

## SUGAR

### Sugar falls by Rs 100 a quintal on ample stocks

The wholesale sugar prices fell sharply by Rs 100 per quintal in the national capital today following ample stock position and persistent supplies from mills against reduced offtake. Marketmen said a steep fall in sweetener prices was mostly due to reduced offtake by bulk consumers including confectioners and soft-drink makers following end of festive season. Sugar ready M-30 and S-30 prices dipped the most by Rs 100 each to settle the day at Rs 3,820-4,000 and Rs 3,810-3,990 per quintal, respectively.

Mill delivery M-30 and S-30 prices also dropped by Rs 50 each to finish at Rs 3,540-3,720 and Rs 3,530-3,710 per quintal. In the millgate section, sugar asmoli slide by Rs 60 to Rs 3,710, followed by khatuli by Rs 55 to Rs 3,715 and Modinagar by Rs 45 at Rs 3,615 per quintal. Sugar dhanora, simbholi and sakoti also declined by Rs 40 each to Rs 3,570, Rs 3,720 and Rs 3,570 per quintal. Following are today's quotations (in Rs per quintal) Sugar retail markets – Rs 39.00-41.00 per kg. Sugar ready: M-30 Rs 3,820-4,000, S-30 Rs 3,810-3,990. Mill delivery: M-30 Rs 3,540-3,720, S-30 Rs 3,530-3,710. Sugar millgate (including duty): Mawana Rs not traded, Kinnoni Rs N.T., Asmoli Rs 3,710, Doralia Rs 3,620, Budhana Rs N.T., Thanabhavan Rs N.T., Dhanora Rs 3,570, Simbholi Rs 3,720, Khatuli Rs 3,715, Dhampur Rs 3,540, Ramala Rs 3,560, Anupshaher Rs 3,560, Baghpat Rs 3,570, Morna Rs 3,570, Sakoti Rs 3,570, Chandpur Rs 3,540, Nazibabad Rs 3,540, Modi nagar 3,515 and Malakpur Rs N.T.

(Source- <http://sugarnews.in/sugar-falls-by-rs-100-a-quintal-on-ample-stocks/>, published on 4th November, 2016)

### Here's what has made satiating your sugar cravings future-safe

Global surplus, or deficit, of sugar output is dependent mainly on four top sugar producers, viz. Brazil, India, the EU and Thailand. Similarly, in India, this is dependent on Maharashtra, Uttar Pradesh, Karnataka and Tamil Nadu, which account for more than 80% of national sugar output. Swings in production generally comes from Maharashtra and Karnataka.

There were two years of continuous drought in Western and Southern parts of India. The El Nino effect on south-west (SW) monsoons in 2015 was the worst since 1997 and the rainfall was 14% below normal. Agriculture in two major sugar-producing states, viz. Maharashtra and Karnataka, was badly affected.

In case of Maharashtra, water level in major reservoirs had fallen below 8% in March this year. The state government even advised farmers to plant other crops, saying that water from dams will not be released for irrigation. It also reportedly said that it will not allow sugar mills in North Maharashtra to crush sugarcane in 2016-17, as dams/reservoirs in this region were almost dry. Many farmers left cane cultivation and switched to other crops, due to which cane area in the state dropped by 30% in 2016-17. Domestic sugar prices have also dropped by R8-9/kg, much below the production cost, resulting in accumulation of arrears of over R22,000 crore in April 2015.

After two consecutive years of below-normal rainfall in the country, the 2016 SW monsoon brought relief to nearly the entire country. Though the cumulative rainfall was 3% below normal, cane-growing areas of all states received better rainfall this year, and major reservoirs

in the country have filled up. Water levels in major reservoirs of Maharashtra and Karnataka (on October 20) were five times higher than last year.

There are seven major reservoirs in Maharashtra. The Jayakwadi reservoir—supply from which covers the Aurangabad and Nanded districts in North Maharashtra—has water at 82% of its storage capacity whereas last year, during the same period, its level had gone down to 5%. Other cane belts like Satara, Solapur, Kolhapur and Sangli are connected to rivers like Koyna, Bhima (Ujjaini), and Mula, and water levels in these reservoirs were at around 100% (except Krishna, where it is at 60%) as compared to 72%, 15%, 51% and 33%, respectively, on the corresponding date last year.

As soon as the first monsoon shower brought water to the fields and dams/reservoirs, farmers who had left sugarcane cultivation returned to cane planting. As per field reports, farmers in Maharashtra have already started planting 15-month and 18-month cane crops for cultivation in 2017-18, and quite aggressively at that. Farmers say that it is a reliable and sturdy crop. They can sell directly to mills, effectively getting 100% remuneration, but other crops pass through middlemen, giving them only a fraction of what consumers pay.

As per the Maharashtra government, till October 24, sugarcane had already been sown in an area of 77,000 hectare for harvesting in 2017-18. State associations have said that cane area for 2017-18 may increase by more than 35-40%, leading to another bumper sugar production.

As regards Karnataka, since 2012-13, there has been deficient rainfall in the state, due to which its reservoirs did not fill up completely. In 2015, water levels in major reservoirs like Almatti and Ghataprabha fell below 50% of their respective storage capacities. By March-April 2016, these reservoirs had almost gone empty, and the state government discouraged farmers from planting sugarcane in the districts watered by these reservoirs. After the good rainfall this year, water levels in these reservoirs have gone up and, at present, their live storage capacity are 100% and 87%, respectively.

While Ghataprabha and Malaprabha cover the cane-belts of Belgaum district, Almatti covers the cane areas of Bagalkot district. These two districts account for more than 67% of cane area of the state. The accompanying graphic depicts the water level in all major reservoirs of Karnataka (except Tungabhadra and the Krishnaraja sagar, which feed Mandya and Mysore areas, accounting for 7% of state's sugarcane area). The cane area in the state, for 2017-18, is also expected to go up by 25-30%.

Even though sugarcane takes a longer time to grow and mature compared with other crops, the relative profits are 50% (or even more) higher. A detailed study on this by CACP and even the World Bank confirms the same.

Supply and demand in 2016-17 are expected to be balanced, with a healthy closing balance. The average all-India domestic, ex-mill price should remain stable at the current level of around R34-35/kg. Better realisation from sugar sales means mills will be in a position to pay cane price to the farmers on time and there will be no heavy arrears in 2016-17. This will encourage farmers to plant more sugarcane for crushing in 2017-18, and to take good care of their cane crop, improving the health of the crop, thereby yields and recoveries.

Considering all these factors, cane area for harvesting in 2017-18 is expected to be higher, including yields and recoveries. India will once again witness a surplus, if not bumper, sugar production in 2017-18.

(Source-<http://sugarnews.in/heres-what-has-made-satiating-your-sugar-cravings-future-safe/>, published on 4<sup>th</sup> November, 2016)

## Delayed crushing in western States pulls down Oct sugar production

Sugar production in the country in October 2016 — the first month of the ongoing sugar season — dropped sharply by 44 per cent to 1.04 lakh tonnes compared to the same month last year as Maharashtra and Gujarat delayed production.

“In all, 28 mills have started crushing as on October 31 2016, as against 65 in 2015-16 sugar season same time,” according to industry body Indian Sugar Mills Association (ISMA).

During 2016-17, Maharashtra mills delayed their crushing operations to get the cane matured further to get better sugar recovery from standing cane, according to an official release.

“These mills are now expected to start crushing from November 5, 2016. Similarly, Gujarat mills are expected to start this week,” the release added.

With the carryover stock of 77 lakh tonnes as on October 1 2016 and estimated sugar production of 234 lakh tonnes, total sugar available in the country during 2016-17 sugar season would be around 311 lakh tonnes against the estimated consumption of 255 lakh tonnes, according to ISMA estimates.

Closing stock at the end of the season is expected at 56 lakh tonnes, which would be sufficient to meet two-and-a-half-months consumption in the initial period of 2017-18, it added.

In Karnataka, 19 sugar mills had started their crushing operations in October 2016 against 12 operated last year in the same month. However, sugar production in the State till October 31 2016 was 69,000 tonnes, which was 12,000 tonnes lower than the sugar produced during the same period last season.

In Tamil Nadu, four sugar mills were in operation as on October 31, 2016 and sugar production was 20,000 tonnes compared with 31,000 tonnes produced by 8 mills in 2015-16 SS up to October 31, 2015.

Three mills in Uttar Pradesh had also started crushing from the second fortnight of October 2016 and these mills were estimated to have produced 12,000 tonnes up to October 31. During 2015-16, only one mill in the State was operational in October and its production was negligible.

One sugar mill each in Madhya Pradesh and Andhra Pradesh have started their operations with estimated sugar production of 3,000 tonnes.

(Source-<http://sugarnews.in/delayed-crushing-in-western-states-pulls-down-oct-sugar-production/>, published on 4<sup>th</sup> November, 2016)

## Making compost out of sludge and sugar refinery waste

Add the waste from sugar refineries to the sludge produced by WWTPs (wastewater treatment plants), and what do you get? According to research carried out by the Faculty of Sciences Semlalia at the Cadi Ayyad University of Marrakech, Morocco, in collaboration with the company Biodech Ltd – specialised in recycling waste – you get rich and useable compost.

Mixing WWTP waste with this sugar 'scum' – left over from the process of refining beetroot juice and sugar cane using lime, enables a reduction in both the bacterial content and the loss of gases from the resulting compost, while also improving its quality. This also means that such sugar refinery waste, which typically represents around 270,000 tonnes per year and normally ends up in landfill, has the potential to be instead transformed into something a little more useful.

The development of this technique also represents a business opportunity. The results of the experiments have so far been released at several national and international conferences, spreading the word that – from both physiochemical and bacteriological viewpoints – adding this sugar refinery waste and industrial sludge to compost is a step worth taking. Especially considering that this type of compost meets the French NFU 44095 standard, which outlines the specifications required for these types of WWTP related compost. Having been through a rigorous testing period, this method has produced some excellent results. A patent is soon to be filed.

“Legislation on water management (Law 10-95) and the National Liquid Sanitation Plan have succeeded in pushing municipalities, cities and industrial companies to develop water treatment and purification stations, WWTPs. These stations operate under different models to produce treated water, which is still not being recovered in Morocco, apart from by a few commendable initiatives,” explains Professor Khalid Fares, director of the project as part of the Biochemistry and Plant Biotechnology (BBP) team at Cadi Ayyad University. “In addition, the sludge is frequently discarded in or alongside public landfill sites. It’s the ‘missing’ link in Law 10-95.”

Initially, the compost produced by Biodech will only be used in recreational green spaces “as there is a strong resistance to change in Morocco, and the virtues of compost are widely unknown.”

Biodech was initially created through the Marrakesh University incubator by Fares and a fellow researcher from the Biochemistry and Plant Biotechnology (BBP) team, Nabila Saadaoui. The pair have already secured four Moroccan patents for their work on waste recovery, including three involving sugar refinery waste. The company is also working on other solutions including the composting of vegetable water; such as that contained in the cells of olives. This low-cost solution reduces the need for chemical fertilisers, with their detrimental effect on groundwater. Biodech was invited to present their findings at the COP21 climate conference last year.

(Source-<http://sugarnews.in/making-compost-out-of-sludge-and-sugar-refinery-waste/>, published on 3rd November, 2016)

## Sugarcane tastes bitter for AP farmers

Almost half of the sugarcane farmers are switched over to other crops as the fair and remunerative price (FRP) declared by the Centre had failed to impress them.

The state government, which is supposed to come to the rescue of farmers by appointing State Advisory Committee and announce State Advisory Price (SAP), has failed to react.

As a result, sugarcane farmers are worried about their future. The farmers want the government to announce common price without any delay.

The sugarcane issue has gained significance as the farmers have to send their produce to factories for crushing from November 15. Making the crisis worse, a dozen out of total 29 sugar factories in the state are closed.

There was no hike in sugarcane price and the Union government had announced Rs 2,300 SRP per tonne this year too, sugarcane farmers complained.

While the sugarcane price is at its low in the state, the scenario in other states is different. Punjab, Haryana, Uttarakhand topped with Rs 3,100 per tonne followed by Tamil Nadu and Uttar Pradesh offering Rs 2,800 price, informed Y Kesava Rao, vice-president of AP Sugarcane Farmers' Association.

Kesava Rao alleged that the state government was not using Rs 36 crore per season being collected from sugar factories towards purchase tax.

The state was taxing Rs 60 per tonne of the sugarcane crushed. He said private factories offered Rs 2,550 FRP last year compared to Rs 2,300 offered at cooperative sugar factories.

Crushing has already started in Chittoor district while the same would begin in other districts. He said sugarcane farmers invest Rs 60,000 to Rs 1 lakh per acre of the crop depending on the area and local conditions.

The cultivation area has also come down from 1.5 lakh hectares to 75,000 hectares this season as the farmers were unhappy with the price. The government should convene a joint meeting of factory managements, farmers, officials and ministers, he added.

Association secretary Haribabu charged both Central and State governments with surrendering to sugar factory lobby, which was not allowing the governments to favour farmers. He said farmers suffered losses in the range of Rs 200 to Rs 450 crore because of the meagre price for produce.

The banks were also not giving loans to farmers properly. Tenant farmers were the worst affected. The proposal to offer Rs 100 extra for each tonne of sugarcane for tenant farmers was also not being implemented. Most of the tenant farmers use bullock-cart for transportation of sugarcane to the factories.

But the bullock-carts were not being given permits. On the other hand, sugarcane farmers were not allowed to share the income from the byproducts, he alleged.

Commissioner of sugar and cane Murali said that he brought the issues raised by the farmers during a recent dharna at his office to the Union government to take action

**(Source- <http://sugarnews.in/sugarcane-tastes-bitter-for-ap-farmers/>, published on 5th November, 2016)**

## Co-gen/Power

### India to be global coal production bright spot: Report

India will be a global coal production bright spot with the country increasing global market share of output from 10.1 per cent in 2016 to 13.1 per cent by 2020.

In 2016, the country will surpass the United States to become the second largest coal producing country in the world, second only to China, despite remaining a net importer of the mineral, BMI Research said.

The government's desire to attain self-sufficiency in coal in order to improve domestic electricity provision will see state-owned Coal India (CIL) to remain the country's largest producer. The miner produced 536.5 million tonnes (MT) of coal in the fiscal ending March 31 2016, representing a growth of 8.6 per cent y-o-y, which is their highest annual tonnage increase since inception.

"Nevertheless, we believe the difficulties in land acquisitions and environmental clearances will remain key obstacles to CIL's expansion plans in India over the coming quarters," it said.

In March 2015, the Indian government passed the Coal Mines (Special Provisions) Bill, under which private as well as foreign mining companies are allowed to enter the domestic coal market, a previously state-monopolised sector, to sell and produce coal.

However, the government announced in June that auctions will be delayed for a few months due to a lack of takers.

(Source-[http://www.business-standard.com/article/pti-stories/india-to-be-global-coal-production-bright-spot-report-116110401376\\_1.html](http://www.business-standard.com/article/pti-stories/india-to-be-global-coal-production-bright-spot-report-116110401376_1.html), published on 4th November, 2016)

### Power on demand to curb use of generators

In an attempt to discourage use of diesel generator sets, the government on Sunday asked the discoms to provide power connection to every willing Delhiite.

After a cabinet meeting, chief minister Arvind Kejriwal said several people, particularly those from unauthorised colonies, used diesel sets as an alternative. "In the given circumstances, we need to discourage this. Getting a power connection, however, will not make these colonies authorised," Kejriwal said.

The discoms said providing electricity to the unelectrified colonies would have to be assessed on a case-to-case basis. Out of over 600 unauthorised colonies, many have been electrified, they said. "In certain unauthorised colonies, either the government has not allowed electrification or the owners do not have any paper. Also the law prohibits us from electrifying colonies in forest areas," said a source.

The companies said if new areas were to be electrified, the government would have to provide infrastructure to set up transformers and lay service lines. "This could take anywhere between 10 days and a month depending on the colony and the challenges it faces. We will

also need approval from DERC as this expenditure would be huge," said a discom source. "The problem is that most of these areas are not even accessible," the source added.

Unauthorised colonies that remain without electricity include Aya Nagar Extension, Rangpur Pahari, a forest area near Vasant Kunj, Rajokri, Khatta Colony, some parts of Seelampur and Shahdara, and forest land near Narela.

Residents of these areas, said the discoms, usually resort to power theft, with a few using DG sets. "A lot of these colonies have no roads, sewage system, and electricity pole. It will be a challenge to electrify these areas," said a source.

(Source- <http://timesofindia.indiatimes.com/city/delhi/Power-on-demand-to-curb-use-of-generators/articleshow/55280294.cms>)

## **Finland keen to showcase its clean energy projects to India**

Finland is keen to showcase its expertise in an assortment of clean energy technologies to India's Energy Minister Piyush Goyal when he visits the country later this month.

From the Wartsila, a well-known name in India, to commercial enterprises with local operations such as Valmet and Vantaa Energy, Finnish companies are keen to tell the Minister what they can do in India.

### **Clean energy options**

Journalists from India, who visited Finland last week on an invitation of the Finnish Embassy in New Delhi, were exposed to a number of clean energy options that the Nordic country can offer India. These range from solutions to keeping the electricity grid stable when power is supplied from renewable energy sources, to producing energy from municipal waste and utilising waste heat for centralised cooling.

For instance, Wartsila, a company known in India for its large engines that produce electricity from oil or gas, is keen to demonstrate how its technology can be integrated in solar farms, so that the power output is stable and predictable.

### **Ensuring stable electricity**

The 182-year-old company, which started off as a marine engine company and owned many shipyards in the Nordic region in the mid-twentieth century, is today into many.

Javier Cavada, President, Energy Solutions & Executive Vice-President, Wartsila Corporation, believes that solar and wind farms married to gas or oil fired engines can produce stable electricity.

Other Finnish companies have very different offerings for the Indian market. Much of Finland's energy comes from burning wood. Typically, handling low calorie, non-homogenous fuels is a challenge — it calls for special expertise in boiler technology.

To India, which has been grappling with the 'circulating fluidised bed boiler' (CFBC) technology for some time — Neyveli Lignite Corporation has been struggling to stabilise



generation with CFBC boilers of BHEL make — Finnish company, Valmet Energy Solutions, has something on the table.

### **160-MW plant**

Valmet (which has evolved from the better-known Metso) is an expert in boilers flexible enough to handle a wide variety of fuels, such as those with high moisture or ash content. The company intends to expose to Minister Goyal its prowess, particular in the area of boilers than can handle coil washery rejects. "There are huge reserves of this fuel in India, which is not fully utilised," says Ari Kokko of Valmet, in a paper on the subject.

Visiting Indian journalists were also taken to a huge, 160-MW plant of Vantaa Energy, which operates entirely on wastes generated by Helsinki city. The 'combined heat and power' plant — there are quite a number of CHPs in Scandinavia — produces both power and heat. The heat is sold to the residents of the township of Vantaa, 25 km from Helsinki.

The town's water supply system absorbs the heat from hot water sent from the plant and delivers it to homes. Sales of heat brings in revenue, and helps to keep the cost of electricity down. Waste-to-energy technologies could be of use to India, officials of Vantaa Energy said.

Another global major, ABB, which has large operations in Finland, is eyeing the Indian solar sector for its upmarket '1,500 V' inverters. The 1,500 V inverters — as opposed to the incumbent 1,000V systems — are the incoming range of inverters that help further lower cost of solar power.

Energy company, Fortum, which made its first foray into solar by acquiring a 5 MW plant in India in 2012, plans for a long stay in India and is eager to showcase its expertise.

(Source- <http://www.thehindubusinessline.com/economy/finland-keen-to-showcase-its-clean-energy-projects-to-india/article9312397.ece>, published on 6th November, 2016)

### **Quote of the day**

"Walking is the best possible exercise. Habituate yourself to walk very far."- Thomas Jefferson