...

\*Agriculture and aqua fields

\*Hotels

\*Workshops

#### **ACT BITES**

\*Child Labour Prohibition and Regulation Act, 1986, extends relief only to children engaged in works of hazardous nature

#### FOR THE FUTURE

\*WG dist. administration will conduct a month-long drive against child labour beginning Oct. 15

\*Joint team of personnel from NCLP, SSA and DCPU to be constituted for raids on workplaces engaging children

#### SOME FACTS

- \*Child labour has been found to be harmful to the mental and physical growth of children
- \*The major causes for child labour are poverty and poor economic conditions
- \*Article 24 of the Indian Constitutions prohibits child labour

# 'Mysore tobacco' packs a punch



Zimbabwe delegation impressed by the quality of the crops

The Mysore brand of tobacco, which attracts buyers from across the world for its low nicotine and tar content, has drawn an official delegation from Zimbabwe, which is one of the leading tobacco-producing countries in the world.

The 10-member delegation from the Tobacco Industries and Marketing Board of Zimbabwe, led by its chief executive officer Andrew Matibiri, arrived here on October 5 and is, at present, visiting tobacco-growing regions of Mysore district, interacting with farmers and inspecting auction platforms.

They will return to Zimbabwe on Saturday.

#### Impressed by quality

Speaking to *The Hindu* over the telephone, Dr. Matibiri said the delegation comprising stakeholders in Zimbabwe's tobacco industry were impressed with the quality of the crops.

"We are also impressed with improved practices and procedures here," he said. Regional Manager of Tobacco Board, Mysore, Y. Venugopal, who accompanied the delegation, said the delegates, who also visited the auction platform at Periyapatna, were impressed with the e-auction system in the State.

Dr. Matibiri said Zimbabwe would try to implement certain practices they learnt in Mysore region.

When asked about the Framework Convention on Tobacco Control (which seeks to reduce demand and supply of tobacco) to which Zimbabwe is a signatory, Dr. Matibiri said the tobacco crop was "too important for the economy of our community. We are yet to find an alternative crop that gives farmers the same returns".

Meanwhile, president of VFC Tobacco Growers' Federation of Karnataka Javare Gowda, who is also a former vice-chairman of the Tobacco Board, said international traders and representatives of various cigarette manufacturing companies from around the world visited Mysore every year to firm up deals

# Locals gear up for the storm

The probability of a cyclonic storm *Hudhud* hitting the Odisha coast on October 12 has created panic in the minds of inhabitants of Ganjam district, who had to face a devastating super cyclone in 1999 and Phailin in 2013.

But this time people are better prepared to face a natural calamity. Although the meteorology department is yet to predict the place and time as well as intensity of the cyclone, measures are being taken to deal with it. Ganjam District Disaster Response Forum (GDDRF), a federation of 21 social organisations of the district, has already started advising inhabitants living in rural areas to stock dry food. "We have also advised the localites in all cyclone-prone areas to clean up the cyclone shelters and stock water," said M. Panda, co-convenor of GDDRF.

Farmers and poor families who had suffered the most last year are a worried lot. After the crop loss last year, the peasants are hoping for a good crop this year. Good rains have ensured steady cultivation of vegetables and paddy. "A cyclonic storm and rain accompanying it may destroy all hopes of farmers of the Ganjam district," said peasants' activist K. Sadangi. The greatest irony is that most poor families of the district including those living in urban slums of Berhampur have not yet rebuilt proper houses after the Phailin and they would be greatest sufferers if a cyclone hits this area again, said Bibhu Prasad Sahu, a social activist working with the urban and rural poor

# 'Prepare list of eligible farmers'

Collector T. Chiranjeevulu instructed the officials at mandal level to prepare the list of eligible farmers for issuing rabi crop loans by October 15. Speaking at a video conference, the Collector directed the bank managements to appoint a point person at each of the bank to act as mediator between the farmer and bank. Joint Collector, Preethi Meenam and others were present.

# Seed production in full swing at Anchal farm

Distribution by October end



Snake gourds at the Anchal government farm meant for seed production.— Photos: S. Suresh Kumar

After keeping vegetable prices under control during this Onam season by marketing a portion of produce from its 350-acre farm, the district-panchayat-managed government vegetable farm at Anchal, near here, is now back to its main activity, vegetable seed production.

Superintendent of the farm, N. Chandrashekaran, said that after providing the share for the Onam market, the vegetables left behind had started to ripe and these were now being harvested for seeds. Seed supplies were vital in maintaining vegetable production and for ensuring food security.

The crops grown for seed production here are pumpkin, long beans, bitter gourd, cucumber, snake gourd, bottle gourd, brinjal, and chilli.

Vegetable seed production required special skill and techniques. Seeds would not be ready at the stage of harvesting produce for market. The plant should be allowed to go through further stages of growth. Production under isolated conditions ensured the purity of seeds. Special techniques had to be applied during the stage of flowering and seed development and also in harvesting.

Mr. Chandrashekaran said that as the vegetables ripened, they became more and more vulnerable to animals that targeted them for food.

Being a farm that employed strict organic farming methods, the seeds produced here had huge demand among farmers.

Mr. Chandrashekaran said that depending upon the climate, the seeds would be ready for distribution by the end of October.

Apart from vegetable seeds, the farm also produces tissue culture banana saplings and grafted saplings of various tropical fruit trees.

# Hybrid papaya to come up on 150 acres this year



third variety: The hybrid papaya variety gives good yield, quality fruits with minimal pest and disease attack. Photo: C. Venkatachalapathy

This year, the Horticulture Department is looking at bringing 150 acres of land under hybrid papaya cultivation in the district. It plans to introduce a third variety of hybrid papaya for farmers this year.

The distribution of seedlings, which are raised in State horticulture farms at Navlock near Ranipet and Kudupattu near Tirupattur, to farmers will begin in two months, officials said.

Hybrid papaya crops were introduced in Vellore four year ago. Last year, 160 farmers took up hybrid papaya cultivation on 250 acres across 20 blocks of Vellore.

"We are giving two varieties of hybrid papaya – red lady and zinda. These seeds are imported by companies from Taiwan. It has a yield of 120 to 150 tonnes per hectare based on how the crops are maintained," said A. Arputham, deputy director of Horticulture, Vellore. Cultivation of hybrid papaya crops have been taken up under the National Horticulture Mission of Government of India, he pointed out.

#### Higher yield

"The government is advocating hybrid seeds as it gives 2.5 times higher yield than ordinary seeds. Farmers too have accepted hybrid seeds as it fetches them good rate," he added.

Papain, a kind of latex, can also be extracted from papaya as it has cosmetic and medicinal value, he said, adding that farmers are going for fruit sale as a kilogram of papaya gets them Rs. 15 to Rs. 20.

Mr. Arputham said the hybrid variety provides good yield and good quality fruits. "The pest and disease attack is minimal. It fetches good price for the farmers. In the red lady variety, the fruit is round in shape and its flesh is reddish in colour. In zinda, the flesh is yellow in colour and the fruit is elongated," he explained.

R. Murali, a farmer who has taken up hybrid papaya cultivation on one acre of land at Madhakadapa near Sanangkuppam, said each tree has at least 20 to 25 papayas.

"I have cultivated hybrid variety two or three times. Last year, I took it up under the horticulture department. A kilo sells for Rs. 12 to Rs. 17. I can get Rs. 300 per tree and I have 1,000 trees in an acre," he said.

#### Not soggy

The farmer said unlike in regular papaya crops when the fruit turns soggy over time, the hybrid variety fruit was good. The department raises seedlings for 21 days and then supply to farmers.

"The plant yields fruits in 10 months but can be maintained up to three years. The quality of papaya is good, it is seedless and does not have that pungent smell," the official noted.

# Nothing unusual, but something strange



An estimated 35,000 walruses gathered on shore on September 23, about 8 km north of Point Lay, Alaska. (Below) Close up of a walrus.PhotoS: AFP, AP



While some experts argue that there is nothing new about last month's walrus haul-out on an Alaskan beach, others say that it is a cause for concern

As many as 35,000 walruses rolling in filth and the carcasses of their kin, on a beach in Alaska, have become the unwitting new poster children for climate change.

Within hours of newspapers covering the striking photographs, the walruses and their reason for being on that forlorn shore became entangled in the politics of climate change. Climate sceptics immediately produced evidence that showed the haul out was nothing out of the ordinary.

The walrus, almost all of them females and calves should be spending their summer on the fringes of the Arctic sea ice. But the ice is gone. Margaret Williams managing director of WWF's Arctic programme, said the walrus were the tip of the trophic iceberg.

"The massive concentration of walruses onshore-when they should be scattered broadly in ice-covered waters-is just one example of the impacts of climate change on the distribution of marine species in the Arctic.

#### Haul out, not stranding

Meanwhile, climate sceptics dug up academic articles that recorded haul-outs of tens of thousands of walrus from as early as the 1978. "Pacific walrus sensationalism — nothing new under the sun," said the Global Warming Policy Foundation. This is not a 'stranding' in the way that we know it in cetacean terms. The correct term for a mass congregation of walrus is the wonderfully descriptive 'haul out'.

The important difference is that whales and dolphins are purely aquatic creatures and, unlike walrus, cannot survive on land for extended periods. Strandings of whales and dolphins almost always result in death, whereas walrus haul outs are not inherently unusual.

#### It is still unusual

Kit Kovacs, an expert on the mammals that live on and under the Arctic ice, said this particular event was unusual though: "Thousands of walruses coming ashore is perfectly normal in Alaska." But this haul out was significant because it was overwhelmingly females and young. It's always the boys. Before 2006, I am not aware of any mass haul outs that included females on land," she said.

But in 2006, something strange started happening. Female walruses and their calves started turning up on beaches in Alaska and Russia, first in their thousands, then in their tens of thousands.

Walrus females traditionally spend their summer months nursing newly born calves on the fringes of the sea ice above the shallow waters of the Chukchi Sea.

#### Elegant ecosystem

Their ecosystem is elegant. While the walruses sun themselves above, sunlight filters through the translucent ice sheet. On the underside, algae and microbes breed in tiny crevices and eventually

die and fall to the bottom where they become a food source for clams, worms other cephalopods and molluscs. The walrus slide from their icy recline, dive and hoover up the bottom dwellers.

But Arctic sea ice is declining. In terms of the past decade, this year was nothing exceptional — the ice sheet covered 5 million sq km at its minimum summer extent, considerably larger than two years ago when it fell to its all-time low of less than 3.5 million sq km. But this year was still the six lowest on record, more than 1.13 million sq km smaller than the 1981—2010 average and comes after a decade of decline. Many scientists believe that it is inevitable that the sea ice will eventually disappear completely during the summer months.— © Guardian Newspapers Limited, 2014

#### 'Moment of truth' on emissions

In March, the Obama administration issued a white paper as part of its Climate Action Plan titled "Strategy to Reduce Methane Emissions." A big part of the strategy was built around cutting down on the methane emissions that result from oil and gas production, particularly the hydraulic fracturing method of extracting natural gas from the ground — aka, fracking. In the white paper, the administration said that the Environmental Protection Agency would decide by the fall how best to go about it.

Fall is now here. More to the point, the word is that the EPA and the White House are in the process of deciding what tack to take in reducing methane emissions (although any announcement will probably have to wait until after the November elections). If the administration takes the right course, methane emissions could likely be reduced by 40 per cent or 50 per cent over the next five years — enough to make natural gas a genuinely cleaner alternative to coal and a critical component in reducing greenhouse gasses. But if it doesn't — if the government decides to back away from regulation, or

allow industry to reduce emissions voluntarily — then the promise of natural gas as a cleaner fuel could well go unrealised.

"It's the moment of truth," says Fred Krupp, the president of the Environmental Defense Fund and a strong proponent of regulating emissions.

Methane emissions, as I've written before, are fracking's Achilles heel. Methane is the primary ingredient in natural gas, and, when it is burned, it is considerably less dirty than coal. The problem is that methane too often leaks at various points in the production and distribution process. And when methane gets into the atmosphere, it is 84 to 86 times more powerful than carbon dioxide over a 20-year span. (After two decades, its potency is greatly reduced.) Not surprisingly, anti-fracking environmentalists have put methane leakage near the top of the list of their reasons that fracking should be banned altogether.

That, to be blunt, is never going to happen. The natural gas boom that has resulted from fracking has become hugely important to the U.S. economy, providing jobs and a plentiful supply of a low-cost fuel. President Barack Obama himself is on record as being pro-natural gas.

#### Technology to lower emissions

It also turns out that lowering methane emissions does not require enormously expensive new technology. It can be done with technology that already exists and at fairly minimal cost. I've seen estimates that it would add a penny to the current price of natural gas. What's more, a 50 per cent reduction in methane emissions is the equivalent to closing 90 coal-fired power plants, according to the Environmental Defense Fund.

In February, Colorado became the first state to impose regulations on the natural gas industry aimed at reducing methane emissions. The regulations included using valves that don't allow methane to leak, regular checks and repairs of leaks and a variety of other rules. Four of the largest natural gas developers in the state supported the regulations — in part because they saw the public relations value in it, but also because the regulations Colorado imposed made sense.

"What we were looking for were rules that wouldn't just add paperwork or documentation but would make a quantifiable difference," said Doug Hock, a spokesman for the Encana Corp., one of the companies that supported the regulations.

He noted that the company was already using, in Wyoming, a special infrared camera that detects methane leaks - which is now required by Colorado — and "we could see the benefit of the rules." He added, "It really puts a very disciplined process around regular maintenance."

The problem, however, is that while fracking is currently regulated by the states, not every state is rushing to follow Colorado's lead. What's more, there are an enormous number of companies in the fracking business — literally thousands. Fracking practically screams out for federal regulation.

Which brings me back to the White House. Mr. Obama has said that he wants to put in place policies that will lower greenhouse gasses by 17 per cent by the year 2020. To that end, in 2012, he set fuel mileage standards that will increase fuel economy to more than 50 miles per gallon by 2025. More recently, the EPA announced rules that would reduce carbon emissions from coal-fired power plants by 30 per cent by the year 2030. The environmentalists I spoke with say that these moves, while significant, won't get the president — or the nation — to that 17 per cent goal. But adding methane emission regulation could well get us over the goal line.

Is industry pushing back? Of course. But oil and gas companies should be welcoming sensible regulation. There is so much mistrust of fracking in the country that rules that made the process demonstrably safer could well have the effect of ameliorating some of that mistrust.

Smart regulation to reduce methane emissions could help industry — and help the planet as well. — © New York Times News Service

Smart regulation to reduce methane emissions could help industry and the planet

# Build a generation that cares about nature'

Minister for Forest and Wildlife Thiruvanchoor Radhakrishnan said that the 'Kadunarvu Oorunarvu' scheme of the State government would ensure protection of the forest and support the livelihood of the tribals.

Inaugurating the State-level valedictory function of the Wildlife Week celebration at the Kallarackal ground here on Tuesday, the minister said that the tribals will benefit from the scheme, which focuses on conservation of wildlife and forests.

The scheme will be implemented soon and an amount earmarked for the welfare of the stakeholders of forests, he said.

Forests are inherited property that has been handed over to the present generation and it should be given to the next generation without damage, he said.

Biodiversity and environmental protection gains top priority in the present volatile scenario created due to climatic changes. The minister said that nurturing a generation which is concerned about the environment is the need of the hour. And for this, the ministry has

decided to provide access to forests for a year to students who win the State-level environmental awards, he said.

Mr Radhakrishnan said that an amount of Rs 30 lakh will be provided to the Periyar Tiger Reserve for creating jobs and marketing the organic produce grown by the tribals there.

He said that the PTR in association with the grama panchayat has launched a waste management scheme and non-bio degradable wastes will be treated at the plant set up by the grama panchayat. It will eliminate the wastes generated in the tourism zone and help to develop an eco-friendly sustainable tourism sector.

Government Chief Whip P.C. George distributed the prizes to the students who won State-level environmental prizes.

# Jokatte residents claim water pollution



The polluted water of the lake near MRPL Phase III at Jokatte, near Mangalore on Tuesday.— PHOTO: H.S. MANJUNATH A lake is brimming with water, weeds giving it a greenish coating. Kites, egrets and water waders are flying about, but the trees are either wilting or have dried up, leafless and lifeless.

Several residents of Jokatte and surrounding villages blame the Sulphur and Coke units at the Mangalore Refinery and Petrochemical Limited (MRPL) Phase III plant for pollution of the lake near Thokur Railway station.

"During summers, residents of Jokatte and Permude used to grow crop on this fertile land. And after the monsoons, they used to catch the fish here...Now because of the chemicals, all the fish died last year, while the ground has become infertile," said B.S. Hussain, a retired government official who stays nearby.

The quality of water in the area – whether it is through underground water accessed through borewell and open wells, or through lakes and streams – has deteriorated over the past year, said the residents.

Asmath, a homemaker, who lives near the Jokatte railway gate, said even after spending Rs. 1.5 lakh for industrial purifiers, the reddish water of their two open wells is not potable. "The colour of rice changes and it gets spoilt if we cook in this water. We are forced to get drinking water from outside," she said.

Resident Jamaat Mayyidi said nearly eight houses rely on tanker supply to provide clean drinking water.

### Air pollution

Apart from water pollution, the residents contend they have to deal with noise, dust and nauseous smoke on a daily basis. "We are seeing a rise in skin ailments and asthma-related problems," said Muralidhara, a doctor at the Government Ayush clinic.

In an official statement, MRPL has said "all possible pollution control measures" have been taken by the company.

"At MRPL, air and sound monitoring is being done throughout the day and drinking wells water is being checked every quarter. All reports

indicate that there is no cause for concern for the people of Jokatte," said the company.

Apart from developing a green belt, the company has used sprinklers, closed conveyor system, and installation of screens to reduce dust and smoke.

To highlight the problems of the residents, Democratic Youth Federation of India (DYFI) has scheduled a protest in the city on October 10 at the Deputy Commissioner's office.



# Toxic Chemicals in Chilli Product Samples: Report

THIRUVANANTHAPURAM: If you think that buying packaged spices and chilli products of leading brands is safe, think again. The latest analysis of the Pesticide Residue Research and Analysis Laboratory under Kerala Agricultural University (KAU) at Vellayani near here, reveals that chilli powder, cardamom, and cumin seed are highly contaminated with toxic chemicals.

The most striking result of the analysis was the presence of at least two dangerous insecticides in almost all chilli samples and chilly products. While residues of chlorpyrifos, sypermethrin and ethion were found in common chilli powder marketed under various brand names, Kashmiri chilli powder was found contaminated with sypermethrin and ethion.

However, the analysis also showed that enhanced public awareness on threat of pesticide residues in vegetables has apparently led to a decreasing trend in application of hazardous chemicals on vegetable crops.

"The decision to include curry powders and spices in the list of articles to be tested for pesticide residue was taken at a meeting of a working group presided over by the Agricultural Production Commissioner," said P Rajendran, Vice-Chancellor of KAU.

Since then, samples of these items have been collected from various outlets in the state in addition to vegetables and fruits which were being periodically tested earlier. KAU's Pesticide Residue Testing Laboratory is the lone public sector institution in Kerala with NABL accreditation.

Dr Thomas Biju Mathew, Professor in charge of the project, said that while the samples of fruits collected across the state seldom indicated pesticide residues, only cauliflower and curry leaves contained hazardous level of pesticide residues.

The residues of chemicals found in some other vegetables such beans, snakegourd, amaranthus, drumstick and cowpea was below permissible level while other vegetable samples collected during this period were free of pesticide residues, thus earning a safe-to-eat tag.

Almost all fruits except some samples of dried grapes among the 58 samples subjected to analysis also didn't show any trace of pesticide residues and hence categorised as safe to eat, he said.

The full text of the report is available on the websites www.kerala.gov.in and www.kau.edu

# hindustantimes

#### weather

INDIAN CITIES

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#### Chennai - INDIA

Today's Weather Tomorrow's Forecast

Wednesday, Oct 9

Max Min

Sunny

Wednesday, Oct 9

Max Min

Max Min

32° | 25° Partly Cloudy

34° | 24°

Rain: 0 Sunrise: 05:58 Humidity: 63 Sunset: 05:54 Wind: normal Barometer: 1009

#### Extended Forecast for a week

Friday	Saturday	Sunday	Monday	Tuesday
Oct 10	Oct 11	Oct 12	Oct 13	Oct 14
~			-26	-26
$\infty$	$C\tilde{\Sigma}$	$C\tilde{\Sigma}$	$C\tilde{\Sigma}$	$C\tilde{\Sigma}$
	)	)	_	_
34º   24º	35°   24°	36°   24°	250   240	250   240
•	· ·	•	35°   24°	35°   24°
Cloudy	Partly Cloudy	Partly Cloudy	Partly Cloudy	Partly Cloudy

# Chronicle

### Disaster plan a non-starter

Visakhapatnam: The City Disaster Plan is still under pipeline though the process was started last year. A team of experts has been engaged for the task and the GVMC has been chosen one among the eight cities, across the country, for preparing the plan. In fact, the plan had to be prepared by September, but officials said it would take another three months since it requires industrial linkages for making it comprehensive one.

The United Nations Development Programme (UNDP), with financial support from USAID, approved a project on 'Climate Risk Management in Urban Areas through Disaster Preparedness and Mitigation', a year ago for preparing a disaster plan for the city. Bhubaneswar, Gangtok, Shimla, Thiruvananthapuram Madurai, Vijayawada, and Navi Mumbai were other cities where the similar exercise has been going on.

The GVMC and other line departments have been involved in preparing the report and premier institutions such as The Energy and Resources Institute, Risk Management Solutions India Private Ltd and many others were involved in suggestions and technical guidance.

In view of tackling tough conditions, during natural calamities like cyclones, industrial and manmade disasters, experts suggest that there should a comprehensive plan that would lessen the risk. But, the exercise has been for last one year and still some workshops have to be completed by getting suggestions from various stakeholders.

"The draft plan had to be updated according to suggestions from the experts. Since the city has many variants, like Navy, huge industrial organisations, distinctive topography, Bay of Bengal, the other aspects have to be carefully considered, while preparing the plan. We are speeding up the process to complete by end of the year," said an official involved in the project.

The programme would have a significant focus on urban risk management, which would cover risk assessments, emergency preparedness and response, and urban risk reduction, according to the official.

# GIS-based water quality mapping in Koratty panchayat



An analysis of the water samples revealed that 90 per cent of the drinking water sources were contaminated with coliform bacteria. The presence of high acidity, iron and fluoride were also identified in certain sources. Based on the database analysis, the panchayat authorities have been taking remedial measures including chlorination. (Photo: DC/File)

KOCHI: Koratty panchayat in Thrissur district has taken up an innovative initiative to ensure the quality of drinking water in the area. With the support of the Centre for Sustainable Water Technology and Management (CSWTM) at SCMS School of Engineering and Management Studies and an NGO, the panchayat has prepared a satellite image-based water quality map. A few selected wells from across the 19 wards in the panchayat have been surveyed to collect details like quality of water and presence of pollutants, if any.

"With the support of CSWTM, samples of water from wells and ponds have been analysed for different quality parameters as per the Bureau of Indian Standards. Apart from this, all water sources were documented using Geographic Information System (GIS) to prepare a water quality atlas," said Manesh Sebastian, panchayat president.

An analysis of the water samples revealed that 90 per cent of the drinking water sources were contaminated with coliform bacteria. The presence of high acidity, iron and fluoride were also identified in certain sources. Based on the database analysis, the panchayat authorities have been taking remedial measures including chlorination.

"CSWTM has been collaborating with Koratty panchayat for the last one year on water conservation and quality management. Innovative concepts like roof top rain water recharging into open wells has been developed in panchayat areas as a climate change adaptation strategy," said Dr Sunny George, director of CSWTM.

In the next phase, the panchayat is planning to conduct a comprehensive survey of the 16 public wells and 64 ponds in the area based on which a conservation project would be initiated. The `34 lakh project will be funded by the World Bank, added the panchayat president.

# Business Line

# Taking the RNAi route to disable genes, control pest attack on crops



RNAi is used to kill the mite that is responsible for mass destruction of honey bees.

#### Chennai, October 7:

Biotechnological firms, led by US-based Monsanto and Switzerland-based Syngenta, have come up with a new crop technology called ribonucleic acid interference (RNAi) that will help control insects and pests in a range of crops by disabling their genes.

The technology, which zeroes in on a genetic sequence unique to a species, will also help protect bees, which are pollinators for one-third of crops in the world.

RNA, considered a sort of messenger in cells, is a genetic code in every living being for a specific function within a cell for survival.

RNAi, a discovery that got Nobel prize for Andrew Fire and Craig Mello in 2006, works by interfering with the genetic code or message that RNA carries to protein factories within a cell. A plant cannot produce a particular protein if does not receive any instruction from the RNA code.

For example, the interference process can be used to disable an enzyme in a cell.

In soyabean, the technology can be used to specifically target proteins which control plant pigmentation or oil composition.

A process found in 1990s, RNAi is now increasingly being used in plants. It is a process which scientists claim can kill pests without harming the beneficial ones.

RNAi is different from the GM technology, in which a gene is injected to kill the pest.

In the case of RNAi, the technology is specifically targeted to disable the working of a particular cell's functioning. Currently, RNAi is being tested in the form of a spray combination on plants.

Monsanto has come up with its own version of RNAi, called BioDirect which is awaiting clearance from US Food and Drug Administration for commercial use. The company says its product is likely to hit the market within a year.

BioDirect is a combination of herbicides and RNA that is sprayed on a plant. The spray binds with RNA in the plant and carries out the specified function.

A Monsanto spokesman said that the company has come up with its BioDirect version to tackle the Colarado beetle in potato and the rootworm in corn. Similarly, Syngenta, according to its spokesperson, has also developed RNAi solution to control the Colarado beetle and rootworm.

"Our innovation centre at Ghent, Belgium, is an international centre of excellence in RNAi and is collaborating projects across our R&D network," said Syngenta's spokesperson.

DuPont Pioneer has also developed RNAi technology for potato and corn but further details were not available.

The rootworm is one of the most devastating species in North America. At least 30 million acres of the 80 million in the US are reported to be infested with rootworm.

The Colarado beetle is a serious pest in potato and has developed resistance to many insecticides and pesticides.

In the case of honeybee, the RNAi is used to kill the mite that is responsible for mass destruction of honey bees.

RNAi, if accepted, can usher in a sea change in crop genetics.

According to renowned agricultural scientist MS Swaminathan, the technology is a welcome initiative.

## Cardamom loses flavour on higher arrivals

Holidays last week result in offerings increasing at auctions; export buying slows



#### Kochi, October 7:

The cardamom market lost flavour last week at the auctions as arrivals increased.

Traders attributed this phenomenon to suspension of auctions for three days last week on account of national holidays.

#### Festive mood

Consequently, arrivals surged at the auctions, market sources told *BusinessLine*. They said that demand was also slow as upcountry dealers and traders were celebrating Navaratri and Dasara.

On Monday, too, there was no auction in Bodinayakannur due to a national holiday.

However, at the auction held by the South Indian Green Cardamom Company Ltd on Tuesday, some 90 tonnes of cardamom arrived. Yet, the market ruled firm on strong buying support, a dealer said.

Many were busy covering for the Diwali demand.

Export demand was slack as overseas demand from the Gulf and West Asian countries was slow.

The individual auction average dropped last week to between Rs. 700 and Rs. 720 a kg from Rs. 730-80 a week ago.

#### Average price drops

Supply of 8mm bold continued to remain thin and good colour bold capsules fetchd Rs. 1,000 a kg. There was no auction on Sunday at the Kerala Cardamom Processing and Marketing Company.

Total arrivals during the season that began on August 1 stood at 3,225 tonnes against 4,382 tonnes during the same period a year ago. Sales were 3,154 tonnes against 4,189 tonnes.

The individual auction average as on October 4 was Rs. 720 a kg against Rs. 608 a year ago.

Prices of graded varieties on Tuesday in the open market in Bodinayakannur (Rs. /kg) were: 8mm bold (980-1000); 7-8mm (800-825); 6-7mm (700-725); below 6 mm (625). The growing areas received good rains during the week as weather conditions remained favourable.

### Coonoor tea turnover falls 21%

Coonoor, October 7: The cumulative turnover at the auctions of Coonoor Tea Trade Association (CTTA) has fallen by 20.83 per cent till September over last calendar, reveals our analysis of the market reports. With only the last quarter remaining, the chances of making good the loss in current calendar are remote.

Till September, 39 auctions had been conducted when a volume of 4.34 crore kg was sold against 4.38 crore kg in the same months of 2013. On an average, every kg fetched Rs. 75.10 against Rs. 93.99.

Consequently, the cumulative turnover in the nine months crashed to Rs. 325.93 crore from Rs. 411.67 crore in the corresponding period last year.

This fall of Rs. 85.74 crore marked a decline of 20.83 per cent. Export situation has worsened because India's supply situation is causing concern with a shortfall in production. "Till now, India has lost 10.87 million kg (mkg) over last year while other major producers have gained in volume – Kenya 4.54 mkg, Malawi 4.42 mkg" Rajesh Gupta, publisher of annual Global Tea Digest, told *BusinessLine*.

## Groundnut oil up on demand

Rajkot, October 7: Groundnut oil prices increased Tuesday as demand from local brands and stockists improved on account of festival demand. On the other hand, cotton oil remained unchanged. Groundnut oil new tin for 15 kg increased by Rs. 10 to Rs. 1,365-1,370, while Jamnagar line teliya tin was up by Rs. 22 at Rs. 1,232-1,233 for 15 kg. Groundnut oil loose gained Rs. 15 at Rs. 790-795 for 10 kg. About 10-12 tankers were traded in Saurashtra's mills. A Rajkot-based edible oil trader said that owing to Diwali, demand is good. But unavailability of quality groundnuts has hampered supply. In the past one week, groundnut oil prices have increased by Rs. 50 for a 15-kg new tin in Gujarat. Cotton oil wash traded at Rs.600-603\10-kg and cotton oil new tin stood at Rs. 1,070-1,090\15 kg. About 25-30 tankers of cotton oil were traded. Our Correspondent

# Mixed trend in spot rubber

Kottayam, October 7: The spot rubber market was mixed on Tuesday with prices of sheet rubber firming up on covering purchases. Prices of latex dropped on lower demand.

There was partial recover in the futures market, while ungraded rubber prices continued to rise on moderate enquiries from the non-tyre sector. RSS 4 prices improved to Rs. 121 from Rs. 120 and Rs. 120.50 a kg, respectively, according to traders and the Rubber Board. The grade closed marginally higher at Rs. 118 (Rs. 117.50) as quoted by the dealers.

October futures increased to Rs. 121.45 (Rs. 120.34), November to Rs. 119.25 (Rs. 118.14), December to Rs. 118.85 (Rs. 117.88), January to Rs. 118.60 (Rs. 117.65) and February to Rs. 119.40 (Rs. 117.66) on the National Multi Commodity Exchange RSS 3 (spot) inched up to Rs. 94.78 (Rs. 94.56) at Bangkok. October futures closed at ¥172 (Rs. 97.29) on theTokyo Commodity Exchange. Spot rubber rates (Rs. / kg) were: RSS-4: 121 (120); RSS-5: 115.50 (115); Ungraded: 106 (105); ISNR 20: 105 (104) and Latex (60% drc): 85 (86).

# Cyclone 'alert' for Andamans; AP-Odisha coast put under 'watch'

#### Thiruvananthapuram, October 7:

India Met Department has declared a cyclone alert for the Andaman and Nicobar Islands and a pre-cyclone watch for Odisha and Andhra Pradesh coasts on Tuesday.

The Met located the causative monsoon depression at 250 km eastsoutheast of Long Island, a small island in the Andamans Islands. The nearest point of reference for the US Joint Typhoon Warning Centre was Bangkok, 630 km east-northeast of the depression.

It only helpindicate the huge distance that separates the system from any point from mainland India. It will take four-five days for it to reach the mainland as a cyclonic storm.

The cyclone is to be named after Hudhud, the national bird of Israel, and is an official entry in the list of cyclone names contributed by Oman.

Meanwhile, the Met expects the depression to move west-northwest and become a deep depression by Wednesday and a cyclonic storm the day after.

#### Cyclone intensity

It will have crossed the Andaman and Nicobar Islands and stepped out into the open waters of the Bay of Bengal from where it would head straight to the Odisha and Andhra Pradesh coasts.

The US Navy's Joint Typhoon Warning Centre upgraded to "medium" the possibility of a "significant tropical cyclone" spinning up in the Bay in the next 24 hours.

### Successor cyclone?

An experimental forecast made by a US-based tracker finds the distinct possibility of a second cyclonic storm in the Bay of Bengal towards the end of the month.

It sees the system taking shape yet again in the Andaman Islands and travelling along a mostly westward track towards north Andhra Pradesh-Chennai coasts by November 1. Meanwhile, model forecasts favour the building first cyclone of the North-East Monsoon to gather considerable strength before making a landfall over Odisha-Andhra Pradesh coasts.

The track being projected is very close to the one tracked by Super Cyclone Phailin around the same time last year. Phailin had crossed coast on October 12.

The Met has forecast isolated heavy rainfall for south interior Karnataka, Kerala, Tamil Nadu, and Puducherry on Wednesday as the incumbent system in the Bay evolves further.

Weather over Andaman and Nicobar Islands may take a turn for the worse with the expected crossing of the cyclonic storm near the Long Island.

Isolated heavy rainfall would continue to lash south interior Karnataka, Kerala, Tamil Nadu and Puducherry.

# Ample stocks to weigh on chana

May find support at Rs. 2,750-2,650; resistance seen at Rs. 3,000-3,150



Chana prices are expected to largely rule weak as abundant supplies may continue to mount pressure on prices.

Chana is a highly-nutritious, protein-rich pulse crop. It is one of the largest cultivated food legumes across the globe. Indian culture is predominantly vegetarian and pulses form an inherent part of the diet; chana being one of them. India is the largest producer, consumer and importer of pulses and is central to any discussion in the world of pulses.

Chana prices have largely remained bearish over the last few months as a record domestic production for the second consecutive year in the 2013-14 season put pressure on prices.

Carryover stocks of 2012-13 season, coupled with record output last year, lead to a comfortable supply situation.

NCDEX chana futures declined to Rs. 2,651 in July from Rs. 3,416 in March, the lowest since August last year. Currently, November futures are trading at Rs. 2,850.

Chana is the largest consumed pulse in the country and is largely dependent on imports to meet the domestic consumption needs.

This has lead to a rise in the food import bill, impacting the country's fiscal deficit. To curb rising imports, the Government tried to boost domestic production and made a significant hike in the minimum support price (MSP) of chana from Rs. 1,760 per quintal in 2009-10 to Rs. 3,100 in 2013-14.

This encouraged many farmers to bring more area under chana.

According to the fourth advanced estimates released by the Ministry of Agriculture, chana output in 2013-14 is estimated at 9.88 million tonnes, up 11.9 per cent compared with 8.83 million tonnes the previous year. The Government had initially set a target of 8.66

million tonnes. Increased acreage and favourable climatic conditions in the major producing States such as Madhya Pradesh, Maharashtra, Rajasthan and Karnataka also helped to push up the yield. Being a rabi crop, sowing of chana takes place after the harvesting of kharif crops between October and December, while harvesting takes place from January through May.

Lower prices on the back of record output and comfortable supplies may force farmers to switch over to other remunerative crops such as mustard and coriander which could yield better returns.

Due to this, the Government has set a target of 9.3 million tonnes for chana output for 2014-15 rabi season, down 5.87 per cent.

Currently, sowing of the kharif crops has been completed and 10.11 million hectares have been brought under various crops, down some 6.5 per cent year-on-year.

Due to delayed rains and lower acreage, the Government has estimated kharif pulses output for 2014-15 at 5.2 million tonnes against 6.02 million tonnes a year ago. Delayed South-West Monsoon resulted in lower kharif pulses acreage.

In the days to come, chana prices are expected to largely rule weak as abundant supplies may continue to mount pressure on prices.

Revival of rains in the latter half of the monsoon has also set ground for sowing of chana, and prices may remain at Rs. 2700-2650 for the November contract. However, festive and marriage season are around the corner, and thus, demand from the snacks and sweets industry may provide some cushion to the downside movement.

Prices have sustained below the MSP levels for a significant period, and thus, short coverings may also be seen at lower levels. Prices may rebound to Rs. 2950-3000 levels.

Technically, Chana November contracts, which are currently trading around Rs. 2,850, may find support at Rs. 2,750-2,650 and see resistance at Rs. 3,000-3,150 in the near-term.

The writer is an Associate Director - Commodities & Currencies, Angel commodity Broking. The views are personal.