

12-05-2015

THE HINDU

Growers want permits to produce ethanol from sugarcane

The Karnataka State Sugarcane Growers Association has urged the Union government to allow sugarcane growers to produce ethanol from sugarcane.

Speaking to presspersons here on Monday, the association president Kurabur Shantha Kumar said allowing sugarcane growers to produce ethanol would help produce cost-effective fuel and ensure better returns to the farmers.

If the government allows the sugarcane growers to produce ethanol, the farmers would get a minimum of Rs. 3,500 per tonne and it would be an alternate source of income for them. The State government should take up the matter with the Union government and see that the licence to produce ethanol was issued to the sugarcane growers free of cost. The MPs of the State should also exert pressure on the Union government on this, Mr. Kumar said.

The State government should also allow farmers to produce electricity from sugar cane waste (bagasse) and purchase the power offering the price being given for solar power. The association was ready to take up a pilot project and show the results if the government wanted to, he said.

Taking a dig at Agriculture Minister Krishna Byre Gowda, Mr. Kumar said that Mr. Gowda was issuing irresponsible and senseless comments on sugarcane growers.

“He recently suggested that farmers should not grow sugarcane. If we don’t grow sugarcane, will the Minister allow us to grow cannabis?” he said.

Rain across southern districts brings cheer

Rain lashed most of the southern districts on Monday keeping the temperatures cool and bringing relief to the residents.

In Madurai city, heavily overcast skies in the morning gave way to heavy showers at 10 a.m. which lasted for about half an hour. A light drizzle continued till the evening in many parts of the city and a few low-lying areas were flooded with water.



The rain however didn't do much to dampen the spirits of the cadres and party members of the All India Anna Dravida Munnetra Kazhagam (AIADMK) who burst crackers and celebrated the acquittal of the party chief Jayalalithaa which was announced in the morning.

With the intermittent showers over the last few days, the 24-day 'Agni Nakshatram' or peak summer period, which began on May 4 has not been of much discomfort to the residents as the rain has helped keep the soaring temperatures under check with pleasant and cool evenings. On Sunday, Madurai had recorded a rainfall of 4 mm and heavy rain was recorded in the surrounding areas including Veerapandi and Andipatti which recorded a rainfall of 76 mm and 31 mm respectively.

Tirunelveli

Mild showers in Tirunelveli District provided much needed relief from the sweltering heat. The mild showers that began early this morning continued till 11 a.m. and resurfaced in the afternoon after a brief interval.

Tuticorin

Tuticorin district experienced widespread rain since early Monday morning. It started raining around 4 a.m. and parts of the district witnessed heavy drizzle that continued, subsequently. The cold climate in the wake of rainfall provided the much-needed relief to the residents from the sultry weather that prevailed over the last one month. Unusually, the sky remained overcast throughout the day. Several low-lying areas in the town were inundated and vehicular movement was thrown out of gear. The rainfall at this time would

be conducive for the standing crops and millets. Paddy was expected to be cultivated on 4,000 hectares during the advanced kar season, reliable sources from Department of Agriculture said. Moreover, summer cotton had attained flowering stage, sources added.

Kanyakumari

Rain continued through Sunday night in many parts of Kanyakumari district including Boothapandi, Aralvaimozhi, Mayiladi, Kottaram, Thuckalay, Thiruvattar and Kulasekaram and parts of Nagercoil had intermittent showers till the afternoon on Monday. Due to rain, the water level of Pechiparai dam increased to 34.45 feet.

Floriculture Institute to come up at Kadiyam

Rajahmundry MP M. Muralimohan on Monday said that Union Minister for Agriculture Radha Mohan Singh had agreed to set up Floriculture Institute at Kadiyam in his constituency.

In a statement released from Delhi, he said that he had met the Minister and submitted two representations requesting the Union Minister to set up the Institute at Kadiyam and another request to set up Marine University in Rajahmundry.

In response to the representations, the Union Minister assured the Member of Parliament that he would consider the request of setting up Floriculture Institute at Kadiyam.

Focus on private artificial insemination centres

The move to set up artificial insemination centres in the private sector will be one of the key points that a two-day State conference of Kerala Livestock Inspectors Union (KLIU), to begin here from May 15, will discuss.

Organising committee chairman and Communist Party of India (CPI) district secretary P. Santhosh Kumar said at a press conference here on Monday that former Minister Mullakkara Rathnakaran would inaugurate the gathering of dairy farmers being held in connection with the conference.

Agricultural Minister K.P. Mohanan will inaugurate the conference on May 16. CPI State secretary Kanam Rajendran will inaugurate the delegates session at the function.

The conference has decided to address setting up of private artificial insemination centres because such a move is expected to adversely affect dairy farmers in the State, KLIU State president P.U. Premadasan said. The services being offered at the Regional Artificial Insemination Centres will not be available in the proposed insemination centres in the private sector, he said.

The service conditions of livestock inspectors will also be highlighted. Though they were originally appointed to facilitate artificial insemination, they now had to provide various services at the door steps of farmers. Yet their pay scale and other service situations have not improved, he said.

Good demand for palmyra fruits



With mercury continuing to sore high in the western districts, tasty and delicious palmyra fruits (nongu) are in good demand in the city along with tender coconuts, water melon, and fresh fruit juice.

Nongu fruit is said to be packed with minerals and is considered as one of the best fruits with cooling effect.

No doubt, the residents of the city make a beeline to the makeshift stalls on the roadsides at Junction, Salem Steel Plant road, Junction high road, Suramangalam main road, Omalur high road; Meyyanur main road; near the new and old bus stands; Agraharam streets etc selling nongu.

The nongu price has remained stable in Salem city and also in other parts of the district. Four nongu fruits are priced at Rs. 10 across the district.

Omalur and Taramangalam belts have a large number of palyra trees and the summer months prove a revenue fetching season for the farmers.

Palmyra trees are found abundant in Muthunayakkanpatti; Thindamangalam, Sikkanampatti; Karuvalli; Sinnappampatti; Kozhikattanoor; Mookanur; Thasanur; Nallur villages on the Omalur and Taramangalam belts on the banks of river Vellar.

The nongu season commences in March and extends till June and the business provides good source of revenue to the farmers and farm workers. “As this business fetches good revenue, I opted out of my regular work and has been marketing nongu after procuring the same from Muthunayakkanpatti village”, says M. Palani, who runs a roadside stall at Koranguchavadi.

The demand for this delicious fruit could be gauged from the fact that over Rs. 30,000 worth business is done every day in the city alone. A majority of the people prefer taking the nongu instantly as the fruit will become hard by the time it is taken home.

The fruit is also mixed with water, sugar, ice etc to get a tasty nongu ice cream and nongu fruit shakes.

A large quantity of palmyra fruits are being sent to Bengaluru from Omalur town. These fruits, besides being sold for consumption, are used for making value added products like facial cream etc, says S. Shanavaz, a trader of Omalur.

Cotton trading anomalies



The ongoing trading of cotton produce in local markets has turned out to be a money spinner like never before for unscrupulous private operators.



Why getting more fibre in our daily diet is important

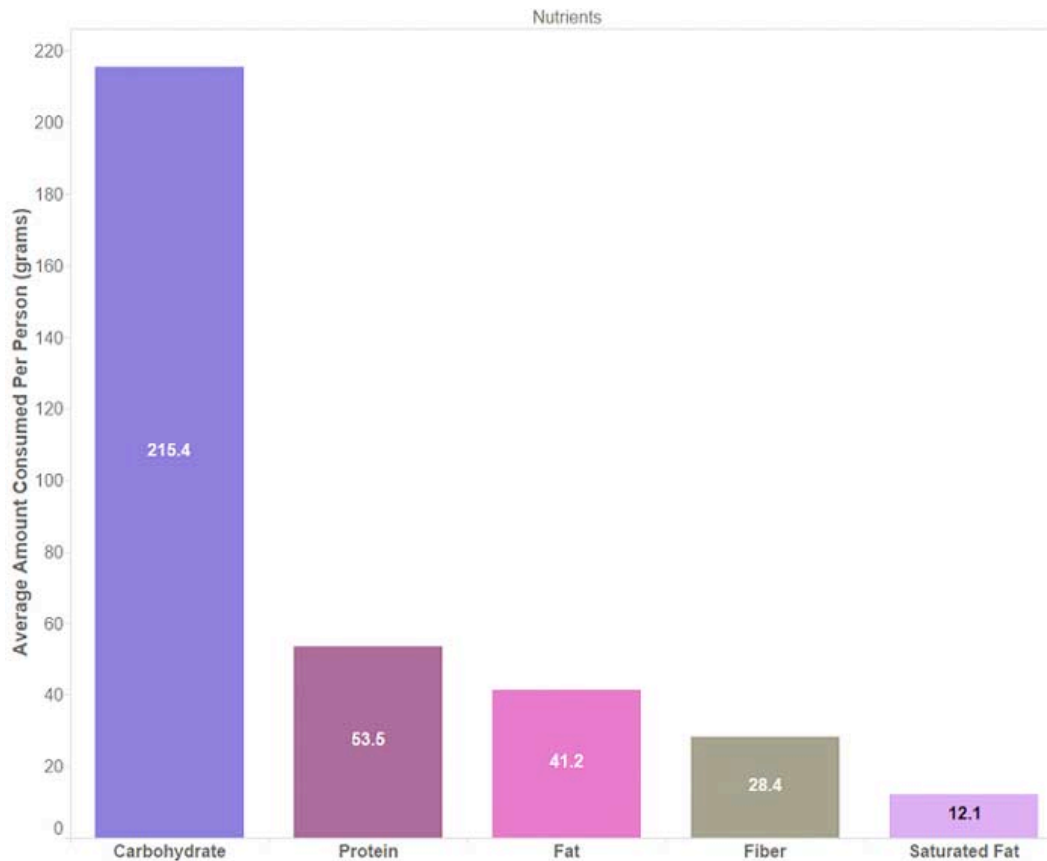


In 2014, author Anderson et al suggested that fibre intake in developed and developing countries are generally below the recommended intake by relevant authorities. According to the study, many people are consuming fibre-depleted refined-grain products and it is a good idea to add fibre rich products to make healthy food choices.

A study was thus conducted on a group of 30 volunteers to study their diet and quantify the amount of dietary fibre present.

As you can see in the chart, against 215.4gm of carbohydrate/day (on an average), only 28.4g of fibre is being consumed. In the study, 12 most

consumed dishes by the participants were compared on the basis of their fibre content.



Wonder why's fibre so important?

Why do we need fibre in our daily diet? Recommended intake of dietary fibre is 40 g/ 2000 kcal to be consumed per day; this is rationalized in all communities based on their recommended energy intake. (ICMR, 2009). You are at lower risk of deadly diseases Another expert in 2009 stated that individuals with high intakes of dietary fibre are at a significantly lower risk of developing coronary heart disease, stroke, hypertension, diabetes, obesity, and certain gastrointestinal diseases.

Fibre prevents against Diabetes Increasing fibre intake lowers blood pressure and serum cholesterol levels. Soluble fiber improves glycemia and insulin sensitivity in non-diabetic as well as diabetic individuals. Fibre supplementation in obese individuals considerably enhances weight loss. Moreover, augmented intake of fibre benefits a variety of gastrointestinal disorders like gastroesophageal reflux disease, duodenal ulcer, diverticulitis, constipation, and hemorrhoids. Prebiotic fibres appear to enhance immune function as well. Dietary fiber intake provides similar benefits for children as for adults.

It also fights Obesity According to another author Freeman in 2000 dietary fibre has many functions in diet, one of which is to aid in energy intake control and reduced risk for development of obesity. Its role in energy intake regulation and obesity development is related to its unique physical and chemical properties that aid in early signals of satiation and enhanced or prolonged signals of satiety.

So you basically lose weight rapidly...

Yet another study by Liu established that women who consumed larger quantities of dietary fiber gained an average of 1.52 kg less than those with small increase in intake of dietary fibre (Liu et al; 2003).

Here's how you can get your recommended fibre

(The units mentioned in the bracket is the quantity of the product, units mentioned after the hyphen is the fibre content)

Whole Wheat(100g) – 12.5g



Bajra (100g) – 11.3g

Maize, dry (100g) – 11.9g

Ragi (100g) – 11.5g

Jowar (100g)- 9.7g

Bengal Gram Whole (Chola) (100g) – 28.3g



Bengal gram whole

Red Gram Whole (Tuver) (100g) – 22.6g

Black Gram Whole (Urad) (100g) – 20.3g

Curry Leaves (100g) – 16.3g

Drumstick (100g) – 9g

Soyabean (100g) – 23g

Fenugreek Seeds (100g) – 48.6g



Corriander Seeds (100g) – 47.4g

Cinnamon (100g) – 48.5g

Cloves (100g) – 35.1g

Dry Dates (100g) – 8.3g

Guava (100g) – 8.5g



Guava
Chiku (100g) – 10.9G



THE TIMES OF INDIA

Waive off crop loan of all farmers, says ex-MPCC chief

The state Congress has demanded total waiver of crop loan besides granting fresh crop loan to all farmers in the state. Unless the state government takes these steps, it will not be able to stop farmer suicides, said former Maharashtra Pradesh Congress Committee (MPCC president) Manikrao Thakre. Addressing a press conference here on Monday, Thakre said the state requires Rs50,000 crore for loan waiver and an equal amount for fresh crop loan.

Thakre said the BJP-led governments in the state and the centre don't have any pro-farmer policy. "Farmers suicides have escalated in the last four months. Western Vidarbha alone has recorded 213 suicides," he added.

When his attention was drawn towards the statement by state agriculture minister Eknath Khadse that the government has no solution to stop farmers suicide and also to the statement by CM Devendra Fadnavis's statement that Yavatmal and Osmanabad districts would be made suicide free in next two years, Thakre said it is another futile attempt to divert the attention of the people from real issues.

When asked what programme his party will implement for the benefit of farmers, Thakre said "We will take out protest rallies in all districts of Vidarbha soon and later spread the agitation to other districts of the state."

Thakre also said he wants to know how much funds can union minister Nitin Gadkari bring from the central government for farmers in the state.

Expressing concern over the law and order situation in the state, Thakre suggested that the CM should appoint a capable home minister to change the situation.

No senior Congress leader, including Yavatmal district congress president, was present at the press meet.

Only 13% farmers are women

The number of women farmers at 20.52 lakh is only 13% of the total 1.36 crore farmers in the state, reveals the Agriculture Census 2010-11. The women farmers have a cumulative landholding of 25,85,253 hectares.

While Ahmednagar district has highest the number of women farmers (1,84,695 farmers having total land holding of 1,96,000 hectares), Kolhapur district has 81,870 women farmers having cumulative landholding of 48,428 hectares of agricultural land.

Sources in the revenue department said, the central and Marathwada regions have large-sized agricultural land, and there is a tendency of adding all the names of siblings as descendents. Compared to it, in western Maharashtra where the average landholding is very small. To avoid legal issues, names of female members in a family are not added on record. tnn

THE HINDU BusinessLine

Sugar companies urge Centre to buy 10% of total output



The sugar industry has urged the Government to buy out 10 per cent of the sweetener to help prices improve on the domestic market.

An industry delegation led by former agriculture minister Sharad Pawar met Prime Minister Narendra Modi here on Monday to apprise him of issues facing the beleaguered sector.

With production likely to touch 28 million tonnes (mt) for the 2014-15 season (October-September) – the highest since 2006-07, according to estimates by the Indian Sugar Mills Association (ISMA), there is likely to be a carryover stock of 10 mt. Domestic demand is pegged at 24.8 mt and the excess output marks the fifth consecutive season of surplus production.

“We explained to the Prime Minister that the industry has been going through a bad patch and put forth our demand that, in the short run, the Government needs to help us with buying out some of the surplus as a short-run measure,” an industry official told *BusinessLine*.

“Ideally, the industry should have 6 mt as carryover stock so there’s a 4 mt surplus. We are asking the Centre to buy out about 10 per cent of our total production which is about 2.8 mt. This would help ease some of the pressure on the mills,” he said.

If the Government were to purchase 2.8 mt of the commodity, it is estimated that the industry would receive about Rs. 8,500 crore, which should ideally be spent on clearing the dues owed to farmers.

Pawar recommended that the Government gives loans to the Food Corporation of India to buy sugar while the Sugar Development Fund could bear the interest burden. Other demands like the creation of 5 mt buffer stock and the financial restructuring of loans provided to mills were also put forward.

Mills across India, the world’s second largest sugar producer after Brazil, owed sugarcane farmers around Rs. 22,000 crore as of April 15, as arrears.

The industry asserts that the cost of production at Rs. 3,200-3,400/quintal outstripped the ex-mill price of sugar that as of Monday was between Rs. 2,420 and Rs. 2,500 (depending on the grade) in Uttar Pradesh and between Rs. 2,250 and Rs. 2,300 in Maharashtra and southern States.

Higher prices likely to keep pulses racing

With unseasonal rain and errant monsoon affecting production and yield in important growing belts, prices of almost all pulses, a key source of protein in the country, have increased sharply, particularly over the last month.

Prices of chana (gram), urad (black gram), tur/arhar (pigeon pea/red gram), moong (green gram) and masoor (lentil) are likely to continue high, according to industry sources.



Surge in prices of pulses

(₹ per kg)

Production*	2014-15	2013-14
	18.4 million tonnes	19.8 million tonnes
Retail prices ex-Delhi	8-5-2015	1 year ago
Urad	110	71
Gram (chana)	68	50
Tur/Arhar	108	75
Moong	107	101
Masoor	94	69

Source: Department of Consumer Affairs * Second advance estimate

“Any bull run comes from supply constraints, lower domestic production and output in importing countries. Weather events over the last year, from deficient to excess rainfall during harvests have caused a shortfall,” said Pravin Dongre, Chairman, India Pulses and Grains Association (IPGA).

The second advance estimate pegs domestic pulses production at 18.43 million tonnes (mt) against 19.78 mt in 2013-14 – a 7.3 per cent decline.

Output of chana, the major Rabi pulses crop, is expected to slide 12 per cent from 9.5 mt to 8.3 mt.

Imports may rise

Myanmar, Australia and African nations such as Malawi and Tanzania which export pulses to India are also projected to produce a lower crop.

The Government on Monday said that it could consider imports through the State-owned MMTTC for the first time in two years.

Imports could rise to 4.5-5 million tonnes (mt) this year from 3.65 mt in 2013-14, said Dongre, mainly yellow peas from Canada, where production is on track. Commerce Ministry data estimated imports at 3.66 mt between April and December 2014.

Retail prices soar

“It’s been a sharp price rise since the April rains. The run should continue but at a slower pace since damage assessments are still on. A production shortfall is certain since Rabi planting was 15 per cent lower than last year,” said Ashwini Bansod, Senior Analyst, Phillip Commodities.

Consumer Affairs Ministry data show the retail price for tur/arhar in the Capital are up 44 per cent at ₹108/kg as on May 8 from ₹75 at the same time a year ago. Urad (55 per cent), chana (36 per cent), masoor (36.2 per cent) and moong (5.9 per cent) have also followed the trend (see table).

“Prices will remain high this year and we have to adjust to that. Farmers have moved away from cultivating pulses due to insufficient remuneration and higher cultivation costs,” said Dongre.

Chana production has dropped by 30-40 per cent and pigeon pea by 25-30 per cent, he said.

“The Government has been watching price movements and traders will keep an eye out for measures it undertakes like imposing stock limits. Such measures have been implemented before when we’ve seen price spikes over a short time,” said Bansod.

“There’s been no hike in import duty and if the gap between domestic and imported prices increases, it could cap off the rally,” she said.

Cardamom loses flavour on bearish sentiments

Cardamom prices slipped at last week auctions on bearish sentiments triggered by intermittent rains in growing areas. Increased arrivals also aided the price fall, market sources said.

“The bearish sentiment continues to exist as summer rains continued to pour in the growing areas intermittently last week like the South-West monsoon,” PC Punnoose, General Manager, CPMC, told *BusinessLine*.

Favourable weather conditions coupled with good farm management practices that growers had followed because of good prices late last season and early this season, are driving the market to the conclusion that the next crop is going to be good and with early arrivals by mid-June, he said.



Continuous downward trend has resulted in the buyers slowing down purchasing. Upcountry dealers who have bought at higher prices were covering at the current prices to mix it to balance the prices, a dealer in Kumily (Kerala) said.

Exporters were inactive as exportable variety of capsules was not available. They bought some 30 tonnes, trade sources said. Arrivals last week were at around 440 tonnes against 340 tonnes in the period a season ago, trade sources said.

The declining trend continued at Monday's auction conducted in Bodinayakannur by Cardamom Planters, Association (CPA), they said.

The auction average decreased to ₹645 a kg from ₹660 week ago. The individual auction average last week fell to below ₹700. During the same week a year ago, the average price was ranged at ₹830-880.

Total arrivals during the season up to May 9 were 18,273 tonnes against 19,603 tonnes in the same period a year ago. Sales were 17,834 tonnes against 18,951 tonnes. The auction average as on May 9 was at around ₹685 (₹845).

Prices of graded varieties (₹/kg): 8 mm bold green 960-1,050; 7-8 mm 825-850; 6-7 mm 725-750; below 6 mm: 625-650.

‘Western sanctions on Russia, a boon for Indian farm produce suppliers’

Market fundamentals appear to be favourable for Indian farm produce suppliers, with the Russian market showing renewed interest in Indian fruits and vegetables.

Participants at an event for the Indian fresh produce business were told that many Russian importers were exploring alternate options to replacing traditional suppliers, and that Russian sanctions could have a silver lining for India.

Russia is one of the largest grocery retail markets in Europe, with approximately \$281 billion in sales, net of VAT (value added tax).

Fresh interest

Participants at the event were told that Western trade sanction on the nation has ensured an uptick and interest in Indian produce, especially in exotic fruits and vegetables.

Niraj Kumar, Managing Director of JSC Vial Inter, said that imports of Indian products into Russia provided an opportunity in the vast market at the recently concluded Fresh Produce India 2015.

He said Indian exporters could explore many opportunities that are on offer.

Market potential

The total market value of the Russian market is estimated at \$8 billion, with fruits like apples, bananas, pears, and citrus fruits accounting for \$5.4 billion.

Vegetables such as tomatoes, cucumbers, potatoes, mushrooms, onion, carrot and garlic tend to account for nearly \$2.6 billion.

Imports from Turkey to Russia accounted for the highest market share at 25 per cent, accounting for 4,92,000 tonnes of produce.

China followed in the second spot with 15 per cent market share, with 3,05,000 tonnes. Israel was in the third spot with 11 per cent market share, with 2,06,000 tonnes.

Need innovations

Urging Indian suppliers to utilise the opportunities in the vast emerging Russian economy, Kumar said that modern formats accounted for just 64 per cent of the total 2014 Russian food retail market, including open markets. Stating that Russian consumers are receptive to innovations in food retail, Kumar pointed out that though Russia's fiscal problems existed, it was still a market worth exploring, since food sales were the penultimate to feel the impact of a weakening economy.

Indian sources

Speaking about the strong purchasing power of Russian importers resulting in improved commercial terms for Indian fruit and vegetable exporters, Kumar said that the top five Russian food retailers hold less than 20 per cent of the market.

Fruit market

Exports currently comprise fresh fruits such as mango, pomegranate and grapes. In the case of vegetables, potato, onions and ginger are high growth areas.

Opportunities for fresh fruits are limitless, said Kumar, especially in the case of orange, lichi, papaya and coconut. In the case of vegetables, it is ginger, baby corn and exotic green vegetables, he pointed out.

Business Standard

Wheat import likely to surge this year despite sufficient arrivals



Despite sufficient arrivals of wheat, belying the fear of crop loss due to a prolonged spell of rain and hail in producing states, the trade says there is a likelihood of high imports .

Flour mills in the southern states have, it is reported, signed contracts for import from Australia of 350,000-400,000 tonnes. "Prices in the international market are historically low and considering the quality issues of Indian wheat this year, this is the right time to import. At this attractive price, the (year's) imports might touch up to two million tonnes, beating the figure for many years," said Parvin Dongre, president, India Pulses and Grain Association.

The landed cost of imported wheat is between Rs 17.90 and Rs 18.30 a kg for the high-grade variety, as compared to Rs 18.50 a kg for domestic wheat.

"The quality took a beating in Madhya Pradesh and Rajasthan (centres of high-protein wheat in India) due to unseasonal rain and hail. We need better quality wheat for bakery products and quick-service restaurants. Wheat drenched in showers is not apt for niche market products," said M K Dattaraj, a Bengaluru-based miller and a senior member of the Roller Flour Millers' Association of India.

For blending and making up for deficiencies in quality, import was the only choice for millers, he added.

"The by-products of wheat, like semolina, cannot be extracted from sub-standard quality. The quality of wheat has been effected. Grain size, loss of lustre, higher moisture content and mud balls make it unusable for millers catering to niche producers," said K S Kamala Kannan, president, Tamilnadu Roller Flour Millers Association

Uttar Pradesh millers find the cost of imported wheat as much as Rs 20 a kg, costlier than the domestic variety. However, for premium consumers, they might have to purchase the imported variety, said Adi Narayan Gupta, a senior member of the Roller Flour Millers Association of UP.

The US department of agriculture puts India's wheat production at 95.85 million tonnes in 2015, as against 93.51 mt in 2014.

A projection of 705 mt global production in 2015, by the International Grain Council, though down two per cent over the past year, has helped stabilise international prices.

Odisha assured increased allocation of fertilizers Odisha included in National Food Security Mission to promote Sugarcane Cultivation

Union Agriculture Minister, Shri Radha Mohan Singh has assured adequate allocation of fertilizer to Odisha for ensuing Kharif Season and inclusion of the state under National Food Security Mission to promote cultivation of sugarcane.

He said in view of high priority to eastern states, the centre will provide all possible assistance to Odisha for development of Agriculture.

During a call on meeting by Chief Minister of Odisha, Shri Naveen Patnaik, Shri Radha Mohan Singh directed department of fertilizer to allocate 10.75 lakh ton fertilizers to the state as per state's requirement. He also directed officials of his Ministry to ensure timely delivery of allocated fertilizers to the state.

Shri Radha Mohan Singh also announced inclusion of Odisha under National Food Security Mission to promote cultivation of sugarcane in the states. Only twelve states were getting assistance under the mission from 2014-15.

In view of good scope of horticulture produce in the states, six he assured assistance for setting up of cold storage in six districts of Odisha.

Shri Singh told to Chief Minister of Odisha that very soon a high level team of officials will visit Odisha to discuss issues related with the development of the agriculture in the state.

After the meeting Chief Minister of Odisha appreciated the positive approach of the center towards agriculture development in the state.

As global carbon dioxide level breaks records, India faces dilemma



During the week of April 6 to 12, 2015, average carbon dioxide (CO₂) levels touched **404.02 parts per million (ppm)**, the highest-ever in recent human history—and 15% above the levels **scientists say** is ideal for Earth, 350 ppm. February, March and April had monthly average CO₂ levels higher than 400 parts per million (ppm), the **first time** in recorded history all three months have reached such levels, according to the keystone Mauna Loa observatory in Hawaii, USA.

These rising levels have growing relevance for India, as it struggles with a farm crisis brought on by uncertain rainfall, attributed increasingly to climate change, as **IndiaSpent**recently **reported**.

India is the world's **third-largest** emitter of CO₂, the chief greenhouse gas. A renewed push for industrialisation will have to be balanced against further climate change.

The 400 ppm mark is a milestone when it comes to CO₂ levels in the atmosphere, and the **first day** to record such levels was May 9, 2013.

“Current [atmospheric] CO₂ values are more than 100 ppm higher than at any time in the last one million years (and maybe higher than any time in the last 25 million years),” [said](#) Charles Miller, Principal investigator at NASA’s Carbon in Arctic Reservoirs Vulnerability Experiment after the 400 ppm threshold was passed. “Even more disturbing than the magnitude of this change is the fact that the rate of CO₂ accumulation in the atmosphere has been steadily increasing over the last few decades, meaning that future increases will happen faster.”

Ever upward—global CO₂ levels

April 2014 was the first month in human history with an average CO₂ level above 400 ppm. April 2015 recorded a level of [403.26](#), nearly two points higher than the same month last year.

In other words, the records being set by CO₂ levels are being consistently reset.

The observatory in Hawaii has been recording CO₂ levels since 1958, and annual CO₂ levels have risen by 82.58 ppm since then to reach 398.55 ppm in 2014, that’s an increase of 1.47 ppm per year.

Why this matters to India

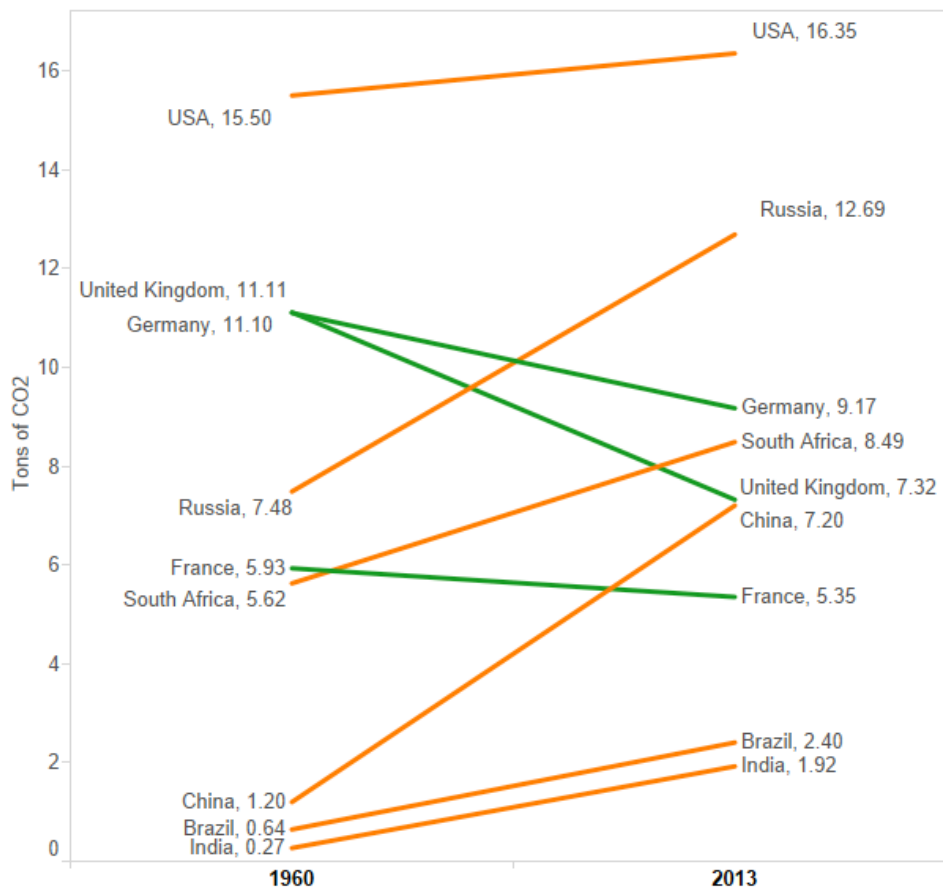
The rising CO₂ levels have been [linked](#) by the UN’s intergovernmental panel on climate change (IPCC), in a 2014 report, to rising ocean and land temperatures as well as rising sea levels over the past 35 years.

As to how rising CO₂ levels have affected or would affect India specifically, it is not clear. Claims in a 2007 IPCC report that the Himalayan glaciers would melt away in the near future have proven to be [not credible](#). However, as [we said](#), a series of studies have shown that unseasonal rain and erratic weather unsettling the Indian farmer—and the nation’s agriculture, economy and politics—are no aberrations.

Disquieting data bring domestic pragmatism

As the world’s [third-largest](#) contributor of greenhouse gas emissions, India may be in a unique position to affect atmospheric levels of CO₂. While its total emissions are rising, its per-capita emissions at 1.9 metric tons are a third of the global average, a quarter of China’s and tenth of the USA’s.

Change in Per Capita Emissions For Select Economies, 1960-2013 (in CO2 Tons)



The path of industrialisation and urbanisation that India adopts will have a significant impact on the world's warming and its own health status. Already, [13 of the world's 20 most-polluted cities](#) are in India.

India's stance at various conferences, including the Climate Change Conference in Lima in 2014, has been that it [was unfair](#) to demand emissions cuts from developing countries. The argument being that these economies were still growing compared to the developed world, and that such emission levels would be unavoidable if they want to catch up.

However, Prime Minister Narendra Modi has set India on an [ambitious programme](#) of using nuclear and renewable energy to power its industrialisation, as it attempts to move some of roughly 600 million people working on farms to factories.

"I think if you look at the whole world, and the whole issue of climate change, if there is one part of the world which can provide natural leadership

on this particular cause, it is this part of the world,” Modi said in an [interview](#) to *TIME* magazine.

India may take an uncompromising position globally to protect its own interests, but it’s difficult to ignore the warning signs from Mauna Loa.