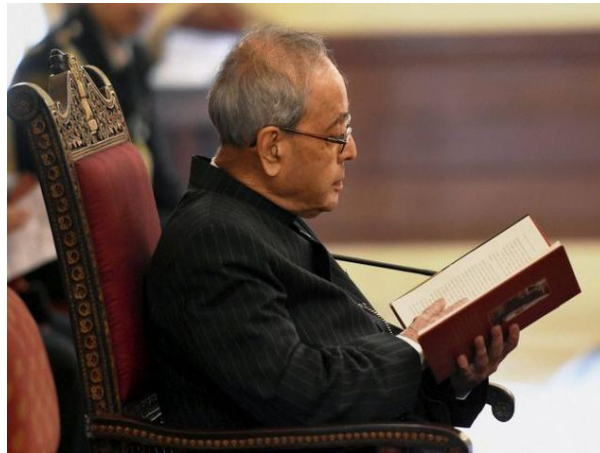


06.02.2016

## THE HINDU

### **Agricultural education must conform to global standards: Pranab**



President Pranab Mukherjee on Friday said India has only three per cent of the world's land resources and five per cent of water resources, yet, Indian agriculture system supports 18 per cent of the world population.

*Pranab Mukherjee said agricultural education in our country must conform to global standards.*

President Pranab Mukherjee on Friday said India has only three per cent of the world's land resources and five per cent of water resources, yet, Indian agriculture system supports 18 per cent of the world population.

Addressing the 54th Convocation of Indian Agriculture Research Institute (IARI) here, Mr. Mukherjee said India's transformation from a state of "ship-to-mouth" to a leading exporter of foodgrains has been made possible largely due to the scientific developments in premier institutes such as the IARI.

He said agricultural education in our country must conform to global standards. For this, there is a need to create a large pool of competent faculty empowered with state-of-the-art research infrastructure.

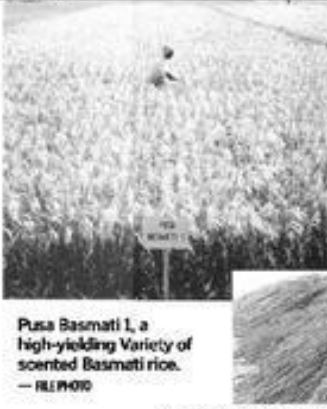
"A strong network of teachers, learners and practitioners will facilitate lab-to-field dissemination of good agricultural practices. It will also provide

feedback about farmers' problems to trigger research and technology development in our institutions," he asserted.

Mr. Mukherjee said that agricultural institutes are the foci on which the success of our farm sector and welfare of people depends. "The barometer of performance is the quality of their products," he said adding that able, committed and industrious professionals from these institutions are required to spearhead the next farm revolution.

## Indian basmati rice all set to get GI tag

*Petition of Lahore-based Basmati Growers Association challenging India's claim dismissed*

<b>RICE AND SHINE</b>		
<b>The Intellectual Property Appellate Board on Friday cleared the decks for issuing the Geographical Indication tag to Indian basmati rice</b>		
<b>What is a Geographical Indication?</b> A 'geographical indication' (GI) is a place name used to identify the origin and quality, reputation or other characteristics of products. For instance, Champagne.	<b>obligation under the agreement for other countries to extend reciprocal protection.</b>	
<b>Why is it important?</b> Article 22 of the Trade-Related Aspects of Intellectual Property Rights agreement says unless a geographical indication is protected in the country of its origin, there is no	<b>India's Basmati credentials...India is the largest producer and exporter of Basmati rice in the world. Exports totalled Rs. 27,597 crore in 2014-15.</b>	
	<b>Some popular registered GIs in India: Darjeeling Tea, Mysore Silk, Mysore Pak (sweet), Thanjavur Veena</b>	
		<b>Pusa Basmati 1, a high-yielding variety of scented Basmati rice.</b> — FILE PHOTO
<small>Sources: WTO and APEDA</small>		

Seven years after an application was made to get the 'Geographical Indication' tag for Indian basmati rice grown in some States, the Intellectual Property Appellate Board (IPAB) on Friday cleared the decks for issuing the tag.

The application has been mired in litigation after farmers and exporters and Madhya Pradesh wanted to be included in the list of States approved by the Agricultural and Processed Food Products Export Development Authority (APEDA), the statutory body responsible for export promotion and development of certain scheduled products.

Following the orders issued on Friday by Justice K.N. Basha, Chairman, IPAB, and Sanjeev Kumar Chaswal, technical member, Trademark, IPAB,

basmati rice cultivated in the Indo-Gangetic Plains on the foothills of the Himalayas, covering areas of the rice grown in Punjab, Haryana, Himachal Pradesh, Delhi, Uttarakhand, Western U.P. and two districts of Jammu and Kathua, will now be issued the GI tag.

Passing the orders, Justice Basha ordered the assistant registrar of GI Registry, Chennai, to proceed with the registration and issue the GI certification within four weeks of getting a copy of the order.

Justice Basha also ordered the assistant registrar to reconsider the issue of addition of areas of basmati cultivation in States such as Madhya Pradesh, Odisha and Rajasthan.

The assistant registrar has now been asked to 'reconsider the matter afresh' and listen to arguments of both parties — APEDA and the respondents — and pass an order within the next six months.

In 2014-15, India exported 37 lakh MT of Basmati Rice to the world worth Rs. 27,597.87 crore and is the world's leading exporter of the rice, according to APEDA. India exports a major quantity of basmati rice to Saudi Arabia, Iran, United Arab Emirates, Iraq and Kuwait.

Justice Basha also dismissed a petition filed by Lahore-based Basmati Growers Association that challenged the issuance of GI tag to Indian Basmati rice.

“The appellant miserably failed to comply with the mandatory requirements of filing the evidence in support of opposition within the time frame stipulated under Rule 44 (1) of G.I. Rules, 2002. The opposition shall be deemed to have been abandoned by the appellant,” he said.

### **Loans given to small traders**

Financial assistance under Amma Micro Loan scheme was extended to 200 small traders here on Friday. Tourism Minister S.P. Shunmuganathan extended the benefits in the presence of Collector M. Ravikumar.



Tourism Minister S.P. Shanmuganathan distributing Amma Micro Loans to women at District Central Cooperative Bank in Thoothukudi on Friday.—  
Photo: N. Rajesh

According to a statement, the scheme introduced by the State government for small traders, who lost their livelihood due to the floods, envisages forwarding of a maximum of Rs. 5,000 loan to street vendors, petty shops and sellers of flowers, fruits and vegetables. The loan could be repaid in easy instalments of Rs. 200 per week for 25 weeks. Those who return the loan promptly will be entitled to further loan facility at four per cent interest, the Minister said.

A loan amount of Rs.102.05 lakh had been provided to 2,041 small traders under this scheme until February 4 with a total of 37, 209 applications received.

The Collector said the district has received a compensation of Rs.14.76 crore towards crop damages caused by the rains that occurred during the Northeast monsoon season. The compensation amount would be given to the affected farmers through Primary Agriculture Cooperative Credit Societies in the district, he said.

Mayor of Thoothukudi Corporation A.P.R. Anthony Grace, G.V. Markandeyan, Vilathikulam MLA attended.

### **‘Reduce test charges’**

The Livestock and Agri Farmers Trade Association has said that testing charges at laboratory in Bhopal has been increased by two-fold times, and demanded that it be rolled back.

In a letter to the Secretary of Department of Animal Husbandry Dairying and Fisheries, Ministry of Agriculture, the association secretary P.V. Senthil said that poultry products and egg exports has significantly come down after the bird flu outbreak in India in 2008.

The exports resumed to Oman under certificate issued by Animal Quarantine Certification Services after testing of samples at High Security Animal Disease Laboratory in Bhopal.

The fees charged for the test were Rs. 26,966 for 20 samples. The fees has been increased to Rs. 53,400.

The letter said that a farmer needed to test the samples at an interval of every 21 days to obtain certificate for his produces. For this, the farmer has to spend Rs. 9,07,800 annually irrespective of export volume. The letter said that poultry farmers were unable to bear the increase in testing charges. Exports would go up if the charges were reduced.

### **Clear pending wages: MGNREGA workers**



Workers from Pala and Rajapur villages staging a demonstration outside the zilla panchayat office in Kalaburagi on Friday.—Photo: Arun Kulkarni

Workers under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) from gram panchayats in Kalaburagi and Aland taluk in the district on Friday staged a dharna outside the zilla panchayat office here demanding clearance of their pending wages.



The protest was led by K. Neela, vice-president of the Mahila Janavadi Sanghatane. In a memorandum submitted to the Chief Executive Officer of the Kalaburagi Zilla Panchayat P. Anirudh Shraavan, they said that payment of wages was due for the work executed in villages coming under the Kalaburagi and Aland taluks during 2015-16.

Ms. Neela said that these landless agriculture labourers had worked for rejuvenation of tanks and other projects taken up under the MGNREGA in Pala and Azadpur villages in Kalaburagi taluk and Bodan, Narona, Kere Ambalaga, Gunj Bablad, Bilgundi villages in Aland taluk. Nearly Rs. 3.5 lakh was due to 50 workers in Azadpur and Pala villages. Ms. Neela said that most of the workers had worked for eight weeks under the scheme and they had been paid only for eight working days.

### **‘Farmers should make effective use of financial assistance’**



Reserve Bank of India Regional Director Eugene Karthak handing over tractor keys to a farmer as part of StateBank of India’s corporate social responsibility programme in Dharwad on Friday.— PHOTO: BY SPECIAL ARRANGEMENT

The farming community should make effective use of financial assistance being rendered by banking institutions to the agriculture sector for improving agricultural operations and be able to repay loans on time, said Reserve Bank of India (RBI) regional director Eugene Karthak.

Speaking at a function to mark the corporate social responsibility programme of State Bank of India (SBI) at its main branch here on Friday, Mr. Karthak said that banks were ever ready to help farmers and they should

reciprocate by being prompt while repaying loans. It would help have better bank-farmer relations, he said.

Mr. Karthak handed over the keys of tractors to farmers on the occasion.

State Bank of India (SBI) chief general manager (Bengaluru circle) Rajni Mishra delivered a motivational lecture on Medium, Small and Micro Enterprises (MSMEs) in the third workshop for capacity building of bankers for financing MSMEs at the State Bank Learning Centre here.

She highlighted on the role of banks in supporting and promoting MSMEs sector having tremendous growth avenues. She also highlighted the need for supporting the agriculture sector and appreciated the help rendered by SBI Dharwad main branch to farmers.

### **Training programme in aquatic medicine from Monday**

Teachers, scientists and government officials in the fisheries sector from nine States will gather at the College of Fisheries, Yekkur, here from February 8 for a fortnight-long training programme on aquatic medicine.

According to K.M. Shankar, Dean, College of Fisheries, the Indian Council for Agricultural Research had made it mandatory for colleges teaching fisheries to include aquatic medicine as one of the subjects in their degree course from the academic year 2016-17. But the College of Fisheries in Mangaluru had introduced it for its four-year Bachelor of Fisheries Science course from the academic year 2013-14. After four or five years from now fisheries graduates could prescribe drugs to aquatic animals.

“The existing fisheries graduates have not learnt about aquatic medicine. The training programme will be for such persons who were now working as different professionals in the fisheries sector,” Mr. Shankar said.

He said that microbial diseases were a cause for concern for aqua farming. Farmers were using antibiotics, drugs, chemicals and pesticides, residues of which were found in fish. The use of drugs in aqua farming was not being regulated mainly due to lack of education and research. Mr. Shankar said that there was a need to create awareness on aquatic medicine among government and university staff. The training programme has been supported by the National Fisheries Development Board.

## A testing time for turmeric farmers

*Drastic fall in production, low rate per quintal putting farmers through great difficulties*



Farmers waiting for their turn to sell turmeric at the agriculture market yard in Nizamabad on Friday.– Photo: K.V. RAMANA

With a drastic fall in production and lack of remunerative price at the market this year, turmeric farmers are facing great difficulties. They are of the view that the existing rate per quintal is not at all profitable and even input costs cannot be recovered with the same.

On the other hand, production this year fell by 60 to 70 per cent compared to the previous year. Acute drought and prolonged dry spell cast its shadow not only on water intensive crops like paddy but also on other crops. On the whole, farmers planted turmeric lower than 50 per cent of the normal sowing area.

That apart, farmers are scared of disinterest of traders to come forward to auction crop citing reasons of poor quality and high moisture content in the produce. Therefore, they staged a protest against the alleged failure of authorities to ensure purchases by traders at the market yard here on Thursday.

Ramesh Modani of M.B. Agro Trading Company says trading has just begun and as of now only low quality produce is coming in. After 15 days, quality produce is likely to come in, fetching high prices. Crop production



rate that declined is between Rs. 5,000 and Rs. 8,500 per quintal, which is reasonable, he says.

Farmers, who arrived with turmeric from different parts of the district and also from Adilabad, deplored that there are no facilities at the yard. Meal for Rs. 5 which was introduced for the benefit of farmers is not in sight anywhere. The same is with drinking water.

A farmer, Palepu Satyam Reddy of Perkit in Armoor mandal, says with the monsoon playing truant and depletion in ground water, just 25 per cent of the crop could be harvested. "I planted the crop in six acres, and have harvested in two acres so far. We get 20 bags yield per acres in normal conditions, but this year in two acres, the yield was just 24 bags," he says.

Given the abnormal increase in input costs, unless Rs .12,000 to Rs. 14,000 per quintal is given, farmer would not be happy, he says. "We have experienced much hardship in this long dry season," he says.

The condition of Darkam Dharmaiah of Harimandal village in Mamda mandal of Adilabad district is no better either. In the previous year, he had brought five tractor loads of turmeric which now fell to just two tractor loads.

Another complaint frequently heard from farmers was that after purchasing crop, traders were not paying amount immediately and keeping them waiting for 15 days for clearance. Agriculture Market Yard Assistant Director K. Sammaiah says the crop fetches a price depending on quality, which may increase in the next few days.

### **Minister calls for focus on fish seed rearing**

Minister for Agriculture and Fisheries Pocharam Srinivas Reddy has underlined the need for increased focus on fish seed rearing and production for tapping the enormous fisheries potential in the district and enhancing the income of fisherfolk.

Self-sufficiency in fish seed production is imperative to give a fillip to inland fisheries and boost income of fishermen, he said. He was addressing officials of the agriculture and other allied departments at a review meeting

held here on Friday. Minister for Roads and Buildings Tummala Nageswara Rao, Collector D S Lokesh Kumar, and others were present.

On the requirement of nearly 7.22 crore fish seed for taking up inland fisheries in the water bodies across the district, the minister said the existing fish seed farms in Wyra and Kinnerasani will be strengthened and major thrust will be laid on promoting fish seed production.

The Minister asked the officials of the Horticulture Department to encourage farmers to take up cultivation of horticulture crops in “pandal” and other scientific methods by availing subsidies on drip irrigation for reaping rich dividends.

The ministers also reviewed drinking water supply, Mission Kakatiya works and other developmental activities in the in-camera meeting. Sources said that they have expressed serious concern over the alleged misappropriation of funds meant for farm mechanization scheme by a group of errant employees in the district. They reportedly sought deterrent action against the errant employees responsible for the alleged embezzlement of public funds.

### **Horticulture office starts functioning from new premises**

Office of Assistant Director of Horticulture for Jawadu Hills block started operating from a dedicated building.

Till now the building was under the control of Block Development Officer and the Horticulture Department took over the building on Wednesday.

An event was organised to mark the occasion.

Eapan Vettath Eapan, Assistant Director of Horticulture, Jammunamarathur (in charge), Block Development Officers Anandan and N. Pandian, Assistant Agriculture Officers Anand and Thiruvengadam and Social Activist Fr. Robert of Donbosco participated in it apart from farmers.

Dr. Eapan said that the department would give 100 per cent subsidy to small farmers for setting up drip and sprinkler irrigation systems in their fields.

Tapioca farmers in the hills would be benefited under Rainfed Agriculture Development Programme (RADP). Integrated Horticulture Development

Scheme (IHDS) would also be made operational in the hills to benefit the farmers, he added.

Nearly 20 farmers of Scheduled Tribe Community submitted applications for availing the subsidy for setting up drip irrigation.

### **Punjab to give cash prizes to farmers adopting innovative practices**

The Punjab government will give cash prizes to farmers adopting innovative farm practices under the 'Recognition and Awards to Persons Engaged in Agriculture and Allied Sectors' scheme.

Farmers will be given cash prize of Rs. 3 lakh, Rs. 2 lakh and Rs. 1 lakh respectively from each category on the basis of decision by a six-member committee headed by Punjab State Farmer's Commission chairman G. S. Kalkat, said an official spokesman here.

### **Farm diversification**

The selection committee has been mandated to give its recommendations by April every year and a function to honour these farmers who had contributed for developing innovative farm practices, thereby shifting from traditional agriculture for promotion of farm diversification.

Apart from this, innovative farmers associated with any sort of the best farm practices/technologies such as post-harvest management and use of agriculture residue (paddy straw), intelligent irrigation system and organic farming would also be honoured under the category of 'Innovative farming'  
- PTI

### **No nod for GM mustard now**

Amid growing outrage by farmer groups and green activists against commercialisation of the country's first genetically modified (GM) food crop, mustard, the Genetic Engineering Appraisal Committee (GEAC) on Friday decided to put on hold any decision on it for now.

The GEAC, the apex body to accord approval for large-scale use and commercial release of genetically modified organisms in India, discussed

safety issues of GM mustard's application, but refrained from taking a final decision.

“Application for GM mustard's commercial cultivation was there for consideration in today's (Friday's) meeting. Following this, it was rumoured that the Ministry will give permission today itself, but we are not in a rush to take such a decision,” Environment Minister Prakash Javadekar told presspersons.

Mr. Javadekar, however, said research could not be stopped as it might have long-term implications on food security issues.

Deepak Pental, who developed the transgenic variety, said he was not disappointed. “It's not my loss ... the country needs to take a call on whether it's serious about transgenic technology,” he said. Mr. Pental, who will retire later this year from the Genetics Department at Delhi University, developed the variety with funds from the government and the National Dairy Development Board.

### **Questions on results**

An official privy to the proceedings of the GEAC said on condition of anonymity that the committee had “100-200 more questions for Pental” on the results of the bio-safety studies and the tests conducted so far. It would at least be a couple of months before the trial and safety data, which ran into nearly 4,000 pages, could become ready to be publicly available, he added.

Earlier in the day, protesters, under the banner ‘Sanson Satyagraha’ held a symbolic protest outside the Environment Ministry and demanded the government not to proceed with the process of the environmental release application of GM mustard. Representatives of activist groups who met the Environment Minister submitted a petition with 42,000 signatures collected through the platform of *Change.org*, urging the government not to go ahead with plans to commercialise GM mustard.

“The Environment Minister has assured us that in today's meeting, permission for GM mustard's commercialisation will not be given,” Rajinder Chaudhari of Kudrati Kheti Abhiyan told reporters. They were also assured that before taking any decision on this matter, the Ministry will hold a consultative meeting with all the stakeholders, he added.

## Despite fall in yield, Andhra Ponni ensures stable returns

*A large tracts of land have been brought under 'Andhra Ponni'*



Harvest of Andhra Ponni has been brisk at Kumaravayalur near Tiruchi.—  
PHOTO: A. MURALITHARAN

Although farmers suffered some fall in the harvest of “BPT 5204” this season, there appears to be a good demand for the produce.

A large area has been brought under the variety, popularly known as “Andhra Ponni” in Tiruchi district in general and Srirangam taluk in particular. There were complaints about the crop having been damaged due to incidence of some disease or pest attack.

The crop does not bear humidity and, obviously, during the period from January to February, the crop suffers serious loss in terms of yield.

Thick formation of fog during the Tamil month of Margazhi has resulted in some loss to the crop. Anticipating the formation of the fog, farmers have resorted to preventive measures this season to minimise the loss in yield.

P. Karuppan, a farmer in Kumara Vayalur, said he had raised the paddy variety on about four acres of land.

Although he could harvest just 40 bags an acre, about four or five bags short of his usual harvest, he was happy over the prospective rate and assured market for the crop. “Brokers have been making a beeline to Kumara



Vayalur for the past one week, demanding for the BPT 5204 variety,” he said indicating the assured market for the produce.

The brokers have fixed the price at Rs. 1,250 a bag of 62 kg each and will directly visit the fields to buy the grain.





He said good northeast monsoon had enabled the growth of paddy this season.

### **Senna, an apt alternative for arid areas**

*Official says it has a good market in Europe and many countries*

**A PROFITABLE ALTERNATIVE**

Cassia angustifolia, 'senna,' is recommended as an alternative crop to paddy in dry Ramanathapuram

	The plant thrives well in <b>red and clayey soil</b> and requires a couple of intermittent rain spells.	
	It will come to the rescue of paddy farmers during <b>drought</b> .	
	<b>Senna products</b> are in big demand in the international market.	

‘Senna’ (Cassia angustifolia), a highly valued medicinal plant, could be an ideal alternative crop for paddy farmers in the arid district, said S. Tamil Vendhan, Deputy Director of Horticulture, here on Friday.

As the leafy tropical plant required less water and no application of fertilizers, farmers could take up its cultivation whenever there was uncertainty on the prospects of paddy crop.

Farmers in drought-prone Kamudhi, Mudukulathur, Kadaladi and Paramakudi areas could cultivate ‘senna’ as a late crop in the event of losing their paddy crop due to water scarcity during drought.

The plant, used as a natural laxative to treat constipation, had a good market in Europe, Australia, New Zealand and other cold countries, Mr. Tamil Vendhan said.

As almost all parts of the plant — leaves, flowers, branches and roots — could be used as laxative, farmers could benefit to the maximum extent, he said. Marketing would never be a problem as representatives of companies and exporters would directly visit the field and procure the produce, he added.

The leaves and other parts were processed as powder and granules and capsules with ‘sennoside-B’ extracted from the leaves, he said. Farmers could harvest about 500 kg of leaves from one acre and sell them at Rs. 60 a kg with less input cost, he said.

As the plant was first introduced in Tirunelveli district from the European countries in the mid 18th century, it was popularly known as ‘Tinnevelley senna’ and widely cultivated in Tirunelveli, Thoothukudi and Virudhunagar districts. Farmers in Kamudhi and parts of Kadaladi and Sayalkudi areas had also started cultivating the medicinal plant, Mr. Tamil Vendhan said.

Instead of burning their fingers by repeatedly cultivating traditional crops, farmers could try cultivation of ‘Periwinkle’ (nithyakalyani) and dragon fruit cactus, both having varied medicinal benefits, he said.

### **Economists devise their own ways to measure GDP**

*Under the new methodology, economists expect that the government will report growth of 7.3 per cent for the October-December period.*

From rural motorbike sales to rail freight, economists and even the central bank are devising their own ways to measure Indian growth.

Their verdict? It’s a good deal weaker than official data showing India to be the world’s most dynamic big economy.

Doubts about the accuracy of India’s gross domestic product figures persist a year after its statisticians unveiled new readings they say better capture value addition down the goods and services supply chain.

Under the new methodology, economists expect India will report GDP growth of 7.3 per cent on Monday for the October-December quarter, according to a *Reuters* poll. That's a touch slower than the previous quarter but comfortably surpasses the 6.8 percent growth posted by China.

While that number appears strong, the lack of a historical series — still in the works — makes it hard to conclude that Asia's third-largest economy is doing well at a time when firms report poor sales, bank lending is slow and investment is weak.

“It doesn't feel like we are growing at 7-8 per cent,” said one official familiar with the Reserve Bank of India's research methods.

Like other economists, the RBI is now turning to hybrid models that mix elements of the old and new GDP methods to get a better feel for the underlying health of the economy.

The RBI looks at two-wheeler sales, car sales, rail freight and consumer goods sales in rural areas “to get a better understanding of the ground realities,” the official said.

The new data is a headache too for Finance Minister Arun Jaitley, who faces tough choices in his February 29 budget over whether to hike borrowing and spending to compensate for the sluggish private sector.

By its own proprietary measure, Ambit Capital estimates the economy may have grown an annualised 5 to 6 per cent in the October-December quarter.

“India is not the fastest growing economy in the world,” said Ritika Mankar Mukherjee, an Ambit economist in Mumbai.

“No matter how you cut it, while there are certain segments of the economy holding up such as IT or e-commerce, large parts of the economy are actually slowing down.”

Economists have drawn on techniques used by colleagues covering China, where GDP figures are widely suspected to have been smoothed for years by its communist rulers to underpin popular faith in their economic stewardship.

Ambit looks at criteria such as motor vehicle sales, power demand, and imports of capital goods to determine the real rate of expansion. Meanwhile, Citigroup has developed a heat map of 18 economic activities including two-wheeler sales, air traffic, and diesel sales.

Downbeat assessments of growth would more closely correspond with trends under the old GDP calculation method that until a year ago showed India experiencing the longest spell of sub-5 per cent growth in a quarter of a century.

The slowdown is especially pronounced in rural areas, which have suffered two consecutive dry years.

“Demand is very weak because farmers' income has been squeezed by drought,” said a Mahindra and Mahindra tractor dealer in Aurangabad, in the state of Maharashtra, who reckons his sales are down more than 20 per cent from a year ago.

Ashish Kumar, who recently retired as the head of India's statistics office, says economists are using the wrong gauges to understand data that measures value addition.

“You have to understand that the new GDP data essentially captures efficiency,” he told Reuters. “Comparing it with volume-based indicators would be a mistake.”

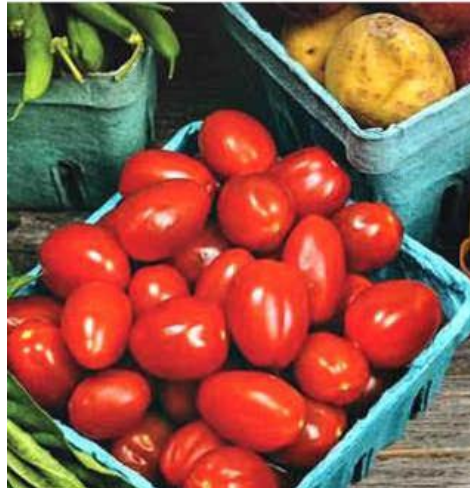
RBI Governor Raghuram Rajan has also endorsed the new GDP readings, saying sliding input costs are offsetting shrinking corporate revenues and inflating value-addition.

Put more simply, sales may be slow but profits are rising.

Still, the statistics office is readying tools to better capture services sector data for GDP calculations and supplement it with employment generation data.

“Once we have all these data points, we will get a better picture,” said Mr. Kumar.

## Farmer's market



Fresh vegetables, fruits, organic honey, food and bakery stalls will be present at the farmers market organised by Hotel Le Meridien on February 7 from 11 a.m. to 4 p.m. A wine tasting session by Grover and a brunch will also be part of the event.

## Water release from Mettur Dam stepped up

The release of water from Mettur dam for farm operations in Cauvery delta districts was stepped up on Friday.

About 1,000 cusecs of water was being discharged from the dam into River Cauvery for farm operations and it was stepped up to 5,000 cusecs on Friday morning, PWD sources said. It may be recalled that at a time when the Mettur Dam shutters were expected to be closed last month, Chief Minister ordered release of 6,000 cusecs of water from the dam from January 28 to February 25 for the benefit of the farmers who commenced farm operations late and also taking into account the Mahamaham festival in Kumbakonam town.

The water level in the Mettur dam stood at 69.36 feet on Friday evening against its full level of 120 feet.



## New fish market in Salem to become operational soon



The new Corporation Fish Market at Suramangalam in Salem. -Photo: E. Lakshmi Narayanan

The newly constructed Corporation Fish Market in Junction area in the city is expected to start functioning shortly.

The spacious new fish market has come up in the busy Dharma nagar first cross, adjacent to the existing fish market, at an outlay of Rs. One crore. The major advantage of the new fish market is that it is situated just a stone's throw away from the Suramangalam Uzhavar Santhai, which attracts hundreds of farmers and consumers every day.

In the absence of a fish market in the city, the Corporation converted the site allotted for a park in Dharma nagar into a temporary fish market few years ago. This temporary fish market soon became a major fish market of the district.

However, the fishermen were demanding a permanent fish market, as the temporary one was lacking in infrastructure. The residents of Dharma nagar and the surrounding areas too made repeated representations for the construction of a permanent fish market, so that a park could be set up in site originally earmarked for the purpose.

The new fish market has all the needed facilities, much to the delight of the fish traders. The new market accounts for 18 pucca permanent shops, separate space for cutting, cleaning and packing the fish with water facility,

cold storage facility, waste water treatment plant, hot water connection, separate toilets for men and women, proper drainage system and vehicle parking space. The work on the construction of the fish market was completed a few months ago, and the Chief Minister Jayalalithaa declared the market open through video conferencing on December 28 last year.

The fish traders are eagerly waiting for the market to be opened.

When contacted, Corporation sources said that the work of allotting the shops to the traders through tenders is in progress. The market will be thrown open for public, once this procedure is completed.

The Corporation should open the market soon, so that the people of this area could get back the land allotted for park, says K. Ravukumar, a consumer activist.

### **Cane farmers seek payment of arrears**

The Karnataka State Sugarcane Growers' Association has urged Chief Minister Siddaramaiah to prevail upon sugar factories to pay arrears of over Rs. 6,020 crore to cane growers in the State.

It asked Mr. Siddaramaiah to initiate action on the lines of the Maharashtra government, which seized the sugar stock and withdrew licences of factories which failed to settle arrears.

Association president Kurubur Shanthkumar said that of the 1,026 farmers, who committed suicide in the State last year, 196 were sugarcane growers.

He alleged that sugar factories were directly responsible for cane growers ending their lives across the State and that the association was seriously contemplating filing cases against the factories.

He urged the factories to pay farmers within 14 days of receipt of cane, or else pay 15 per cent interest on the amount.

The association warned the government that it would not allow the zilla and taluk panchayat polls arrears were not released.

## 50 saplings planted

Pondicherry Original Nativity Good Health Improvement Organisation has planted 50 saplings at Gorimedu a fortnight back. The organisation aims to plant at least one lakh saplings across Puducherry in the next two years.

A.Razalikhan, who heads the organisation, said that they initiated this programme since many trees are destroyed to build the city. There is increase in pollution. “Therefore, we decided to plant saplings in every street in Puducherry, Karaikal, Mahe and Yanam,” he said.

On February 10, nearly thousand saplings would be planted at Police Grounds and quarters. Trees that provide shade would be the ones chosen for this programme. “We would take permission from each house to plant the saplings. School and college students would be involved in this programme,” he said.

**hindustantimes**

## Futuristic farmers: Not cattle class anymore



Bull market: Entrepreneur Gurvinder Kaur with her husband, Amanpreet Singh, and the prized Rs 1.25-lakh buffalo (right) at Kohara near Ludhiana. (Sanjeev Sharma/HT)

For marginal farmers, finding an alternative to farming is not an option any more. It has become a question of survival. Lurking among success stories

are the tales of struggle — those first few tentative steps when the risk of falling looms large just before you break into a sprint.

Gurvinder Kaur, a graduate from Rupnagar married in Kohara near Ludhiana, is taking those first steps. A few years after her marriage when her father-in-law died in 2012, the subsequent division of the family landholding left her husband with a mere acre. The only work the family had ever done or knew how to do became unsustainable suddenly. Her husband picked up the job of a foreman at this village-turned-town but his earnings were too small to run the household.

“We sold our village house and came to live on the 1 acre. Then we started thinking of selling the land to gather money to last us some years; but that would have rendered my husband and all of us without work; and what when the bank balance finished?” she recalls.

### **Starting small**

Gurvinder, most educated member of her family, made some quick and firm decisions, surprisingly with the complete support of her mother-in-law. With the two cows that the family had kept for its milk requirement, she decided to set up a commercial dairy. “My mother-in-law had as a young woman seen her father rearing cows and she was the one taking care of those two cows,” she said. Barely three years later, her efforts are showing good results.

“These are those first few years where we are just breaking even. We now have 10 cows and buffaloes and four calves. The cattle have been bought on credit and though we pay a heavy mortgage every six months to the bank, we are able to stow away enough money to buy better breeds,” says Gurvinder.

The latest prized possession in her dairy is a cow bought for Rs 1.25 lakh last month. “We sold one for Rs 20,000 and bought another that gives us 13 litres of milk a day,” says Gurvinder’s husband, Amanpreet Singh. “Since the requirement for fodder increased, we took another three acres (other than their 1 acre) on lease.

The grain and fodder from 4 acres is enough for the household as well the cattle. There is no profit at all in agriculture,” says Shinder Kaur, Gurvinder’s mother-in-law.

### **Better option**

By tilling 1 acre, the family would have earned Rs 60,000 a year at the most but from the dairy farm, it makes an annual profit of about Rs 2 lakh from a kanal. “The cattle give us almost 30 litres of milk a day, which we sell for anything between `40 and 50 a litre to either the Milkfed co-operative collection centre or a private co-operative. We also sell a small part of the milk from our house.

The co-operatives pay us by the fat content in the milk. Initially, the Milkfed rate was more than Rs 50 a litre but now it is Rs 40. Private co-operative offer us a better rate of Rs 54 per litre,” says Amanpreet Singh.


While a large part of total yearly income of almost Rs 4.5 lakh goes into repaying the bank, a substantial amount also goes into paying the lease money for 3 acres. “The lease rate in this area is Rs 35,000 per acre. Together the credit and the lease payment mean a cut of almost Rs 2 lakh from the total earning.

But since the grain for our consumption and the fodder for the cows are taken care of, there is little expenditure on other things. And whenever we go beyond our annual budget and need money, we sell a calf and that brings in ready cash,” explains Gurvinder.

In the backyard, the family built a shed of less than a kanal, which is big enough to hold 15 cows, and every member takes care of the cattle. Other than Gurvinder Kaur, her husband, and paternal uncle, the family has the assistance of a worker.

“Cows are sacred. They understand us, follow our commands and are easy to handle. We channel the cattle waste into land as manure and also use it as fuel. To inseminate the cows artificially, veterinary doctors are only a call away. The bank has insured the cattle but we have arranged for its regular medical examination. After all, they are the family’s breadwinners,” says Gurvinder.





**CONDENSED FACTS**

**1 ACRE** Used as farm, fetches farmer ₹60,000 a year  
Used as dairy farm, fetches farmer ₹16 lakh annual profit

**THE ECONOMICS OF IT**

Price of good-quality cow/buffalo	₹60,000-1 lakh
Average milk yield from cattle	20 litres a day
Bank loan cap	₹60,000 per cow
Interest rate	2 to 2.5% over the base rate
Time given to repay loan	7 years
Loans available for	Cattle, shed, machinery
Other major requirement	Land to grow fodder
Average annual cost of land on lease	₹35,000 per acre
Cows needed to make dairy flourish	20
Side benefits	Animal waste can be used for making fuel and manure

**MILK BUYERS, WHAT THEY PAY**

Milkfed (co-operative collection centre): ₹40-50 a litre  
Private co-ops: ₹54 a litre

## Harsh loans

A good-quality cow or buffalo costs anything between Rs 60,000 and 1 lakh. Even though the Punjab government has tied up with some national banks to offer farmers cattle loans, capping the cost at ₹60,000 per cow, but the interest rate, 2 to 2.5% over the base rate, is not encouraging.

“The money has to be paid back in seven years,” explains Punjab animal husbandry director HS Sandha. There are loans also for building cow sheds and buying machinery.

Gurvinder Kaur, who bought six cows, pay the bank six-monthly instalments of ₹60,000 each on a total credit of ₹5.6 lakh (₹3.6 lakh for cattle and ₹2 lakh for the shed).

“It pinches. It might take us a few years to repay the loan, but once it is over, the buffaloes will mean only profit. We have four calves from them already and another cow is ready to deliver. Once we have 20 cows, the dairy will flourish,” says Amanpreet Singh.

To get all dairy farmers a better deal, the government is trying to renegotiate with banks. “The interest rate cannot be changed but we are asking the banks not to charge farmers any principal amount in the first year of cattle purchase, which is when farmer invests a lot in other things as well to start up a dairy. We also want the repayment period extended to nine years, to reduce mortgage,” says animal husbandry director Sandha.

## ATTACHED TO LAND

In the period of struggle, Gurvinder Kaur has done well to resist the temptation to sell off the 1 acre by the main road. “Property dealers are

offering good price and almost all families at Kohara have taken the offers, but they have nothing to do now. What is the point of having money and then sitting idle at home?” asks Shinder Kaur. Kohara on the Chandigarh-Ludhiana road is fast developing into a small town and cost of land on either side of the main road is quite high.

“We could have got more than `1 crore easily for 1 acre, but that would be rendering ourselves unemployed. We are attached to the soil that feeds us,” she says.

The attraction that remains is of using this land as a source of rental income. Most owners still attached to their land are building hostels on the space for industrial workers moving in to settle around Ludhiana.

“We could look at that option once we make enough from the dairy to buy fodder and grain,” says Gurvinder Kaur, on planning ahead.

### **Budget may provide Rs 1.10 lakh crore for Pay panel, OROP, hints FM**



While addressing the Consultative Committee, which is attached to the finance ministry, Jaitley said there would be higher allocation for the farm sector. (PTI)

Finance minister Arun Jaitley on Friday indicated that the Union Budget 2016-17 could provide Rs 1.10 lakh crore in order to meet the liabilities for the 7th Pay Commission award and implementation of the One Rank One Pension (OROP) scheme — uniform pension for armed forces personnel retiring at the same rank with the same length of service.

While addressing the Consultative Committee, which is attached to the finance ministry, Jaitley said there would be higher allocation for the farm sector.

“During the financial year 2016-17, the central government has to make provision for about Rs 1.10 lakh crore in order to meet the liabilities on account of implementation of 7th Pay Commission recommendations and One Rank One Pension scheme,” Jaitley said.

The finance minister pointed out that agriculture growth in the last two years has suffered due to insufficient monsoons. However, states have been given the highest-ever funds for drought relief in 2015-16. “More incentives will be given to agriculture sector for increasing agriculture production and productivity,” he said.

Jaitley highlighted that all the major economic organisations, including the International Monetary Fund, have predicted low growth for the world economy in the coming year, and these developments have implications on India’s economy, especially the exports sector.

“The world economy is passing through an uncertain and fragile situation... The silver lining is low international commodities and oil prices, which in turn has helped in better macroeconomic situation of the country,” Jaitley said.

The 7th Pay Commission has recommended an increase in pay for about 10 million government employees and pensioners. The move will put an additional burden of Rs 1.02 lakh crore in 2016-17 on the exchequer.

Jaitley said that for the first time this year real expenditure amount was higher than budget proposal.

It was suggested by the Committee members that tax exemption limit for middle and salaried class be increased from existing Rs 2.5 lakh to Rs 4 lakh while focusing on widening the tax base.

There should also be severe punishment for those evading taxes, it was proposed. There was also a suggestion to change the labour ratio in MNERGA such that it can be more productive and used for infrastructure building along with providing jobs.

## Indian Basmati gets geo-tag of authenticity



Recognition for rice grown in Indo Gangetic plain; MP awaits its turn

### **CHENNAI, FEB 5:**

Traditional Basmati farmers in India have got a boost with the Intellectual Property Appellate Board (IPAB) ordering the Geographical Indications Registry to give GI recognition for the aromatic rice.

Basmati cultivation in the Indo Gangetic Plains (IGP) in the Himalayan foothills will get the GI mark. This will cover the unique variety of rice cultivated in Punjab, Haryana, Himachal Pradesh, Delhi, Uttarakhand, Western UP and two Districts of J&K – Jammu and Kathua.

In November 2008, the Agricultural and Processed Food Products Export Development Authority (APEDA), a statutory body which protects intellectual property and GI in India and abroad, had applied for GI registration of Basmati cultivated in IGP.

But in December 2013, the GI Registry had asked APEDA to include all areas where basmati is cultivated and submit an amended application including Madhya Pradesh, Rajasthan and Bihar. APEDA appealed against

that order as diluting the GI application will be against the interest of Basmati growers in traditional areas.

A host of rice exporters, NGOs and growers associations from Madhya Pradesh who opposed APEDA's stand appealed to IPAB.

Even a Basmati Growers Association from Pakistan opposed addition of new areas such as Madhya Pradesh.

The IPAB upheld APEDA's appeal and ordered the GI Registry to give GI recognition within four weeks based on the application filed by APEDA.

However, IPAB also said the claim of Basmati farmers and exporters for including Madhya Pradesh can be considered afresh by the GI Registry and a decision be taken within six months.

It dismissed the Pakistan Basmati Growers Association's objections to including Madhya Pradesh.

The order comes seven years after APEDA initiated steps to protect and get GI recognition for Basmati cultivated in the IGP. This will preserve the unique identity of the aromatic rice in the international markets.

### Battle for the tag

**Sept 2008:** Centre empowers APEDA to act as statutory authority for registration of IPR and GI

**Nov 2008:** APEDA applies to GI Registry for Basmati registration

**May 2010:** APEDA's application publicised in GI Journal No 34

**Sept 2010:** Basmati Growers Association, Pakistan, opposes APEDA application

**Jan 2011:** APEDA counters BGA, Pakistan

**Dec 2013:** GI Registry upholds APEDA's stand, directs APEDA to include more growing areas in application

**Jan 2014:** BGA, Pakistan, appeals against order of GI Registry and granting of Basmati GI to APEDA

**Feb 2014:** APEDA approaches Intellectual Property Appellate Board against GI order to include more areas

Madhya Pradesh Basmati growers associations, NGOs and companies such as Daawat Foods, Madhya Kshetra Basmati Rice Exporters Association, SSA International, Narmada Cereals Pvt Ltd, New Darpan Social Welfare Society appeal to be included in GI tag for Basmati

**Feb 2016:** IPAB directs GI Registry to give Indian Basmati the coveted tag

*Nearly 33% of the Basmati produced in India is exported – to over 150 countries. In 2015, India exported over 37 lakh tonnes of Basmati to 150 countries*



(This article was published on February 5, 2016)

## **Fisher-friend app extended to Kerala**

### **KOCHI, FEB 5:**

Fisher friend mobile application programme, jointly developed by Qualcomm and MS Swaminathan Research Foundation, has expanded the app's reach to Kerala.

The app will provide the fishermen with information about local weather, oceanic conditions, potential fishing zones and markets in Malayalam on smart phones to help them fish safely, productively and profitably. It has been used by more than 2,000 fishermen in Andhra Pradesh, Tamil Nadu and Puducherry in their native languages since 2013.

Anirban Mukerji, Senior Manager, Govt Affairs, Qualcomm, said that the company is working with fishing organisations of various state governments for the promotion of the app and also started training the fishing community for using the app by appointing master trainers. Plans are afoot to cover the East Coast in the next 2-3 months with Bengali and Oriya languages.

At present the app will be available on MS Swaminathan website and it will soon be loaded into the Google Play store, which will enable natural downloads, he said.

Fisher friend programme is an outstanding example of a public-private partnership that's using mobile technology to bridge the information deficit of a vulnerable section of the society and improve their well being, he added.

(This article was published on February 5, 2016)

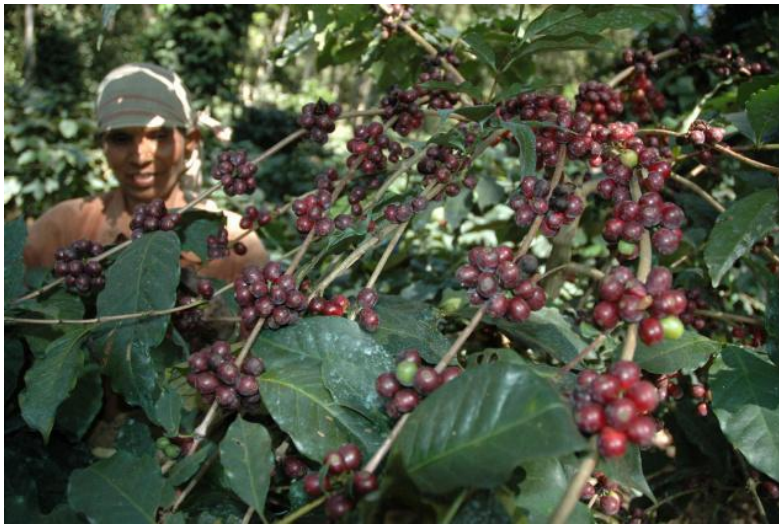
## **Bean there, drone that... Coffee planters for an eye-in-the-sky to assess crop health**

Coffee plantation owners keen to use drones to assess crop health

## **MUMBAI, FEBRUARY 5:**

Enabled by unmanned aerial vehicles (UAVs), drones are leading agricultural data collection and facilitating precision analysis in agriculture globally, helping to improve crop yield.

Though the use of drones by civilians is as yet restricted in India, speakers at a recent coffee seminar urged the government to allow these hi-tech machines to help detect the health of the crop.



Apart from their military use, millions of farmers across the country could use drones and the new emerging technology to boost production and efficiency in their farms.

“We are on the cusp of a new era of farming, where precision agriculture practices can offer a new approach to crop management. We now have a technique that wrings out waste and uses data to maximise crop yields and profits. UAV technology is reshaping farming,” said Jaisimha Rao, coffee plantation owner and entrepreneur.

### **Game changer**

Passionate about technology and agriculture, Rao noticed the lack of data-driven decision making while working on his family’s coffee plantation. He decided to combine the versatility of UAVs and computers, and ensure algorithms to analyse crops. Aiming to bridge the gap, Rao, who holds a

Bachelors degree in Electrical and Computer Engineering from the Carnegie Mellon University, founded TartanSense. The company uses UAVs to capture and analyse aerial imagery.

### **Blanket restrictions**

“Flying drones and gathering data is a game changer for agriculture, and especially for large plantations like coffee. How we can use this technology in India is the moot point, since the Directorate General of Civil Aviation (DGCA) has restricted the use of drones,” he said.

Pointing out that the “blanket restriction by the DGCA to operate drones would kill the enthusiasm of start-ups” such as his, Rao said his drones had worked in Indonesia, Japan as well as in the US, with drones costing upwards of \$100,000.

Speaking about the new technology, Sanjiv Sarin, Managing Director and CEO, Tata Coffee, who was moderating the talk, said, “We are entering the future of the coffee industry. The Coffee Board can work for government clearances to use drones in agriculture.”

Though coffee is shade-grown among silver oak trees, Rao said, “drones will soon be able to look at a tree and avoid it. Over the next 6-12 months, we are going to have an UAV that can fly under the canopy, measure each and every coffee bush and get data for the planter. Canopy penetration will be the true essence of precision farming.”

### **Big data**

Agricultural drones are UAVs used for precision agriculture, which is a modern method of farming globally that uses big data, aerial imagery and other means to optimise efficiency.

The drone collects the crop’s image and makes a colour coded map based on its health, which is then assessed by the UAV firm.

Drones are helping assess the exact nature and area of crop damage during natural calamities, and are helping save huge amounts.

Stating that a lot of people are fascinated by drones, Rao said the real value add “is not the hardware, which is about how to fly them and get the data, but to analyse it and benefit the farmer.”

Detailing the functioning of the UAV, Rao said, “Our drone flies for about 20 minutes, and then the battery is dead. It can survey about 150 acres. We send the images up to the cloud, and can then stitch the data into a nice map. Once you get the image and sensor data in a map, one can get an actionable report and help the farmer. This is where the real skill lies.”

(This article was published on February 5, 2016)

### **Russia mulls excise tax on palm oil**

#### **MOSCOW, FEBRUARY 5:**

The Russian government is considering imposing an excise tax on palm oil and a number of other products, Economy Minister Alexei Ulyukayev said on Friday. “On the instructions of the prime minister we are considering this possibility. There are obvious things such as an excise tax on palm oil, there are less obvious things. This question is being studied now,” Ulyukayev told reporters.

The Business daily Vedomosti reported on Friday the government was considering imposing an excise tax on palm oil and soda drinks to help balance its budget and reduce the consumption of products it considers unhealthy.

According to Vedomosti, the tax on palm oil may be introduced on July 1 and amount to around \$200 per tonne. The final list of products that may become subject to payment of excise taxes may also include potato crisps or snacks, electronic cigarettes and food products that are high in fat and sugar, the paper said.

(This article was published on February 5, 2016)

## **Water in 91 reservoirs at 38% of full capacity**

### **NEW DELHI, FEBRUARY 5:**

Availability of water at 91 major reservoirs in the country is at 38 per cent of their total capacity and 22 per cent less than the levels reported in the corresponding period last year.

According to a statement by the Union Water Resources Ministry, as on February 4, water stock available across major reservoirs was 59.335 billion cubic metres (BCM) as against the total storage capacity of 157.799 BCM.

The current stock is 76 per cent of the 10-year average for the corresponding period.

While Himachal Pradesh, Andhra Pradesh and Tripura have reported better storage vis-a-vis last year, Andhra Pradesh-Telangana (combined projects in both states) have reported same water levels as that in the corresponding period last year.

States with lower storage than last year are Punjab, Rajasthan, Jharkhand, Odisha, West Bengal, Gujarat, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, Telangana, Tamil Nadu, Karnataka and Kerala.

(This article was published on February 5, 2016)

## **Business Standard**

### **Bad weather could hit farm output this year: Pranab Mukherjee**



As winter makes a hasty retreat, putting at risk the standing [wheat](#) and other [rabi](#) crops, President [Pranab Mukherjee](#) on Friday warned agricultural production could be lower this year, as a result of deficient [monsoon](#) and a long dry spell.

"Nature has not been kind to us this year as well. A deficient monsoon followed by a dry spell is likely to affect agricultural production for the second year in a row. This is an area of grave concern," the President said while addressing the 54th Convocation of the Indian Agricultural Research Institute (IARI), (better known as the [PUSA](#) institute) here on Friday.

With majority of the cultivable area under severe climatic conditions such as drought, floods and cyclones, Mukherjee called for serious efforts to overcome the challenge and make Indian [agriculture](#) sector resilient to [weather](#) fluctuations.

Mukherjee's warning comes at a time when agriculture production in 2014-15 crop year (July-to-June) dropped to 253 million tonnes (mt) from a high of 265 mt in 2013-14 owing to 12 per cent deficiency in monsoon.

As the rains remained short by 14 per cent in 2015, setting the stage for consecutive droughts for the first time in around 100 years, agriculture production is projected to slip further.

According to the first advanced estimate of farm production for 2015-16, kharif grain output is projected at 124.05 mt, which was less than the production achieved in kharif 2014.

Full-year production is also not expected to be great given that residual soil moisture has been poor this year. The relatively warm winter is also not expected to help much.

The President also asked the IARI scientists to develop climate resilient technological solutions by leveraging opportunities from frontier science such as biotechnology and nano-technology.

"The time is ripe for some serious efforts as 80 per cent of the area under cultivation in India is in the grip of severe climatic conditions like drought, floods and cyclones," he said.



Speaking about India's dependency on pulses and edible oils, Mukherjee said the demand for these items is expected to substantially increase in the future while expressing confidence that the new technologies of IARI would address the problem.

"IARI has developed mustard varieties suitable for unconventional areas that can boost oil seed production. The institute has also initiated the development of synchronous-maturity pigeon-pea hybrids and varieties, apart from chickpea. I am confident these technologies will enhance the productivity of pulses and edible oils to meet our domestic requirements fully," he said.

IARI has developed quality protein maize, and iron and zinc rich wheat, pearl millet and lentil varieties through molecular breeding, and genetically modified 'golden rice' enriched with pro-vitamin A, he said, adding these technologies should reach the farmers immediately.

Agriculturists must be trained to transform their farms into production-cum-processing centres.

Also, agri-research must address the critical issues that hinder the development of rural agri-businesses, the President added.

IARI, set up in 1905, has played a key role in providing human resource to the national agricultural research system. Around 8,000 students of IARI have been awarded post-graduate or PhD degrees so far.



## THE TIMES OF INDIA

### **Bhartiya Kisan Union seeks farmers' feedback on social media**

CHANDIGARH: Bhartiya Kisan Union (Mianpur) has taken to social media to ask farmers which party they think will best address their problems and should be supported in the 2017 assembly elections by the organisation, which seeks to fight for their cause in the state.

Bhupinder Singh Mann, ex-MP and national president BKU, said feedback

was sought on Facebook and for now the opinion was divided between Aam Aadmi Party (AAP) and Congress. "We are also holding meetings in various districts and a clear picture will emerge after analyzing all the responses. Farmers, especially the younger generation, is anxiously looking at the political parties to address the agrarian crisis.

Even though the farmers' body had decided to support Congress in 2002, it has remained undecided in the past two elections and this time it has decided to take proper feedback from all parts of the state before taking a call.

"We are an apolitical body and not in the fray to get votes. It is therefore, important to make the right choice on the basis of the agenda put across by the political parties so that the critical problems facing the farmers are addressed," added Mann.

Apart from issues of growing rural indebtedness, farmers pointed out in their feedback that they have to deal with local problems like crop damage by wild cattle that have not been taken seriously by the state government.

Mann and president of the Punjab unit Baldev Singh Mianpur said they have already started with public meetings in villages. In the next stage, the BKU plans to pose a question on Facebook where they will be asked to give suggestions on how political parties can tackle the agrarian crisis in the state.

### **Production high, but Indians eating less fruits and veggies**



*Production high, but Indians eating less fruits and veggies (Getty Images)*

India may be among the highest fruit and vegetable producing countries, but Indians are lacking in adequate intake of these horticultural produce.

Though availability is an issue due to barriers in supply chain, the lower intake of fruits and vegetables is largely determined by the dietary choice of individuals in India which is skewed towards cereals. Ironically, in a largely vegetarian country, fruits and vegetables account for only 9% of the total calorie intake in the country.

The trend in consumption pattern, however, varies from region to region with people living in south Indian cities (Chennai and Hyderabad consuming more fruits and vegetables as compared to those in the north Indian cities.

These findings are part of the India's Phytonutrient Report, brought out on Thursday by the Delhi-based think tank Indian Council for Research on International Economic Relations (ICRIER). It is based on a survey done across five cities -National Capital Region (Delhi, Gurgaon and Noida), Mumbai, Chennai, Hyderabad and Kolkata -covering 1,001 individuals drawn from upper and middle income group households.

Chennai tops the list with the highest number of servings of fruits and vegetables while Kolkata is at the bottom of the cities covered in the survey. "The greater number of vegetarians and the relatively higher income in the sample can partly explain the high levels of intake of fruits and vegetables in Chennai and Hyderabad," says the report.

The objective of the report is to understand the actual consumption patterns of fruits and vegetables in India as compared to World Health Organisations (WHO) recommended quantity for an adult. The WHO panel on diet, nutrition and prevention of chronic diseases recommended a daily intake of at least 400 grams (or five daily servings with an average size of 80 grams) of fruits and vegetables, excluding potatoes, cassava and other starchy tubers to "prevent diet-related chronic diseases and micronutrient deficiencies".

The report notes that the Indians consume quite less than what is recommended by the WHO. The country has, however, been producing fairly good quantity of fruits and vegetables. India had during 2013-14 produced 88.98 million metric tonnes (MT) of fruits and 162.89 million MT

of vegetables. The country at present ranks second in the production of fruits and vegetables in the world after China.

Referring to good quantity of production of fruits and vegetables in the country, the report notes that there are many barriers in the supply chain that impact consumption. It highlights a number of regulatory issues related to Agricultural Produce Marketing Committee (APMC) Act and consumer protection rules, which if rectified, can support an efficient supply chain and help to increase the consumption.

### **Exotic fruits now available in your nearby market**



*Exotic fruits now available in your nearby market (Getty Image)*

Gone are the days when any thing exotic -be it fruits or ingredients -were only available in the supermarket near you. An array of exotic fruits is sure to greet you even as you walk down the markets of Mumbai. The names are even more exotic as they look for instance dragon fruit, kiwi, passion fruit, mangosteen, rambutan, longan amongst others. It is not a unfamiliar sight to find these along with the regular varieties of fruits in local markets located in areas like Crawford, Vashi, Dadar station, Vile Parle East station and Santacruz West station.

## **DRAGONFRUIT**

This spiky, bright pink or yellow fruit in oval, instantly grabs your attention due to its attractive avatar. Also known as pitaya, it is actually the fruit of a cactus. Once cut, the flesh inside is full of tiny edible black seeds set in rosy pink or white flesh. Ways to eat it While the skin of the dragon fruit is inedible, its seedfilled flesh is juicy. Cut the fruit to scoop out the flesh with a teaspoon. Or you can slice or dice the flesh into rounds. Squeeze some lime juice on it to bring out the flavour of the fruit and combine it with other tropical fruits such as watermelon, litchis, rambutan to make an exotic fruit salad. How it can benefit you It is rich in vitamin C, B1, B2 and B3 and minerals such as iron, calcium, and phosphorus.

They have a high-fibre content that helps those with problems of poor digestion and constipation.

The rich antioxidants in the fruit can keep the skin tight and young. Combine the flesh of the fruit with honey to make an anti-aging face mask.

## **MANGOSTEEN**

Though unrelated to the mango, mangosteen gets its name due to its almost similar sweet and tart flavour. National fruit of Thailand, this purple-skinned fruit has a thick velvety stalk and a waxy skin. Ways to eat it Cut a circle around the stalk and take it out. Inside there are 5-7 soft and juicy white segments, which have a delicious fragrance and, occasionally, also contain seeds. With its appetizing floral flavour, it is best eaten as it is. The juice of this fruit is used in various Thai savoury dishes. It also goes well with coconut milk, sugar and a dash of lime. Its flavour also matches with a variety of fruits like peach, pineapple, pomegranate and apricot, so mix these for an unusual fruit salad. How it can benefit you It has good quantity of vitamin C, which is good during pregnancy.

The skin of the fruit, when dried and powdered, can be used to cure skin disorders and eczema.

Mangosteen aids in promoting red blood cells and prevents anaemia.

## **KIWI**

Oval and shaped like a large egg, Kiwi fruits are also known as Chinese gooseberry. It has fuzzy brown skin. Once cut, the light green fleshy fruit has tiny black seeds. Ways to eat it It is juicy and has a sweet-and-sour taste to it. Miniature grape-sized kiwis can be eaten whole, with skin and all since the fruit tastes best raw. It can also be added to fruit salads and your breakfast fruit plate. How it can benefit you Kiwi can help boost the immune system as it is a rich source of Vitamin C. It has a favourable sodium-to-potassium ratio, making the fruit heart friendly.

Kiwi fruit is ranked as having the fourth highest natural antioxidant potential, next to red fruits containing high levels of beta carotene.

## **LONGAN**

Softer and smaller than litchi, this fruit is also known as the 'dragon's eye' as it has white eye-shaped mark on the black pit, which resembles the pupil of an eye. Yellowish to light brown in colour, they can be consumed both in the raw or dried form. Ways to eat it Just peel the fruit like you would a litchi. The fleshy fruit inside it is translucent white in colour with 5 a single tiny black seed. It has a musky grape like flavour and a delicious sweet taste. Eat them as it is or use them to make sherbets. How it can benefit you Eating longan relaxes the nerves and lowers stress levels and fatigue. They are recommended for those with sleeping disorders.

Said to be a heart friendly fruit, it reduces the risk of cardiac arrest and strokes.

Longans are said to improve blood circulation and prevent anaemia.

## **RAMBUTAN**

Rambutan resembles a furry oval strawberry from the outside, but is more like a litchi from the inside. The fruit travelled to India with migrants from Singapore and Malaysia and has limited production in India. Ways to eat it With its slightly sweet-with-a tinge-of-sour taste, Rambutan can easily substitute litchis in any recipe. Just peel them to get the fruit inside, it has a flavour that goes well with pineapple, mango or coconut based desserts. You can also make a smoothie by blending it with coconut water, banana and



strawberry. How it can benefit you Rich in water, it not only helps quench thirst and prevent bloating, but also aids in regaining lost energy.

It makes for a good astringent and is extremely beneficial for the skin.

The fatty acids in it can treat cancer and obesity.

## THE ECONOMIC TIMES

### **Reforms in agriculture needed for 2nd Green Revolution: Arvind Panagariya**



Panagariya said though 49 per cent of country's population is associated with agriculture, their contribution is just 15 per cent in the total GDP.

Panagariya was in Gandhinagar to chair a meeting of 'Task Force on Agriculture Development', constituted by each of the central and western region states, an official release said.

Panagariya said though 49 per cent of country's population is associated with agriculture, their contribution is just 15 per cent in the total GDP.

"It is time we give importance to agriculture sector. For the second green revolution, we have to bring reforms in the various avenues of this sector, such as land, farming, seeds, etc," he was quoted as saying in the release.

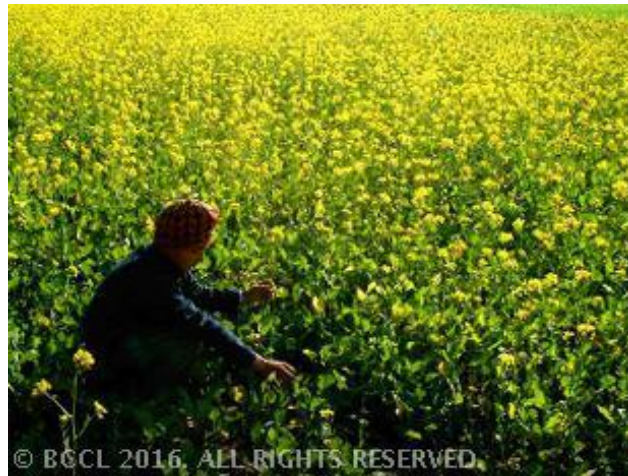
The Vice Chairman further added that NITI Aayog believes in equal relationship with states and today's meeting shows that even Niti Aayog can come to states.

Gujarat Health minister and president of Gujarat Task Force Nitin Patel agreed with Panagariya and suggested that farmers must be given a 'status' and this sector should be encouraged in line with industries.

Gujarat Agriculture minister Babubhai Bokhiriya suggested that agriculture sector should be given priority and efforts should be made to see that it gets international finance, it added.

The meeting was attended by the heads of such task force of Gujarat, Rajasthan, Maharashtra, Madhya Pradesh, Chhattisgarh, Goa, Union Territory of Dadara and Nagar Haveli, and Diu and Daman.

### **Decision on genetically modified Mustard after 'due deliberations': Government**



While the minister said public health will not be compromised, he did not rule out the use of science for increasing agricultural productivity.

NEW DELHI: Taking a cautious stand on approving commercial farming of genetically modified Mustard, government today said a decision will be taken after "due deliberations" amidst strong opposition by activists and

farmers against the commercialisation.

After a meeting of Genetic Engineering Appraisal Committee (GEAC), the apex body that clears GM field trials in India, to deliberate on the feasibility of commercial farming of GM mustard, Environment Minister Prakash Javadekar said government will not rush through the decision on the issue.

"Today, the application for commercialisation of GM Mustard was there for consideration. We have sought some more information on certain aspects of the data. We will take due deliberations before reaching any decision and will not rush through the decision," the minister said.

His remarks came even as protesters staged dharna outside the ministry under the banner 'Sarson Satyagrah' and submitted a petition to him demanding that the government should not go ahead with commercialisation of GM mustard. Delhi Minister Kapil Mishra also joined the protesters.

RSS-affiliated Swadeshi Jagran Manch is also opposing any move for commercialisation of GM mustard and has raised several technical issues including fears of cross-pollination between GM and non-GM crops.

Javadekar also clarified that today's meeting of GEAC did not intend to give permission to GM Mustard. "It was a rumour that we were giving permission today. There was no such agenda in the meeting," he added.

While the minister said public health will not be compromised, he did not rule out the use of science for increasing agricultural productivity.

"We cannot stop science from progressing. We cannot starve our population. There are other good alternatives of increasing our productivity like organic farming and using biotechnology for farming but at the same time the scientific methods are also important," he said.

Earlier this week, the Supreme Court had also sought explanation from the government on its proposed move to introduce GM Mustard.

"Court has asked us information on the issue and we will submit it in 15 days," the minister said.

Reacting to the allegation by activists and farmers that GEAC is going ahead on the issue in a secretive manner, Javadekar said the details that are legally important are duly provided.

"It is not a cricket match where regular commentary is required. Whatever is legally required is provided through our website," he said.

### **President Pranab Mukherjee expresses concern over likely fall in farm output**



Pranab Mukherjee called for serious efforts to overcome the challenge and make Indian agriculture sector resilient to weather fluctuations.

NEW DELHI: Ruing that despite advancements Indian agriculture is yet to be completely out of the "clutches of weather", President Pranab Mukherjee today expressed "grave concern" over likely decline in farm output for the second-straight year due to deficient rains.

With majority of the cultivatable area under severe climatic conditions like drought, floods and cyclones, he called for serious efforts to overcome the challenge and make Indian agriculture sector resilient to weather fluctuations.

President asked the Indian Agriculture Research Institute (IARI) to develop climate resilient technological solutions by leveraging opportunities from frontier science like biotechnology and nano-technology. Mukherjee also spoke about import dependence on pulses and edible oils.

Addressing the 54th convocation of IARI, he said: "Despite the advancements made, Indian agriculture is yet to be completely get out of the clutches of weather."

President also pointed out that the country's foodgrain production fell to 253 million tonnes in 2014-15 crop year (July-June) from a record 265 million tonnes in 2013-14 on account of 12 per cent deficit in rainfall.

"Nature has not been kind to us this year as well. A deficient monsoon followed by a further dry spell is likely to affect agricultural production for the second year in a row. This is an area of grave concern.

"The time is ripe for some serious efforts as 80 per cent of the area under cultivation in India is in the grip of severe climatic conditions like drought, floods and cyclones," he said.

Stating that global climate change could aggravate these problems, Mukherjee said the IARI must leverage opportunities from frontier sciences such as biotechnology, synthetic biology, nano-technology, computational biology, sensor technology and geo-spatial technology to develop climate-resilient technological solutions.

"Innovation in agricultural techniques and practices must be supported through infusion of funds, mentoring of ideas, and technical assistance. The risk-taking ability of farmers must be boosted. The newly-launched crop insurance scheme will leverage technology to provide risk cover to the farmers," he said.

### **Ashok Kumar Bhargava re-elected as chairman of Indian Tea Association**

KOLKATA: At the first meeting of the Indian Tea Association's national committee for the current financial year held on February 4, Ashok Kumar Bhargava, managing director Apeejay Tea LtdBSE 0.00 %, Azam Monem, director, McLeod Russel India LtdBSE 1.80 % and Vivek Goenka, president, Warren Tea LtdBSE -0.07 % have been re-elected as chairman, vice-chairman and additional vice-chairman respectively of the association.

As chairman of Indian Tea Association Ashok Kumar Bhargava will concurrently hold the chairmanship of Consultative Committee of Plantation Associations (CCPA), the apex body of Tea Plantation Association in India.

### **Production high, but Indians eating less fruits and veggies**



India may be among the highest fruit and vegetable producing countries, but Indians are lacking in adequate intake of these horticultural produce.

NEW DELHI: India may be among the highest fruit and vegetable producing countries, but Indians are lacking in adequate intake of these horticultural produce.

Though availability is an issue due to barriers in supply chain, the lower intake of fruits and vegetables is largely determined by the dietary choice of individuals in India which is skewed towards cereals. Ironically, in a largely vegetarian country, fruits and vegetables account for only 9% of the total calorie intake in the country.

The trend in consumption pattern, however, varies from region to region with people living in south Indian cities (Chennai and Hyderabad) consuming more fruits and vegetables as compared to those in the north n cities.

These findings are part of the India's Phytonutrient Report, brought out on Thursday by the Delhi-based think-tank Indian Council for Research on



International Economic Relations ( ICRIER). It is based on a survey done across five cities - National Capital Region (Delhi, Gurgaon and Noida), Mumbai, Chennai, Hyderabad and Kolkata - covering 1,001 individuals drawn from upper and middle income group households.

Chennai tops the list with the highest number of servings of fruits and vegetables while Kolkata is at the bottom of the cities covered in the survey. "The greater number of vegetarians and the relatively higher income in the sample can partly explain the high levels of intake of fruits and vegetables in Chennai and Hyderabad", says the report.

The objective of the report is to understand the actual consumption patterns of fruits and vegetables in India as compared to World Health Organisations' (WHO) recommended quantity for an adult.

The WHO panel on diet, nutrition and prevention of chronic diseases recommended a daily intake of at least 400 grams (or five daily servings with an average size of 80 grams) of fruits and vegetables, excluding potatoes, cassava and other starchy tubers to "prevent diet-related chronic diseases and micro-nutrient deficiencies".

The report notes that the Indians consume quite less than what is recommended by the WHO. The country has, however, been producing fairly good quantity of fruits and vegetables. India had during 2013-14 produced 88.98 million metric tonnes (MT) of fruits and 162.89 million MT of vegetables.

The country at present ranks second in the production of fruits and vegetables in the world after China.

Referring to good quantity of production of fruits and vegetables in the country, the report notes that there are many barriers in the supply chain that impact consumption. It highlights a number of regulatory issues related to Agricultural Produce Marketing Committee (APMC) Act and consumer protection rules, which if rectified, can support an efficient supply chain and help to increase the consumption.