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Commodity prices

Despite several steps taken by the government, including seizing hoarded stocks across 12 States and bringing them to the market, the prices of pulses haven't come down much, at least in Chennai. Tur dal sells for ₹173/kg, up from ₹141/kg last week. Urad dal is selling for ₹160/kg, higher than last week's ₹121/kg.

Here are the prices of various commodities in Chennai.
Price scale is given as Rs./kg

Commodity	Quantity	Now	Year ago
Rice	1 kg	28	32
Wheat	1 kg	32	30
Atta	1 kg	30	34
Gram Dal	1 kg	75	49
Tur Dal	1 kg	173	83
Urad Dal	1 kg	160	93
Moong Dal	1 kg	121	100
Masoor Dal	1 kg	98	79
Sugar	1 kg	32	33
Milk	1 ltr	37	27
Ground Nut Oil	1 ltr	125	104
Sun flower Oil	1 ltr	92	85

Commodity	Quantity	Now	Year ago
Gur (Jaggery)	1 kg	45	50
Tea	1 kg	220	220
Salt	1 kg	18	17
Lime	1 kg	70	80
Apple	1 kg	140	140
Papaya	1 kg	30	25
Pineapple	1 kg	50	40
Pomegranate	1 kg	160	120
Sapota	1 kg	50	40
Banana	1 kg	30	30
Bitter Gourd	1 kg	36	28
Brinjal	1 kg	36	32
Cabbage	1 kg	20	16
Cauli Flower	1 kg	50	40
Garlic	1 kg	120	120
Ginger	1 kg	110	120
Chilly	1 kg	30	36
Onion	1 kg	46	34
Potato	1 kg	24	48
Tomato	1 kg	28	20

*Source: Nathan Enterprises & Kovai Pazhamudir Nilayam, Chennai.

Himachal Pradesh to continue farm insurance scheme

The Himachal Pradesh Government will continue to implement the National Agricultural Insurance Scheme (Rashtriya Krishi Bima Yojna) during Rabi 2015-16 season on the existing patterns in selected units of the state after getting approval from the Centre.

The scheme covering 44 units, including Tehsils and Sub-Tehsils of Bilaspur, Chamba, Hamirpur, Kangra, Kinnaur, Kullu, Mandi, Shimla, Sirmaur, Solan and Una districts of the State for wheat crop and 20 units of Chamba, Kangra, Kinnaur, Kullu, Mandi, Shimla, Sirmaur and Solan districts for barley crop is applicable to all farmers growing wheat and barley crops, an official spokesman said.

The risks covered under the scheme would be natural fire and lightning, storm, hailstorm, cyclone, typhoon, tempest, hurricane, tornado, drought, dry spells and pests/diseases etc, the spokesperson stated.

However, losses due to war and nuclear risks, malicious damage and other preventable risks have been excluded from the ambit of this scheme, the official said.

The scheme will be on compulsory basis to farmers availing Seasonal Agricultural Operation (SAO) loans from the financial institutions like commercial banks, cooperative banks, regional rural banks and primary agricultural cooperatives (PACs) for the insured crops within the stipulated period, whereas it will be optional for the farmers who have not applied for the loan.

The level of indemnity for wheat and barley crops has been kept at 80 per cent of the average yield (threshold yield), the spokesperson said.

The small and marginal farmers are eligible for 50 per cent government subsidy on total premium on the insurable crops under National Agriculture Insurance Scheme from 10 to 50 per cent (45 per cent as State Share and 5 per cent as Central Share).

The small and marginal farmers will require paying only 50 per cent of the total premium payable.

The cut-off date for accepting the crop insurance proposals from farmers at PACs/Bank branches have been fixed as January 31, 2016 for non-loanee farmers and March 31, 2016 for loanee farmers, the spokesperson said.

The declaration will have to be submitted by the end of the following month of the loaning/accepting proposals (within one month from the cut off dates) for accepting the crop insurance proposals in case of non-loanee farmers. --

No stopping farmers burning paddy straw

Farmers in Punjab and Haryana continue to burn paddy stubble in their fields ignoring warnings by state authorities, thus posing health risks and adversely affecting soil health.

Both the Punjab and the Haryana governments have imposed a ban on burning paddy residue which could lead to prosecution of erring farmers. However, reports from various parts of the two states suggest farmers still burn paddy straw despite being asked time and again to shun this practice and provided subsidy on farm implements like happy seeder, rotavators, straw reapers for managing straw in sustainable manner.

“Farmers, especially the small ones still prefer to burn paddy stubble rather than use solutions like happy seeders as they think it involves spending money,” Punjab Commissioner of Agriculture B S Sidhu said on Monday. Burning of paddy residue causes air pollution, smog and also poses serious threat to human lives by way of creating medical problems such as breathing trouble, allergies and asthma attacks.

The problem of crop residue burning assumes significance as a whopping 22 million tonne of paddy residue is being disposed of every year by this process, farming experts said.

Stubble burning causes emission of smoke and toxic gases such as carbon dioxide, carbon monoxide, methane and nitrous oxide. It also leads to poor soil health by eliminating essential nutrients, they said.

It is estimated that burning of one ton of rice straw accounts for loss of 5.5 kg nitrogen, 2.3 kg phosphorus, 25 kg potassium and 1.2 kg sulphur.

“It is the duty of the Pollution Control Department to take action against farmers who burn paddy straw,” Punjab Agriculture Director Gurdial Singh said.

Rs. 3,000 cr. released for irrigation projects

After completing the Pattiseema project, which augments water supply to the Krishna delta, the Irrigation Department is now focusing on completing pending projects in Rayalaseema.

Following its request the government released Rs.3000 crore. The funds would be utilised for completing the Handri-Neeva and Galeru-Nagari projects, which are likely to prove lifelines to drought-prone Rayalaseema. This apart, focus is being trained on completing the Veligonda, Pulivendula and relief and rehabilitation works under the Pulichintala projects, besides minor irrigation works.

Irrigation Minister Devineni Umamaheswara Rao said efforts are being made to hire the services of lashkars under the outsourcing method for speedy completion of the Handri-Neeva project. He claimed that six pumps have been installed at Handri-Neeva. In addition, all project works in Hindupur, Madanapalle and Kuppam would be taken up in November and completed by March.

Mr. Rao said Chief Minister Chandrababu Naidu would inspect the various works and camp at project sites on November 9 and 10. The Finance Department conducted a review meeting with the Irrigation Department on the status of projects across the State here on Monday. Finance Minister Yenamala Ramakrishnudu said the government was giving top priority to irrigation and agriculture.

Pushing for vertical farming in urban spaces

Experts are giving serious thought to adopting this system to make fruits and vegetables available on your doorstep



Vertical farming will ensure availability of organic, fresh vegetables and fruits at one's doorstep

With the land available for farming fast-shrinking and given the exponential increase in population, Indian agricultural scientists and policy makers are giving serious thought to 'vertical farming' that makes effective use of urban spaces for growing horticultural produce.

About 150 experts, scientists and entrepreneurs from India and various other countries have begun the process of deliberations in Bengaluru on ways of taking forward vertical farming in India. This is part of an international workshop being organised by the Munich-based Association of Vertical Farming and Indian Council of Agricultural Research (ICAR).

Speaking to *The Hindu*, ICAR Deputy Director-General N.K. Krishna Kumar said the scope of vertical farming goes far beyond terrace gardening. It involves cultivation of various horticultural crops — fruits and vegetables, besides rare varieties of flowers such as orchids in multiple layers, with the help of proper supporting structures that can go up to a height of 20 to 25 floors. Apiary is also part of the vertical farming system.

This will ensure availability of organic, fresh vegetables and fruits on one's doorstep. Residents can use their kitchen waste, which will also help fight the problem of garbage disposal, he said.

This would also add aesthetic value, he added.

He said it is possible to grow enough vegetables and fruits or flowers even in apartments through vertical gardening.

Scientists also hope to encourage urban residents to go for commercial cultivation through vertical farming.

According to experts, it is possible to take up normal cultivation that uses soil if the vertical gardening system is taken up outside the house. Similarly, soilless farming, backed by LED lights to make up for shortage of sunlight, would have to be tried out for cultivation either inside the house or on a commercial basis.

Spice Development Agency starts functioning in Erode

The Spice Development Agency formed in Erode by the Union Commerce Ministry to promote turmeric processing and export has started functioning. A Deputy Director and other staff have been posted.

The Erode SDA is among 10 such agencies formed in major spice-growing States and regions under the control of the Spices Board.

The SDA covering the entire State will also promote processing and export of chilli, pepper, small cardamom, curry leaf, tamarind, herbal spices, clove, nutmeg and coriander.

Headed by the Chief Secretary, the SDA consist of members representing the Ministry of Commerce and Industry, State Government, Ministry of Agriculture, Spices Board, ICAR and other related Central and State organisations besides stake-holders of the industry: growers, traders and exporters.

Farmers in Erode, considered the country's turmeric capital, expect better returns for the product through creation of appropriate infrastructure for

processing, packing, warehousing, research, and establishment of quality evaluation laboratory.

According to officials, the Agency will identify the issues and formulate programmes relating to production, quality improvement, promotion, domestic marketing and export of spices.

Training programmes

The programmes will be implemented by the Regional Office of the Board attached to the SDAs in coordination with the State Government.

Training programmes on quality awareness would involve farmers, producers and traders, S. Nallakannu, Member Secretary, Spices Development Agency, Erode, said.

The SDA office currently functions out of a rented building on the Second Street of Gandhi Nagar Colony (via KMCH Hospital Road).

Welcoming the formation of Erode SDA, secretary of Tamizhaga Vivasayigal Sangam C. Logusamy emphasised on formation of an exclusive Board for turmeric on the lines of Coconut Development Board in view of the quantum of production and extent of export.

Tapping export market necessitated natural fumigation, packaging with environment-friendly materials, and retention of aroma.

The training programmes by the SDA would sensitise farmers to focus on quality all through the stages of planting, cultivation, harvest, boiling, polishing, grading as per CFTRI (Central Food Technological Research Institute) standards and packing, Mr. Logusamy said.

Global cage aquaculture symposium in Kochi

Seabass being harvested from a cage in Vembanad backwaters.

‘CAA5’, the fifth edition of the International Symposium on Cage Aquaculture in Asia will be hosted by the Central Marine Fisheries Research Institute here between November 25 and 28.

The symposium is being organised by the Asian Fisheries Society and the Indian Council for Agricultural Research.

The symposium will be a platform for researchers, technologists, entrepreneurs and farmers to meet and share ideas on the current developments in the cage aquaculture.



The symposium is focussed on five major themes covering current developments in cage aquaculture and the future. More than 200 delegates from around the globe will participate in the symposium, said information posted on the CMFRI website.

The first symposium on cage aquaculture in Asia was held in 1999 and since then it has become a major platform for various stakeholders in the field.

The symposium will review the recent advances in cage aquaculture in Asian countries and in other regions; will identify constraints and research needs of cage culture and consider new sustainable cage aquaculture technologies and management.

Ryots given training to produce quality seeds

Farmers of Thookanaickenpalayam were exposed to the methodology of enhancing yield of paddy and other crops through use of certified seeds, earlier this month.

Under the aegis of Seed Village Scheme, the farmers were initiated into producing quality seeds in their lands for own use and for distribution to

other farmers by Agriculture Department, Myrada Krishi Vigyan Kendra and Tamil Nadu Agricultural University.

TNAU assistant professor Rajavel provided insights into the weather pattern and its impact on productivity, and Assistant Director of Agriculture Chidambaram elaborated on certified seeds while Soil Scientist of Myrada Sekar detailed on nutrient management.

Introduced during May, 2012, the scheme entailing distribution of foundation seeds of paddy, millet, pulses and oilseeds at 50 per cent subsidy on cost of production is valid until the end of 2016.

According to officials, the improving stock of farm-saved seeds will help in enhancing crop productivity. The seed produced in the villages will have to be preserved till the next sowing season.

Forty seed farmers who received training were encouraged to develop storage capacity with promise of assistance for making bins made of mud and paper pulp.

As per the scheme, a project area should receive assistance for a maximum of two years, so that identified farmers could sustain seed production independently.

Thookanaickenpalayam farmers initiated into producing quality seeds in their lands for their own use and other farmers

Farmers tap Pattiseema water to save withering paddy

Godavari water lifted from the Pattiseema lift irrigation project is serving to save the standing paddy crop on 20,000 acres in Denduluru in West Godavari district in the absence of water being released into the Krishna-Eluru canal from the Krishna river. Denduluru farmers are drawing water from Pattiseema near the Janampeta aqueduct using natural gravity.

With the local MLA Chintamaneni Prabhakar obtaining permission from the State Government to utilise the Pattiseema water to save the standing crop in his constituency, officials of the Irrigation Department have been releasing 100 cusecs a day into minor irrigation canals for the last three days. ,” said Srinivasa Yadav, SE .

Officials taken to task over milk procurement

Revive defunct milk societies and set up new ones: DC

Anurag Tewari, Deputy Commissioner, reprimanded officials for slowing down the work of increasing milk procurement from cooperative societies in the district.

At a meeting to review the progress of the milk shed scheme at the DC's office on Monday, Mr. Tewari asked officials to table an action taken report on various issues discussed in the last monthly meeting. Karnataka Milk Federation (KMF) and Veterinary Department officials, however, said that they could not appoint NGOs to promote milk producers' cooperative societies in villages. We need to call a tender for the purpose and that has caused the delay, they said.

They clarified that they had not anticipated the delay earlier.

Additional volunteers

Mr. Tewari suggested that they hire additional volunteers from registered NGOs at pre-decided rates, till the tender was finalised.

He said he would set deadlines for each task and hold individual officers responsible, if they fail to achieve targets.

He asked them to refresh their databases and plan their work only after the figures are up to date.

He asked the officials to revive defunct milk societies, along with setting up new societies. He warned of strict action against officials if they were involved in diverting funds or selecting undeserving beneficiaries.

He asked B.H. Govind, Deputy Director of Veterinary Department, to coordinate with the Karnataka Veterinary, Animal and Fisheries Sciences University and the KMF in training farmers. If different agencies are doing the same thing among the same beneficiary groups, it helps to dovetail programmes and pool resources, he said.

He announced that the district would adopt Pashu – Poshan, a web-based tool developed by the National Dairy Development Board, to keep track of animals and monitor the various programmes of the government and other agencies like KMF.

Monitoring committee

A district-level monitoring committee will be set up including members of various departments, agencies and the University, he said.

He asked the department to set up a farmer helpline that could send bulk SMS to animal rearers and answer their questions. We will try to set up this helpline in a rural BPO model, he said.

S. Lakshmi Narasappa, managing director, Bidar-Gulbarga-Yadgir milk union, said they were planning to set up 80 new societies by year-end. An estimated Rs. 1.1 lakh will be spent on setting up a new society.

“We plan to distribute at least 1,600 cows and buffaloes to farmers this year, he said. The government had released Rs. 4 crore to the union, of which 75 per cent would be spent in Bidar district this year,” he said.

Rajshekar Patil, MLA, Revanasiddappa Patil, president of the union, S.M. Shivaprakash, director, extension, KVAFSU, and others were present.

‘Set up godowns for paddy’

The Farmers Wing of the Tamil Maanila Congress has urged the State government to take steps for providing adequate infrastructure, particularly godowns, for the National Cooperative Consumers Federation of India (NCCF) for procuring paddy from farmers in non-delta districts across the State.

In a statement here on Monday, the State president of the farmers’ wing of the party, A. Nagarajan, said that although the State government, in August 2014, had announced the starting of the NCCF in about 20 non-delta districts, there was delay in its take-off.

He said the NCCF was permitted to procure paddy in Coimbatore, Dhamapuri, Dindigul, Erode, Kancheepuram, Kanyakumari, Krishnagiri,

Madurai, Tirunelveli, Tiruvallur, Tiruvannamalai, Tuticorin, Tiruppur, Vellore, Villupuram, and Virudhunagar – all non-delta districts.

He said that non-availability of infrastructure, particularly godowns, was a major handicap for the NCCF in its take-off in the above non-delta districts. The NCCF officials, when contacted, told *The Hindu* that the district collectors concerned were yet to identify villages.

Diet rich in soluble fibre can combat obesity



Eating more foods high in soluble fibre — found in oat bran, nuts, lentils, peas, and some fruits and vegetables — may help prevent metabolic disease and obesity, a new study has found.

Researchers at Georgia State University in the U.S. found that a diet missing soluble fibre promotes inflammation in the intestines and poor gut health, leading to weight gain in mice. But incorporating soluble fibre back into the diet can restore gut health.

The study examined the effects of diets varying in amounts of soluble and insoluble fibres, protein and fat on the structure of the intestines, fat accumulation and weight gain in mice.

They found that mice on a diet that lacked soluble fibre gained weight and had more fat.

The intestines of mice on the soluble fibre-deficient diet were also shorter and had thinner walls. These structural changes were observed within two days after starting the diet.

Restoring gut health

The researchers also found that introducing soluble fibre into the diet restored gut structure. Supplementing with soluble fibre inulin restored the intestinal structure in mice on the soluble fibre-deficient diet.

Mice that received cellulose, an insoluble fibre, however, did not show improvements.

Aavin's mobile marketing unit a big hit in Salem



The mobile marketing unit of Aavin has evoked good response from consumers in Salem.

Aavin's mobile marketing unit that was introduced here a month ago to provide all the value added milk products to customers at their door steps has become a hit.

The vehicle is visiting one particular area once a week at the scheduled day and time.

Products

The mobile unit markets Aavin products such as ghee; sweets (Mysorepa, sonepappadi, halwa, paalkova); milk powder; tetra pack milk shake, apple, pineapple, carrot and badam juice; tetra pack chocolate milk, strawberry milk; tetra mango juice 'Maavin' and tetra pack butter milk.

While ghee is available in 100 ml, 500 ml, one litre, five litre and 15 litre packs; sweets are of 250 g, and milk powder pack weighs one kg.

Aavin sources said that the mobile unit halts at important points such as Collectorate, Government Mohan Kumaramangalam Medical College Hospital, Shevvetpet and Hasthampatti once a week at a particular time. The mobile unit also halts at places where people gather in good number such as temple festivals.

The mobile marketing unit initiative has been widely welcomed by all sections of society.

The Tamil Nadu Cooperative Milk Producers Federation, Aavin's headquarters in Chennai, has come out with gift packs containing sweet and milk products this Deepavali season.

The pack comprises two Aavin milk chocolates, gulab jamun 250 g, ghee pack 200 g, badam milk powder 200 g and tetra mango juice 'Maavin'. It has been priced at Rs. 350.

The Salem Aavin has placed bulk order with the Federation for adequate stock of gift packs.

Adequate stock

The Salem Aavin also has adequate stock of skimmed milk powder, which is used in the preparation of gulab jamun and other sweets. Those in need of the milk powder in bulk quantity could contact the Assistant General Manager – Marketing (mobile: 73737 04816) and Deputy Manager – Marketing (mobile: 73737 04818).

The Salem Aavin has placed bulk order with the Federation for adequate stock of gift packs

Mettur level

The water level in the Mettur dam stood at 63.24 feet on Monday, against its full level of 120 feet. The inflow into the dam was 5,152 cusecs and the discharge for Samba farm activities in delta districts, 900 cusecs. The storage level stood at 27.16 tmc against its full capacity of 93.470 tmc, PWD sources said.

Turmeric auctioned for Rs. 1.75 crore

Turmeric was auctioned for Rs. 1.75 crore at Tiruchengode Agricultural Producers Cooperative Marketing Society. While ‘Virali’ variety fetched between Rs. 6,215 and Rs. 9,637 a quintal; ‘kilangu’ variety fetched a price between Rs. 5,600 and Rs. 8,599 and ‘Panakali’ variety fetched a price between Rs. 6,666 and Rs. 18,719.

About 3,900 quintals were auctioned for Rs. 1.75 crore.

Now, weather bulletins from Cusat



Cusat Vice Chancellor J. Letha interacting with Dr. K. Mohankumar, Director of the Advanced Centre for Atmospheric Radar Research, at the ST Radar facility in Kochi on Monday.

Here is some good news for all interested in getting regular weather updates. Cochin University of Science and Technology launched its weekly weather bulletin initiative utilising the data generated using the facility at the site of its Rs. 20 crore Stratosphere Troposphere (ST) Radar.

Vice Chancellor J. Letha released the first bulletin. She also inaugurated the 32-metre meteorological tower at the radar site set up in association with the Center for Mathematical Modeling and Computer Simulation (CMMACS), Bangalore. It helps in providing weather information in the lower level of the atmosphere.

K. Mohankumar, Director of the Advanced Centre for Atmospheric Radar Research, said that the 25 MHz radar had immense applications in Meteorology, Cloud Physics, Thunderstorms, Weather, Climate Change, and Civil aviation. It will play a key role in research on the Indian summer monsoon.

Farmer producer company being floated at Zaheerabad

Seeds, chemicals and fertilizer to be supplied to the members as well as other farmers

A farmer producer company (FPC) is being floated for the first time in Telangana to carry out commercial production of potato and red gram seed in Zaheerabad of Medak district in the next few months.

The existing farmers' clubs in the area with a membership of 10 to 25 will be involved in the running of the company.

An umbrella organisation of the clubs 'Zaheerabad Mandal Farmer Clubs Federation' will act as the facilitator to secure loans for the company. Presently, the federation is having about 300 members and efforts are on to increase it to 500. Each member is paying equity share amount of Rs. 1,000 and so far the amount collected stood at about Rs. 3 lakh.

Matching grant

Once the equity touches Rs 10 lakh, the National Bank for Agriculture and Rural Development (NABARD) will release a matching grant under Equity

Grant Fund (EGF). That would be sufficient for the FPC to be eligible for credit guarantee of Rs. 85 lakh.

The farmers from Govindapur who had an exposure visit to Prakasham district in Andhra Pradesh to study about the functioning of FPC there decided, in principle, to enter into the business of potato and red gram seed production as part of their expansion plans.

Recently the federation even conducted elections and had its own panel of office-bearers. Collector D. Ronald Rose who visited the village a week ago promised to extend all the required help in promoting the FPC and asked the farmers to draw inspiration from the community at Ankapur in Nizamabad district to be united in their efforts.

“Here the farmers are showing zeal and commitment to promote the company and enter into viable business including supply of seeds, chemicals and fertilizers to the members as well as other farmers. This will be first such company in Telangana being promoted by farmers,” G. Ramesh Kumar, AGM, NABARD, told *The Hindu* .

109 fish species found in Krishna in Mahabubnagar-Nalgonda stretch

CAUSE FOR CONCERN	
 <p>B. Laxmappa, Fisheries Development Officer from Gadwal, looking at 'Mystus' fish which grows up to a weight of 100 kg, on the banks of Krishna river in Mahabubnagar.</p>	<p>EXTENSIVE FISHING MAY LEAD TO DECLINE IN THE SPECIES</p> <p>Some species having high market value are facing extinction</p> <p>Some fishermen indulging in dynamite fishing in violation of the Fisheries Act</p>
	<p>Lack of awareness among fisher-folk leading to indiscriminate killing of brood fish, spawn, fingerling and juvenile fish</p>
<p>Fish species Labeo Pottai, Schismatohyncho Nutka, Tor Khudree, Tor Musullah, Silonia Childreni are featured in IUCN (International Union for Conservation of Nature) endangered list, while Cirrhinus Cirrhosus is in vulnerable category</p>	<p>Several spots up to a depth of 40 feet along the river course hold key to fish conservation</p> <p>Making the fishermen community part of the river bio-diversity conservation could yield better results</p> <p>Five other species Bagarius, Bagarius, Wallago Attu, Ompok Padda, Ompok Bimaculatus, Clarias Batrachus are in nearly threatened category</p>

In a rare study on river Krishna's aquatic life and bio-diversity, a fisheries development officer and two faculty members of zoology have found 109 types of fresh water species in the second longest river of South India.

The study was concentrated on ichthyofaunal diversity of 250 km stretch of the river from Krishna village in Makthal area, where tributary Bheema confluences Krishna, and Somasila village in Kollapur of Mahabubnagar district.

Among the 109 species found during the study, 5 species are found to be in abundance , while 31 are scanty and 19 species are very rare.

According to the researchers, the 109 species belong to 7 orders, 19 families and 46 genera. Researchers -- FDO of Gadwal B. Laxmappa, Assistant Professor of Zoology at M.V.S. Government Arts and Science College of Mahabubnagar B. Ravinder Rao and Assistant Professor of Zoology at M.A.L.D. Government Arts and Science Degree College of Gadwal D. Venkata Sivanarayana, stated that several studies were conducted on river Krishna but almost all of them were carried out in Western Ghats and none in Telangana area.

They claimed that their study had found more species than any other such previous exercises carried out on various rivers in the country so far.

A study conducted in the past had found 51 fish species in river Krishna at Wai and Dhoom reservoirs in Maharashtra and another study had reported 57 fish species in Indrayan, a tributary of Bheema. Another research had found 62 species in Kuttanad river in Kerala, they explained.

Speaking to *The Hindu* , B. Laxmappa said they had taken up the study in January 2012 and concluded it in December last year.

“With the help of local fishermen we have collected the species from the river along 15 villages of Mahabubnagar. We have also collected the fish from local fish markets and engaged some fishermen in our endeavour to trace the rare species”, he stated.

Punjab needs law, awareness to contain air pollution caused by paddy straw burning

It is said the pollution from burning paddy straw is a factor in Delhi's poor air quality.



With the harvesting season at the fag end, the farmers are now clearing their fields by burning the paddy straw causing air pollution. (Reuters)

The burning of paddy straw continues unabated in both Punjab and Haryana with authorities in both the states unable to check the menace. With the harvesting season at the fag end, the farmers are now clearing their fields by burning the paddy straw causing air pollution.

It is said the pollution from burning paddy straw is a factor in Delhi's poor air quality.

There is no specific law in Punjab to ban stubble burning. Every Deputy Commissioner (DC) has the power to impose a ban under section 144 of

Criminal Procedure Act. It's a common practice in Punjab that every DC issues order pertaining to this under CrPC 144 just before paddy harvesting and wheat harvesting season in Punjab asking farmers to abstain from it but still farmers continue to do so.

DC also has the power under 188 IPC to punish the violators creating nuisance but hardly any punishment is given under it in the state. Under the law, a violator may be punished upto six months jail and a fine of Rs. 1000. Hardly any action is taken under this law against violators in Punjab. There's a lack of 'political will' resulting in poor implementation in the state.

Several types of mechanisms are available now which can cut the paddy straws into small pieces of one inch each which ultimately can be converted into manure but farmers do favour this — not even two per cent of the total area (27 lakh hectares) under paddy and basmati rice in state sees the practice.

Meanwhile in Haryana, the environment department had banned the burning of agriculture waste in the open fields under the Air (Prevention and Control of Pollution) Act 1981. Till date, prosecution action has been filed against 32 farmers in the special environment courts in Kurukshetra and Faridabad by the Haryana Pollution Control Board for burning paddy in the open fields. As per an official of the board, two farmers were recently convicted by the courts.

It is the legal wrangles that pose a problem in the implementation of the rules. An official said that every case has to be sent to the environment court

after the board sanctions approval. This is a lengthy procedure and proves to be a deterrent in preventing the farmers from burning paddy straw.

Experts say that implementation is not possible due to the lack of machinery. Between paddy harvesting and growing of a new crop, farmers get only 15-20 days and for that a large number of straw chopping machines are required at low price so that farmers can go for chopping straw instead of burning the same.

Punjab Pollution Control Board Member Secretary Babu Ram said that burning straw led to increase in particulate matter (PM) in the air.

He said that there is a very small mixture which may include acids like sulfates, nitrates, metals. Also oil dust particles cause health problems like nose, throat, lungs, heart problems. PPCB official said that the PM level is several times higher than the permissible limits in Punjab during paddy harvesting season.

Rajesh Kumar Garhia, Environmental Scientist at Haryana Pollution Control Board says that Haryana Space Application Centre (HARSAC) has been asked to conduct a study on the pollution caused in Haryana due to paddy straw burning and the extent of the problem. He said that all deputy commissioners have been asked to keep a check on burning of paddy straw.

Awareness is being created among the farmers.

High soluble fibre may help you fight metabolic disease: Study



A new study suggests that food rich in soluble fibre such as oat bran, nuts, lentils, peas, and some fruits and vegetables can help you lose fat and prevent metabolic disease.

Researchers at Georgia State University in US found that a diet missing soluble fibre promotes inflammation in the intestines and poor gut health, leading to weight gain in mice.

But incorporating soluble fibre back into the diet can restore gut health. The study examined the effects of diets varying in amounts of soluble and insoluble fibres, protein and fat on the structure of the intestines, fat accumulation and weight gain in mice.

They found that mice on a diet lacking soluble fibre gained weight and had more fat compared with mice on a diet that included soluble fibre.

The intestines of mice on the soluble fibre-deficient diet were also shorter and had thinner walls. These structural changes were observed within two days after starting the diet.

The researchers also found that introducing soluble fibre into the diet restored gut structure. Supplementing with soluble fibre inulin restored the intestinal structure in mice on the soluble fibre-deficient diet.

Mice that received cellulose, an insoluble fibre, however, did not show improvements.

Moreover, in mice fed a high-fat diet, switching the type of fibre from insoluble to soluble protected the mice from the fat accumulation and intestinal wasting that occurs with excess fat consumption.



The data suggest a difference in health benefits between soluble and insoluble dietary fibres, the researchers said.

Improvements in gut structure with soluble fibre were due to changes in the gut microbiota and the gut microbiota's production of molecules called short chain fatty acids, which are used as fuel by intestinal cells and have anti-inflammatory properties, researchers said.

Mice consuming a soluble fibre-deficient diet had lower levels of short chain fatty acids, and introducing soluble fibre into their diet boosted their levels. Supplementing the soluble fibre-deficient diet with short chain fatty acids had similar effects as inulin supplementation, although not to the same extent.

Inulin supplementation increased the size of the intestines in normal mice but not in mice with no gut microbiota, supporting that the gut microbiota is involved in the intestinal health effects of soluble fibre.

According to the researchers, the data support that soluble fibre promotes gut health by encouraging the gut microbiota to produce short chain fatty acids.

“If our observations were to prove applicable to humans, it would suggest that encouraging consumption of foods with high soluble fibre content may be a means to combat the epidemic of metabolic disease,” the researchers said.

The study was published in the American Journal of Physiology - Gastrointestinal and Liver Physiology.

Higher paddy procurement in Punjab this year



Punjab has recorded higher paddy procurement this year compared to last year, food and supplies department officials said here on Monday. The state has procured over 103 lakh tonnes of paddy till Monday compared to about 90 lakh tonnes procured in the same period last year.

Paddy procurement in the state started on October 1. Punjab is eying to procure 137 tonnes of paddy this year as against 118 tonnes procured in 2014. The Punjab government has made payment of Rs 9,428 crore to the farmers for the procured paddy crop. Over 97.3% of the paddy has been procured by government agencies. The Reserve Bank of India (RBI) had

sanctioned Rs 18,972 crore for paddy procurement in Punjab this season. Sangrur and Ludhiana districts have led the state in paddy procurement this year. Neighbouring Haryana is expecting to procure over 35 lakh tonnes of paddy.



THE TIMES OF INDIA

Meet on utility of spiders in agriculture

ShriShivaji Education Society-run JDPatilSangludkarMahavidyalaya, Daryapur, is hosting the 3rd Asian Conference of Arachnology here from November 16. The four-day event will discuss utility of spiders in agriculture and human welfare.

Addressing a press conference, scientist Dr GN Wankhade said that Asian Society of Arachnology, that is researching on spiders, assigned the conference to the college and Indian Society of Arachnology.

Wankhade said the event will be the first international conference on spiders in India and will see participation of 44 scientists from 18 countries beside Indian researchers.

Asked about the utility of spiders, Wankhade said they are useful to human in medicine, defence and agriculture sectors. He said spiders help farmers in pest control and they also terminate mosquitoes. Wankhade said that spider silk is bullet proof and can be used in defence.

Admitting that study on spiders has not been to the extent it should have been in India, Wankhade said that it has picked up lately. He said that during the conference a special workshop will be held for farmers on rearing spiders on the insistence of Indian Science Congress Association.

Talking about the species and families of spiders, Wankhade said that 1,500 species of spiders are recorded in India. He said that to promote independent

studies on spiders, 100 species of spiders have been provided to Bombay Natural History Society.

Wankhade said besides scientists from across the globe, Simon Hodge, Ambassador of England in India, Josef Koh, Ambassador of Singapore to Australia, Dr AK Saxena, President of Indian Science Congress Association, Dr Dipak Apaté, Director, BNHS, Dr Asim Pal, Pro VC of CITE, Manoj Chakravarti, executive council member of Indian National Congress, Dr Vijayalaxmi Saxena, Dr Nibedita Chakravarti will attend.

Wankhade said the conference is a joint venture by principal Dr Sanyogita Deshmukh and convenor Dr AK Bodkhe under the guidance of Shivaji Education Society president Arun Shelke and him.

THE HINDU BusinessLine

AP Tobacco auctions: 190 mn kgs sold at Rs 93/kg



The Virginia tobacco auctions concluded on Monday in Andhra Pradesh and a total of 190 million kgs of tobacco was sold on the floors at an average price of Rs 93 a kg. The average price last year was Rs 118 a kg. The authorised crop size in Andhra Pradesh for the year (2014-15) was 172 million kgs.

For the current crop year (2015-16), the Tobacco Board has drastically reduced the crop for Andhra Pradesh by more than 50 million kgs compared to last year and pegged it at 120 million kgs, in view of the market conditions. Therefore, tobacco farmers in many areas of the State are forced to go in for alternative crops.

During the last phase of the auctions in Andhra Pradesh, there was a hue and cry over the low prices paid to low-grade tobacco by the trade and the Union Commerce Minister, Nirmala Seetharaman, had to intervene and announced Rs 20/- more per kg to the low grade tobacco in addition to the price paid by the trade, with the Union Government contributing Rs 15 a kg and the State Government Rs 5 a kg. A total of Rs 28.50 crores was released by the Union Government and the State Government together for the purpose. The step was taken in Sept. after the suicide of two tobacco farmers in the State due to the low prices realised on the auction floors.

In all, more than 60 million kgs of low-grade tobacco was sold on the auction floors in the State, fetching an average price of Rs 54.85 a kg. The medium grade tobacco was 74 million kgs, fetching an average price of Rs 102.99 a kg. The rest was bright grade tobacco fetching an average price of Rs 120.74 a kg.

In Karnataka, where auctions are going on and are in the early stages, 7 million kgs of tobacco has been sold till date at an average price of Rs 140 per kg. The crop in the state may be around 83 million kgs, it is expected, against an authorised size of 100 million kgs.

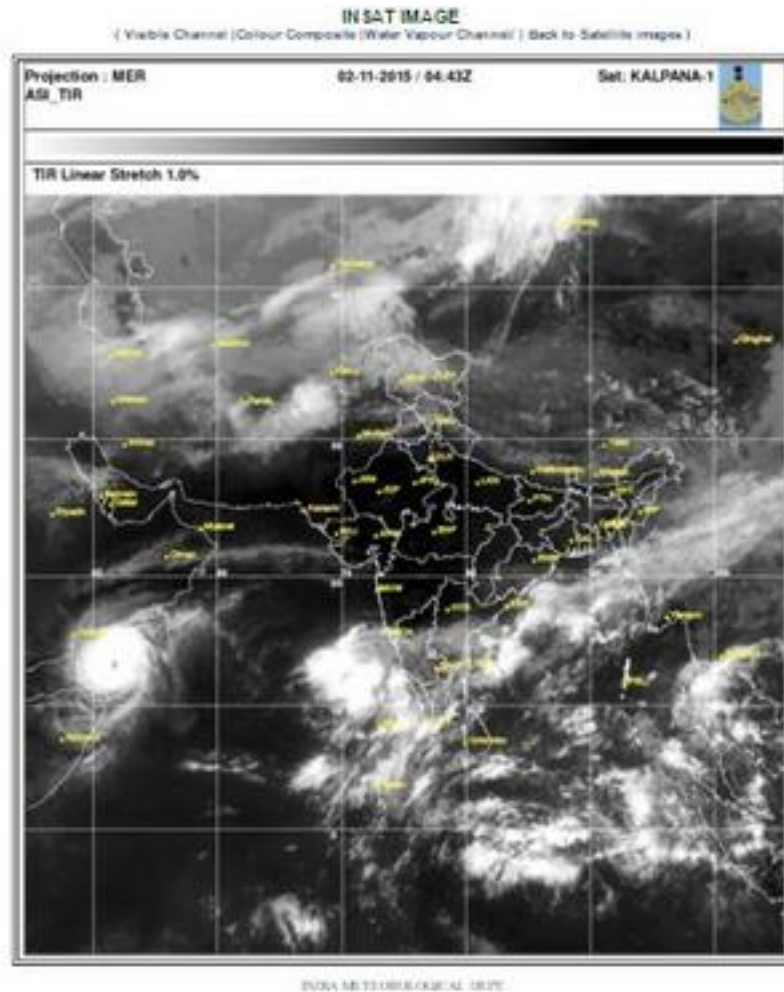
'Chapala' misses super cyclone tag, to hit Yemen coast on Tuesday

Extremely severe cyclone narrowly missed the class-topping super cyclone tag on the home-stretch towards Yemen and is expected to make a landfall there by tomorrow morning only.

An India Met Department update said that 'Chapala' moved with a speed of about 20 km/hr and lay centred this morning 400 km southeast of Riyan in Yemen and 140 west-northwest of Socotra Island (Yemen).

Set to weaken

It would weaken gradually into a very severe cyclonic storm during next 24 hours and cross the Yemen coast south of Riyan as a very severe cyclonic storm by noon tomorrow.



High winds from the massive storm have already started wreaking havoc over the Socotra Island, according to international agencies.

The US Joint Typhoon Warning Centre said that the storm was tracking a path that would take it closer to the Yemeni port city of Mukalla, which has a population of three lakh people.

'Chapala' is expected to dump at least 50 cm of rainfall - which is seven times more than average annual rainfall of the arid Mukalla - likely leading to massive flooding, the agencies said.

Northeast monsoon

Meanwhile, closer home, the northeast monsoon has picked up strength with cyclone Chapala having moved sufficiently away to be of much significance for prevailing weather over South India.

A remnant upper air cyclone from a Chapala-hit formation off Sri Lanka has crossed into the Arabian Sea and has thrown back a helpful trough in an east-northeast direction.

This 'productive' trough extends right from Lakshadweep to Karnataka and Coastal Andhra Pradesh into North Bay of Bengal and the Northeastern States.

It has been bringing moderate to heavy showers over South Peninsular India as its southern pivot moved slowly from Sri Lanka, the Comorin region, and now Lakshadweep.

Moderate to heavy rain has lashed many parts of Tamil Nadu during the 24 hours ending this morning.

Activists urge Javadekar to make public all info on GM mustard safety

The Coalition for GM Free India, a network of organisations and individuals, has urged Environment Minister Prakash Javadekar to stop the processing and approval of genetically modified mustard in India and make public all the information regarding the safety tests.



In a statement in response to a news report that an application for approval for commercial cultivation of GM mustard has been moved with the apex regulatory body, Genetic Engineering Appraisal Committee (GEAC), under the Environment Ministry, the Coalition said the government should take public feedback before arriving at a decision.

“This is the first time India would be considering commercial cultivation approval of any GM food crop after an indefinite moratorium was placed on Bt brinjal five years ago in February 2010,” said the Coalition.

The GM mustard, developed by Delhi University, called Dhara Mustard Hybrid 11 (DMH11), has adopted transgenic technology to facilitate hybridisation and claims increased yields.

Rajesh Krishnan, convenor of Coalition, alleged that this GM mustard hybrid had been created “mainly to facilitate the seed production work of seed manufacturers” even as farmers already have a choice of non-GM mustard hybrids in the market, in addition to high-yielding mustard varieties. He said his RTI application for biosafety data had been declined with regard to this GM mustard, adding that “GEAC is functioning in a highly secretive fashion, and while the nation does not know what is happening inside the regulatory institutions with applications like this GM mustard, biosafety data is being repeatedly declined by the regulators.”

Kavitha Kuruganti, Convenor of Alliance for Sustainable & Holistic Agriculture (ASHA), who has also been seeking biosafety data under RTI Act without any success, said repeated requests to meet the Environment Minister to “share our concerns has met with no success.”

India may need to import 10 mt pulses to tame prices: Assocham

To rein in prices and bridge the demand-supply gap, India may have to import 10 million tonnes of pulses, according to the industry chamber Assocham.

“Considering deficit in rainfall for 2015-16, it is expected that the production of pulses for the year would decrease slightly to 17 million tonnes against 17.2 million tonnes recorded in 2014-15.

“Further with the rise in demand, it is expected that a total of 10.1 million tonnes of pulses might have to be imported,” according to a paper brought out by the Associated Chambers of Commerce and Industry (Assocham).

The paper noted that most States producing pulses have witnessed weather-related issues affecting production.

Pulses: production and consumption					
	2011-12	2012-13	2013-14	2014-15	2015-16
Production (million tonnes)	17.09	18.34	19.25	17.2	17
Imports (mt)	2.8	3.2	3.4	4.4	–
Population ('000)	12,01,863	12,13,370	12,28,785	12,44,036	12,44,036
Per capita net availability (grams per day)	43	41.7	43.3	47.2	
Per capita consumption (kg)	20.8	21	21.3	21.6	21.8
Monthly per capita consumption expenditure (₹)	96	108.9	123.5	140	158.8
Total consumption demand (mt)	25	25.5	26.2	26.8	27.1
Total required import in mt (Production–consumption)	–	–	–	–	10.1

Source: Ministry of Agriculture

“Maharashtra is the largest kharif pulses producer in the country followed by Karnataka, Rajasthan, Madhya Pradesh and Uttar Pradesh...These five States together account for about 70 per cent of the country’s total kharif pulse production,” said the paper. The chamber said meeting domestic demand for pulses was greater than facing the challenge of footing an increased import bill, adding that the biggest challenge for the country is efficient distribution of available pulses across regions. “While we are coping with the difficult situation this year, we cannot afford to continue with it since shooting prices of essential food items create adverse eco system and negative discourse,” said the chamber’s Secretary-General DS Rawat.

It urged the government to draw up an action plan to incentivise farmers to cultivate more pulses by providing seeds and technical support.

Innovation needed to reduce dependence on pulses, says expert

At a time when India is facing shortage of pulses, experts say innovative solutions are required to reduce dependence on pulses. Speaking at the Global Agri Connect 2015, Ashok Gulati, Infosys Chair Professor at Indian Council for Research on International Economic Relations, said that innovations around soya milk and tofu can help reduce dependence.

He said food technologies are available to create a taste which suits the palate of Indian consumers. He added that time has come to bring in a brown revolution and focus on increasing agricultural productivity.

Turmeric to remain bullish on concerns of lower output



Turmeric prices have been on an upswing for the past four months. This bullish trend is expected to remain intact on concerns over production due to erratic rainfall during monsoon.

Moreover, reports of lower sowing and water stress conditions in major turmeric growing States may affect yields.

In the past one month, the turmeric futures contract traded on National Commodity and Derivative Exchange (NCDEX), surged more than 15.3 per cent to Rs. 8,984 per quintal from Rs. 7,788 levels. This increase in price is supported by upcountry demand due to arrival of good quality turmeric.

Price movement

The surge in price started in July after below normal monsoon rains recorded in southern peninsula region, as also parts of Maharashtra.

However, prices declined by about 6 per cent to Rs. 7,850 levels during September after touching Rs. 8,500 levels due to late surge in monsoon rains in southern peninsula. Since then, prices have increased by about 10.8 per cent.

Acreage affected

This year, monsoon rain that covered entire country in June, provided an ideal moisture condition. However, the intensity of rainfall decreased during July and August, resulting in moisture stress in Telangana, Karnataka and Maharashtra. Thus, turmeric acreage in these States declined.

As per latest sowing data from various State departments, turmeric sowing in Andhra Pradesh was on 15,753 hectares, an increase over last year's acreage, but well below the normal sowing area of over 19,000 hectares.

In Telangana, turmeric has been planted in 40,823 hectares, about 17 per cent lower than the normal sowing area. Similarly in Maharashtra and Karnataka, the acreage dropped by about 25-30 per cent to 7,000 hectares and 12,000 hectares respectively.

However, due to better irrigation facilities and sufficient rains, acreage in Tamil Nadu increased by 10-12 per cent compared to last year to over 50,000 hectares.

Production & arrivals decline

Turmeric production in India has declined over the last few years as lower returns forced farmers to shift to other remunerative crops like cotton, sunflower and vegetables. As per trade sources, the production of turmeric in 2015-16 may decline by about 5-10 per cent to 6.8 lakh tonnes (lt) compared to 7.3 lt produced last year.

As per Agmarknet data, turmeric arrivals were recorded at 1.26 lt compared to 1.86 lt arrived last year during first ten months of the year. This year the arrivals are down by more than 32 per cent.

Steady Exports

Turmeric exports during the first five months of 2015-16 are pegged at 38,774 tonnes, as per data published by the Department of Commerce, same as last year's exports.

Last year, the country exported 90,000 tonnes of turmeric. For this year, the Spices Board has set a target of only 80,000 tonnes due to high domestic consumption and expectation of lower output.

Outlook

The bullish trend in turmeric may continue on expectation of tight supply-demand situation, as the carryover stocks are diminishing over the years due to lower production trends.

Since the starting of sowing season, the uptrend in the turmeric price is intact and we expect prices to touch Rs. 10,000 per quintal on limited supplies and improved domestic demand, as the new season crop will arrive only next year.

The writer is Associate Director - Commodities & Currencies Business, Equity Research & Advisory-Angel Broking Pvt Ltd. Views are personal.

Cardamom eases amid excess supply

The small cardamom continued to witness an easier/steady trend last week as the upsurge in supply continued to persist at auctions held in Kerala and Tamil Nadu. Selling pressure was felt in the markets as the growers were releasing whatever material is harvested, trade sources said.

Divali buying is over now, and the trade is pinning their hopes on the Divali sales, if it turned out to be good demand would pick up and that in turn might result in some improvement in the prices, PC Punnoose, General Manager, CPMC told *Business Line*.

The individual auction average as on Oct 31, 2015 was at Rs. 638 a kg while that on November 1, 2014 was at Rs788 a kg. Prices of graded varieties slipped in the open market in Bodinayakannur on Monday and they were in Rs. /Kg: 8mm bold good colour 900-920; 7- 8mm 690-740; 6mm -7mm 590-640; below 6 mm: 550- 600.

WTO: differences intensify over Nairobi package

Differences between developing countries and rich nations over what needs to be included in the package of agreements, to be delivered at the Nairobi Ministerial meet of the World Trade Organisation (WTO) in December, are getting more intensified.



India, China and Indonesia were among the developing nations that recently took on farm exporting members such as the US and New Zealand for pushing for an agreement on export competition at Nairobi, while ignoring other aspects of the farm negotiations such as a special safeguard mechanism for poor farmers.

“At last week’s meeting of the Committee on Agriculture (CoA), several developing countries made it obvious that they are not willing to agree to only a pact on export competition in agriculture at Nairobi without getting anything in return,” an official who attended the meeting said.

Speaking independently at the meet, India’s representative stated that all three pillars of the agriculture negotiations — market access, domestic support and export competition — were balanced, and asked members not to cherry pick.

China, too, seemed to be on the same page with its representative stating that members should not push any issue off the table, the official said.

The US and some others support the conclusion of the Doha Round — which has been on since November 2001— at Nairobi, with the delivery of a small package of agreement on select issues.

Development issues

This is being opposed by many developing countries such as India as it would result in burying of all developmental issues that the Doha Round included and subsequent rounds might just focus on issues favoured by powerful nations.

The US, backed by the entire Cairns group of farm exporting countries, has been insisting that a pact on export competition — for time-bound elimination of all forms of export subsidies and tracking and monitoring of export measures — was the only plausible agreement that could be reached at Nairobi. The G-33 group of developing countries in agriculture, led by Indonesia, however, does not agree.

At the CoA meeting, the alliance insisted on an agreement on a ‘special safeguard mechanism’ that will allow developing countries to raise import tariffs on farm goods whenever there was a surge in imports or a fall in domestic prices.

The G-33 proposal also received support from the African Group and the African, Caribbean and Pacific countries group. It was, however, opposed by the US and the Cairns group, which argued that the mechanism would allow countries to raise tariffs instead of opening markets, a step in the wrong direction of agriculture reform.