

Indian Sugar Industry – Bitter Sweetener

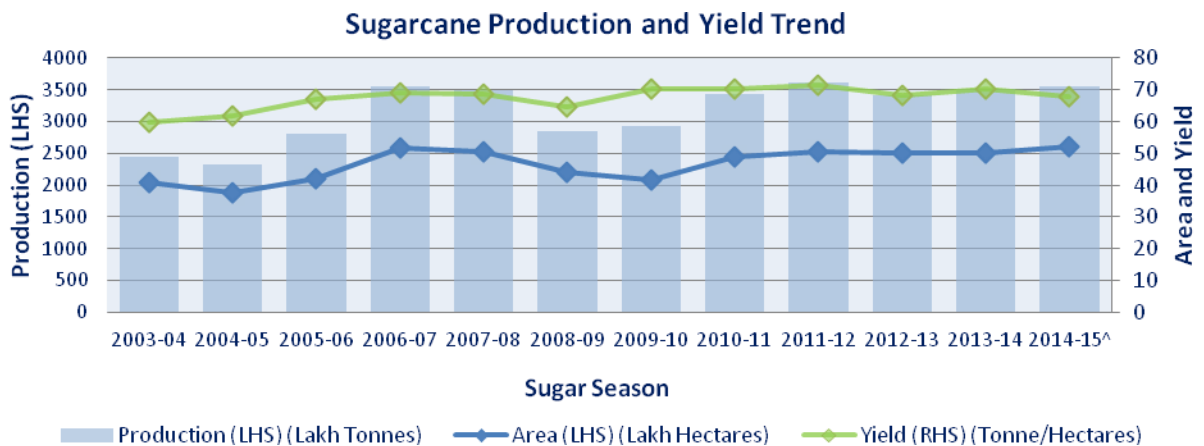
Industry Overview:

With an annual production capacity of over 30 million metric tonne (MMT), the Indian Sugar Industry (ISI) is the second largest producer of sugar in the world. It is also the second largest agro-based industry in the country after cotton. The sugar industry contributes significantly to socio-economic development of the rural population. ISI remains highly regulated and is a source of livelihood for 50 million farmers and their families; and provides direct employment to over 5 lakh skilled and semi-skilled labour in sugar mills and allied industries across the country. The annual turnover of the industry is estimated at Rs.41,000 crore and it pays about Rs.2,500 crore per annum to the government in the form of taxes.

Sugarcane - Area under Cultivation, Production and Yield:

India’s sugarcane production and area under cultivation registered a compounded annual growth rate (CAGR) of 3.70% and 2.03%, respectively, during last 10-years ending SS 13-14. (Sugar Season; refers to the period from October 01 to September 30). Although sugar can be extracted from any crop having sugar content, sugarcane is preferred by the farmers as it is a durable crop backed by strong price support by the Government of India (GOI) in terms of favourable prices for cane through the Fair & Remunerative Price (FRP) / State Advisory Price (SAP) mechanism which has helped it to generate competitive returns as compared with paddy and cotton (refer Chart 1 for sugarcane acreage, production and yield trend during last 10 years).

Chart 1: Sugarcane acreage, production and yield in India



[^]Second advance estimates for SS2014-15

Source: Department of Food & Public Distribution (for Sugarcane Production) and Agricultural Statistics (for production and area of Sugarcane)

Acreage under cultivation has increased consistently during last 5 years ending SS14-15 and the sugar production in SS14-15 is expected to remain higher when compared with SS13-14.

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However, climatic conditions, inadequate availability of quality seed and irrigation facilities, lack of efficient technology and inadequate farm credit were primarily responsible for fluctuating yield ratio.

Industry Size, Structure and State-wise Production Trends:

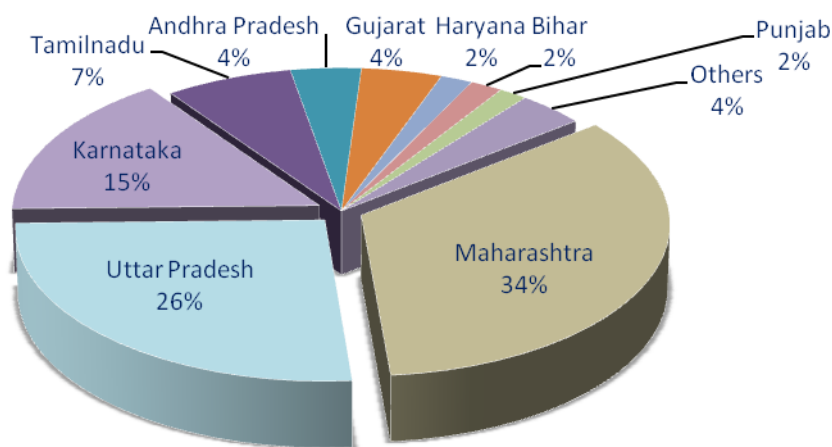
The ISI accounted for more than 15% of the total world sugar production in last 5 years ending SS14-15. As on January 31, 2015, India had 703 sugar mills (including two standalone refineries) with major concentration in rural areas. About 50% of the sugar mills are promoted by sugarcane farmers in the form of co-operative societies (refer Table 1 for breakup of sugar mills on the basis of ownership structure).

Table 1: Sugar mills in India (segregated on the basis of ownership structure)

Sr. No.	Sector	Number of Units
1.	Private Limited Companies	335
2.	Co-operative Societies	325
3.	Public Limited Companies	43
	Total	703

Of the above, 328 units have distillery facility, while 210 have own co-generation power plants. India produces around 300-350 MMT sugarcane, 24-26 MMT white sugar and 6-8 MMT jaggery and khandsari annually to meet the demand for sweeteners. Moreover, the ISI produces about 2,700 million litres of alcohol, 2,300 Mega Watt (MW) of power and multiple allied products. The industry exports about 1,000 MW of power to grid after meeting its captive power requirement. ISI is gradually transforming into sugar complexes by producing sugar, bio-electricity, bio-ethanol, bio-manures and chemicals, contributing about 1% to the national GDP. Maharashtra, Uttar Pradesh (UP) and Karnataka are the major sugar producing states in the country.

Chart 2: State-wise sugar production from SS10 to SS14.



Source: Indian Institute of Sugarcane Research (IISR), FAS/New Delhi

Top six states mentioned above account for approximately 90% of total India's sugar production; of which Maharashtra and Uttar Pradesh together account for nearly 60% of total sugar production (refer Chart 2 above for

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state-wise percentage production). Uttar Pradesh was the largest sugarcane cultivating state and accounted for approximately 39% of the total sugarcane crop in SS13-14 followed by Maharashtra with 22%. Average yield of sugarcane during the last 5 years in UP was 57-59 tonne/hectare as compared with Maharashtra, which has an average yield of 80-85 tonne/hectare. Furthermore, UP also had a low sugar recovery rate and consequently ranked second in sugar production after Maharashtra during the last 5 years ended SS13-14.

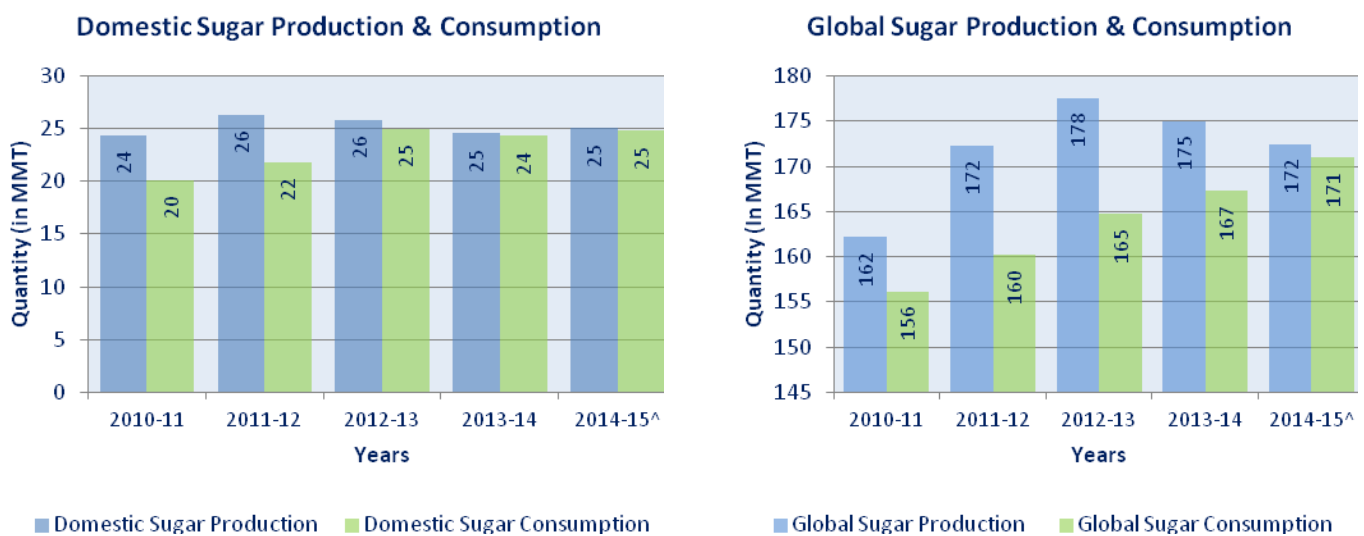
The ISI is amongst the few industries that have successfully contributed to the rural economy. Furthermore, the farmers opt for sugarcane as a preferred crop on account of better yield per hectare, lower irrigation requirement and strong intervention by the government towards protection of interest of the farmers in terms of price of cane through fixing FRP / SAP.

Key constraints of Indian Sugar Industry:

Production surplus in domestic and global markets constrain sales realisation:

The ISI is expected to register surplus production for the fifth year in a row since SS10-11 (Refer Chart 3 for annual production and consumption trend). The industry had opening stock of 7.5 MMT as on October 1, 2014, and is estimated to produce 25.05 MMT during SS14-15 as against envisaged consumption of 24.80 MMT for the same period resulting in further increase in surplus sugar stock at the end of season.

Chart 3: Sugar production and consumption



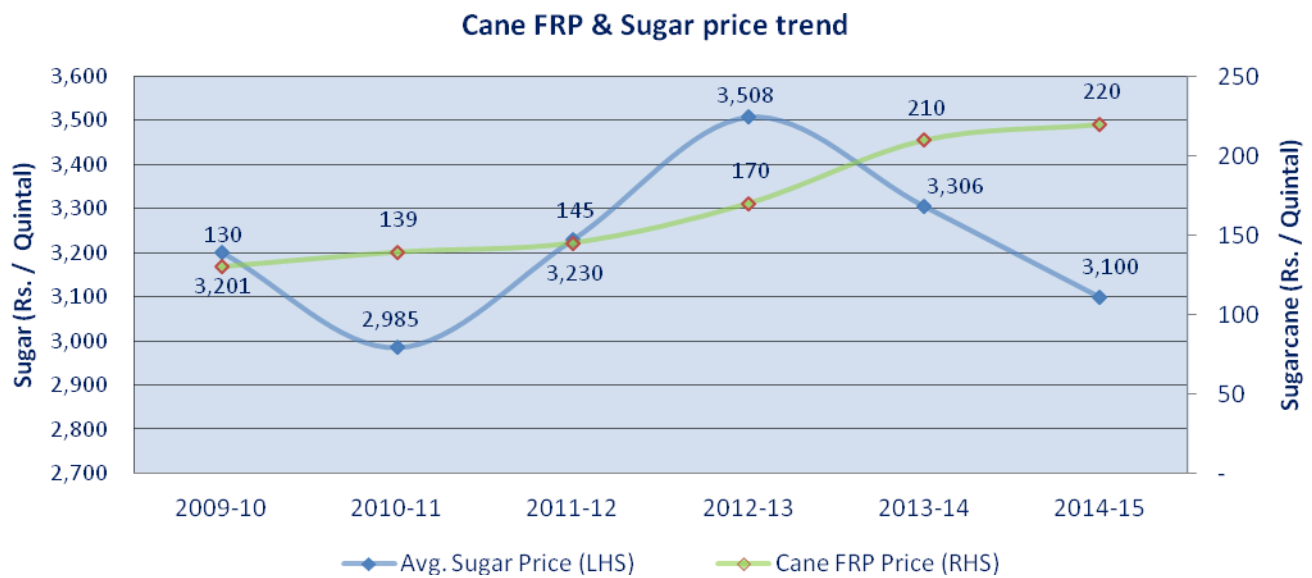
[^]Estimated; Source: Directorate of Economics and Statistics, Ministry of Agriculture; Indian Institute of Sugarcane Research & United States Department of Agriculture

Similarly, global sugar production during last five SS has also exceeded the total requirement in the world. The surplus stock has not only impacted the sales realisation and squeezed the operating spread of sugar mills but also forced closure of small and medium-sized mills and consolidation in some geographies.

Raw material (sugarcane) prices are highly regulated; sugar prices are vulnerable to market dynamics:

The ISI continues to be highly regulated by the GoI; in terms of sugar production and cane procurement areas for sugar mills and most importantly for determining sugarcane pricing. The FRP is decided by the central government every year at the beginning of SS; which is the minimum price the sugar-mill has to pay to the farmers for procuring sugarcane. Furthermore, some state governments also announce SAP and in that case, the mills have to pay FRP or SAP, whichever is higher. Internationally, the FRP/SAP declared by the Indian government for sugarcane is very high compared to other major producers in the world. Brazil, the largest sugar producing nation in the world, has linked the sugarcane prices in line with global sugar prices. The sugar price is market driven and is governed by domestic and global demand-supply dynamics (refer Chart 4 for price trend of sugarcane and sugar prices in India). The recommendation of the Rangarajan committee to determine the sugarcane price as a percentage of the sugar price and realisation of its by-products has not been implemented by the sugar producing states, which makes Indian sugar uncompetitive in international market. Furthermore, the rising inventory level coupled with virtually no export (because of relatively lower international prices) has resulted in sluggish price trend during the current SS.

Chart 4: Price trend of sugarcane (FRP) and Sugar in India



Source: National Informatics Centre

Declining trend of sugar prices and consistent increase in the FRP declared by the government have resulted in moderation in operating margins of sugar mills and delay in payment to farmers for sugarcane procured by the sugar manufacturers. As on March 31, 2015, the difference between payment to the farmers to be made as per FRP/SAP against sugarcane procured and actual payment made by the sugar manufacturers, referred to as cane

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arrears, was estimated at about Rs.19,000 crore. The situation worsened when Uttar Pradesh kept the SAP prices unchanged during last three SS ending SS14-15. Out of the total cane arrears, Uttar Pradesh alone constitutes approximately 50%, which is mainly due to aggressive cane pricing adopted by the state government. Similarly, cane arrears of sugar mills in Maharashtra and Karnataka stood at 15% and 13%, respectively, which is mainly on account of depressed sugar price.

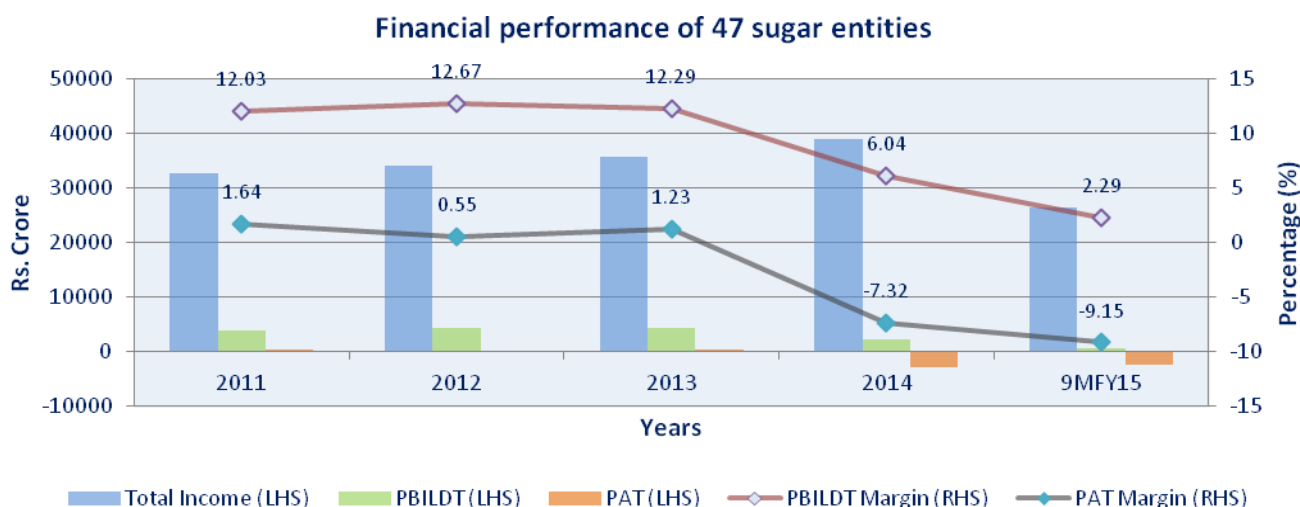
Protected mechanism towards pricing of sugarcane makes banks averse to lending to ISI:

Inherent operational snags, mounting cane arrears and significant surplus stock has resulted in pricing pressure, lower operating spread and operating losses by few sugar mills. Furthermore, the apex court upheld the decision of the Honourable Allahabad High Court of September 5, 2014; directing sugar mills to prioritise payment of farmers' dues by selling the sugar stock that were hypothecated to banks over servicing of the bank debt. Judicial order in favour of the farmers over bank debt by the apex court has created an uncertainty for repayment of loans extended to sugar mills.

Financial Performance of Sugar Mills

High sugarcane prices during last 3 years in domestic market, uncompetitive pricing in export market, crystallisation of working capital in sugar stocks and mounting cane arrears has plagued the financial profile of entities in the sugar industry during FY14 (refers to the period April 1 to March 31). With drop in total operating income and profitability of the sugar mills, overall operations of small and medium scale sugar mills expected to remain under stress in forthcoming SS.

Chart 5: Financial performance



Source: Ace Equity, sample size

Steps taken by the government to address the issues of sugar industry

Deregulation of release of quota and levy sugar:

Following the recommendation of the Committee headed by Dr. C Rangarajan, the Government of India has partially deregulated the sugar industry in June 2013 by eliminating the monthly release mechanism of non-levy sugar. Moreover, the central government has removed the compulsory supply of 10% of mill's production as levy sugar at subsidised rate meant for the public distribution system. Both these moves have helped the mills in reduction in their working capital requirement and improvement in average sales realisation. However, the key recommendation by the Committee on determination of sugarcane pricing remains unimplemented.

Export subsidy on raw sugar:

The Government announces export subsidy from time to time in order to make Indian raw sugar competitive in the international market and ease the liquidity crisis of sugar mills. In February 2015, the Government granted a uniform rate of subsidy of Rs.4,000 per tonne up to 1.40 million tonnes of raw sugar export during current SS14-15. The quantum of subsidy fixed for current year is also higher than Rs.3,371 per tonne fixed for SS13-14.

However, the subsidy announced for the current marketing season was delayed by 4 months (no subsidy was available for exports during peak SS; October 2014 to February 2015). Furthermore, the consumption of raw sugar is very limited in the domestic market and its production is solely dependent on export orders. Delay in announcing the export subsidy during the peak season along with fall in global prices has made exports unviable for domestic players.

Ethanol Blended Petrol (EBP) Programme:

Ethanol is an agro-based product, produced from the by-product of the sugar industry, viz, Molasses. The EBP programme, besides lowering pollution levels, ensures utilisation of molasses produced as a by-product during manufacture of sugar and improves the revenue stream of the sugar mills. The Government of India (GoI) has mandated minimum ethanol blending of 5% with petrol from June 2013 and has set aggressive target of increasing the blending ratio up to 20% by 2017 to be in line with other major sugar producing countries. Furthermore, the GOI has incentivised the sugar industry by increasing the price of ethanol to Rs.48.50 per litre for supply to oil marketing companies and waived off the excise duty of 12.60% on ethanol for blending for next SS, ie, 2015-16.

Sugar Development Fund (SDF):

The Government has set up SDF under SDF Act, 1982 for financing ISI. The sugar mills are required to pay for levy of cess, which currently is Rs.24 per quintal of sugar manufactured to the Consolidated Fund of India. The GoI uses the SDF primarily for advancing loans to facilitate the rehabilitation and modernisation of any sugar factory. Fund can also be used to build up and maintain buffer stocks of sugar.

Proposal for Reinsertion of Release Order (RO) mechanism and creation of buffer stock:

The GoI is also considering bringing back of RO mechanism for sale of sugar in the domestic market. Under the RO mechanism, the government decides the quantity of sugar that can be sold by each sugar mill in the open market every month. It is expected to help undue slippage of sugar prices in the domestic market during the peak season. The GoI is also proposing to create buffer stock of 10% of current year's expected sugar production so that the surplus can be absorbed from the market to some extent and amount due to cane growers can be paid directly to the farmers. This will benefit the sugar industry in two ways, the part of excess supply will be absorbed and sugar industry's debt burden will come down significantly.

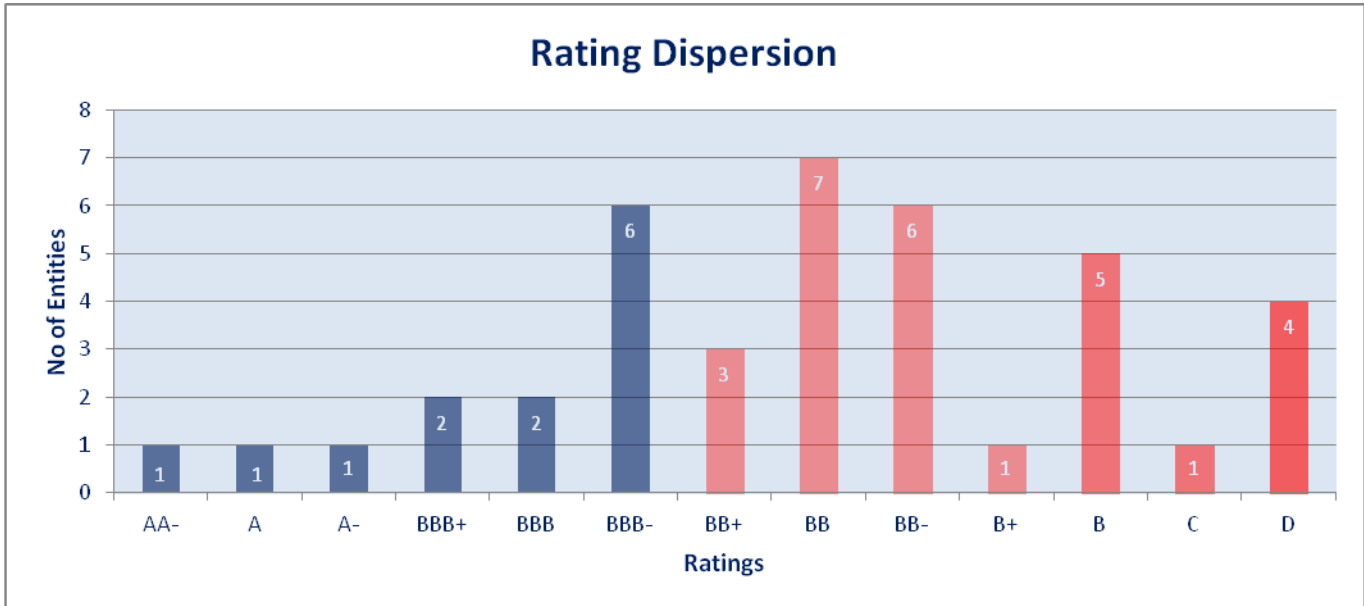
Outlook:

India will continue to be a major sugar producer in the world and is expected to be a sugar surplus country for the sixth consecutive SS. ISI is expected to be a net exporter in SS15-16 and sugar imports, if any, will be negligible. The average sugar recovery rate for cane (planted in both tropical and sub-tropical regions) is also expected to improve during SS15-16. On the consumption side, strong domestic demand from soft drink manufacturers, confectionaries, hotels, bakeries and ice-cream manufacturers will support higher levels of consumption. India's relatively strong economic growth, stable political situation, rising incomes, a young population, and changing consumer consumption patterns are envisaged to be the key drivers encouraging higher sugar consumption. However, Indian sugar prices are expected to remain weak due to surplus sugar stock in both domestic and global markets. The government's intervention is necessary in order to revive the ISI which has been reeling under the twin impacts of high sugarcane prices and low sales realisation on sugar leading to recurring losses being incurred by sugar mills and mounting cane arrears. Concrete measures are required including emphasis on increasing its ethanol blending program along with providing flexibility for use of sugarcane as feed-stocks for ethanol production, building compulsory buffer stocks, incentivise exports through higher export subsidy, restructuring debt of sugar manufacturers, and most importantly implementation of recommendation of the Rangarajan Committee for linking the prices of cane to actual realisation of sugar and its allied products.

Rating Dispersion:

CARE has outstanding credit ratings (as on March 31, 2015) on 40 sugar mills. Majority of the entities are in the non-investment grade rating category on account of inherent weakness of low profitability margins, high working capital intensity of operations, low debt coverage indicators and seasonal & cyclical nature of the sugar industry, operating under highly regulated environment.

Rating dispersion is indicated below:



Data Sources:

- National Informatics Centre
- Indian Institute of Sugar Research
- Ministry of New and Renewable Energy
- Department of Food and Public Distribution
- Indian Sugar Mills Association
- Department of Agriculture and Cooperation
- United States Department of Agriculture

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