



Review Article

INDIAN SUGAR INDUSTRY: POLICIES AND SURVEY

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Abstract: The India Sugar sector is the second largest agro-based industry in the country contributing significantly to the socio economic development of the nation. Indian sugar Industry is surrounded by a web of policies and politics including lobbying. Sugar industry operations are highly regulated by the Government. Till 2013 the sugar sector was controlled completely by the Government *i.e.* from procurement of raw material to marketing and export. The Government in centre regulates the minimum support price which is FRP in case of sugarcane and export-import tariffs. The Government in State controls the cane area reservation, Statutory Advised price (SAP) and other sugarcane subsidies. The Government also keeps buffer stocks and provides sugar thru PDS. Several Committees have studied the Indian Sugar Industry and submitted various recommendations. The association of sugar mills was requesting for liberalization of the industry. But the Government of India has only partially decontrolled the sugar industry in 2013. The paper examines the policies and politics around Industry which is ultimately effecting the efficacy of India's Sugar Economy.

Keywords: Sugar Industry, Policies, Lobbying, Essential Commodities JEL: H4, H8

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Introduction

Policies and politics go hand in hand, inseparable but separate like a rail track upon which the country runs. India is the second largest producer of sugarcane and sugar and fifth largest exporter of sugar in the world. Sugarcane is the second most important industrial crop in the country grown in over 5 million hectares and supporting millions of cane farmers in the rural areas. India has produced around 20.22 MT of sugar from 306 MT of Sugarcane. India has exported 27.52 lakh tonnes and also has imported 14.54 lakh tonnes of sugar during 2016-17 [1]. Sugar is one of essential commodities of consumption by Indian population. In India, Sugar industry produces the sugar complex *viz.*, sugar, bio-electricity, bio-ethanol, bio-manure and chemical. Molasses and bagasse are sugar industry by-products. Indian sugar industry is also a major sector to create employment directly and indirectly to two million working population. Indian sugar industry which is making an annual turnover approximately Rs.41,000 crore [2] was highly controlled by the Government of India. It is an important component in Indian politics and restrained by a ton of policies. These issues have led this intriguing study on politics and policies providing meaningful insights and grand view of Indian sugar industry.

Policies Governing Indian Sugar Industry

The sugar policy of India includes framing of various incentive programmes for promotion of sugarcane and sugar production, sugarcane pricing system, import and export policy of sugar and allied products including bio-fuel. Indian sugar industry operations are highly regulated by the Government. The sector was controlled by the Government right from production to marketing of the commodity. Accordingly, each month, the Central Government even decided on the quantity of sugar that mills were allowed to put on the market. To check continuous price fall and stabilize sugar prices several policy measures like fixing FRP, imposition of stock holding limits and creation of a buffer stock. State Government controls the minimum distance criteria between mills, cane area reservation and fixing SAP.

The Central Government controls the levy sugar obligation on mills, regulated release mechanism, fixing FRP, import and export of all kinds of sugar from mills. The National Mission on Micro-Irrigation (NMMI) have subsidised the investment in drip system and the Ministry of Fertiliser and Chemicals provide subsidy for N, P, K and S fertilisers used for production of sugarcane. The Sugarcane Development Fund (SDF) is framed to promote sugarcane production and to develop sugar industry. The Levy Sugar Price Equalisation Fund (LSPEF) was mainly framed to regulate the uniformity in levy sugar price in India. The Government of India announces Fair and Remunerative Price (FRP) or Minimum Support Price (MSP) and State Governments announce State Advised Price (SAP) for every sugar season. The Commission for Agricultural Costs and Prices (CACP) provides recommendations to the Central Government regarding cane price for the season. The central government also consults with the State Governments and associations of sugar industry to fix the cane price. According to the Department of Food and Public Distribution [3], the amended provisions of the Sugarcane (Control) Order, 1966 provides for fixation of Fair and Remunerative Price (FRP) of sugarcane having regard to the following factors,

- cost of production of sugarcane;
- return to the growers from alternative crops and the general trend of prices of agricultural commodities;
- availability of sugar to consumers at a fair price;
- price at which sugar produced from sugarcane is sold by sugar producers;
- recovery of sugar from sugarcane;
- the realization made from sale of by-products *viz.*, molasses, bagasse and press mud or their imputed value;
- reasonable margins for the growers of sugarcane on account of risk and profits

The FRP will be announced for every season a year prior to it and hence farmers do not need to be waiting for profit announcement by the mills till the end of the season.

The system also assures the margins on account of profit and risk to farmers, irrespective of the fact whether the sugar mills generate profit or not and is not dependent on the performance of any individual sugar mill. FRP is calculated for a basic recovery rate of sugar, with a premium payable to farmers for higher recoveries of sugar from sugarcane. This ensures that higher sugar recoveries are adequately rewarded and considering variations amongst sugar mills. The Indian Sugar Mill Association (ISMA) usually comments on the FRP rate fixed as higher than the recommendable rate. It has commented on the accepted FRP for 2018-19 as impractical and unreasonable counting on the difference between cost of production of sugarcane (cost A2 +FL) and FRP fixed [4]. Several State Governments augment the FRP, typically by 30 percent to 40 percent, due to political compulsions rather than market pricing, because of which it is also called as 'negotiated price'. Regardless of ups and downs in market price of sugar, the mills would have to pay the "State Advised Price" (SAP) to sugarcane farmers. A forecast of a smaller cane crop normally encourages sugar mills to pay higher cane prices, resulting in prices exceeding the FRP in most of the cane growing states. Sugarcane is included in Section 2(a) of the Essential Commodities Act, 1955 by virtue of which Government is empowered to control its production, distribution and supply. There is no compulsion for farmers to cultivate cane. Government only regulates its supply to sugar factories by provisions of Clause 6 of the Sugarcane Order, 1966. Factories are allotted cane areas from which they alone can draw cane which is called as 'Cane Area Reservation (CAR)'. The cane growers within the reserved area are required to enter into a bond with the factory for supply of specified quantity or percentage of sugarcane grown by them and are not allowed to supply cane to any other factory outside the reserved area except under a permit issued on this behalf. The factories are correspondingly under obligation to crush all the cane which is bounded by the growers. CAR is followed in many states in India except Maharashtra and Gujarat. CAR assures millers, assured supply of cane and farmers an assured buyer for cane. Though CAR encourages mills to invest in farm and extension services, ISMA fears a complacency and lack of investment in farm by cane growers. ISMA also have encouraged a permanently demarcated CAR which was originally a suggestion of Mahajan Committee [5].

EXIM Policy of Sugar in India

Indian trade policy has oscillated between complete export bans to high import duties (up to 60 percent) with an overarching objective to attain domestic price stability. Over the last decade and a half or so, the exports of sugar were canalised through the notified export agencies, viz., Indian Sugar and General Industry Export Import Corporation Ltd. (ISGIEIC) and State Trading Corporation of India Ltd. (STC) till 15th January, 1997. From then exports of sugar were decanalised and permitted subject to obtaining Registration-cum-Allocation Certificate (RCAC) from Agricultural and Processed Food Products Export Development Authority (APEDA). Since 1st April, 2001, the requirement of RCAC was dispensed with and the export of sugar could be undertaken by various sugar mills and merchant exporters, after obtaining the export release order from Directorate of Sugar, Department of Food and Public Distribution [6]. As domestic prices of sugar surged between January to June of the year 2006, exports of sugar were banned with effect from (w.e.f.) 22nd June, 2006. Only exports through the Indian Sugar Export and Import Corporation (ISEC), the joint body of Indian Sugar Mills Association (ISMA) and the National Federation of Cooperative Sugar Factories (NFCFSF), were permitted subject to the quantitative ceiling notified by Director General of Foreign Trade (DGFT) from time to time. Due to high production in sugar season 2007-08, the ban on export of sugar against advance licenses was relaxed on 4th January, 2007 and later for exports under Open General License (OGL) was permitted from 23rd January, 2007. Within a span of six months, due to the cyclicity in production of sugarcane and consequently sugar, trade policy was changed from complete ban on exports to open exports through OGL. As 2008-09 was also a good production year, the requirement of obtaining export release orders from Directorate of Sugar (except for export to European Union and United States of America) was also relaxed till 31st December, 2008 vide DGFT notification dated 31st July, 2007. This requirement was re-introduced from 1st January, 2009 in view of the lower expected production

of sugar in 2009-10. Sugar production improved in sugar season 2010-11 and due to comfortable sugar stocks in the country, exports of 1.50 million MT of sugar were allowed under OGL during March to August, 2011 and two million MT during December, 2011 to February, 2012. Free exports of sugar have been allowed subject to prior registration of quantity from 14th May, 2012. Obtaining export release orders from Directorate of Sugar has also been dispensed with notification dated 11th May, 2012. In view of high sugar inventories since sugar season 2010-11, a scheme was notified in February, 2014 to encourage the sugar factories to export raw sugar, which allows incentives for marketing and promotion services for raw sugar production targeted for export markets for four million MT during the 2013-14 and the 2014-15 sugar seasons from SDF. Import policy of sugar is also under the control of government and also fluctuates based on the domestic prices, production and so on. During May, 2015, the customs duty on sugar was restored with a withdrawal of Duty Free Import Authorisation (DFIA) as per the notification No. 5/ 2015-20. The import duty on sugar has doubled by the government even up to 100 percent to support sugar industry.

Ethanol Blended Petrol (EBP) Programme

Molasses is used in distillery to produce alcohol and ethanol. Molasses is also being contested for baking, food manufacturing, and animal and poultry feed and pharmaceuticals purposes. Government of India is promoting Ethanol Blended Petrol Programme (EBP) mainly to reduce the dependency on imports eventually to improve the balance of trade. EBP also reduces vehicular pollution. The policy on ethanol blending can be traced from the Power Alcohol Act (1948). The main objective of the act was to use ethanol from molasses to blend with petrol to bring down the price of sugar, trim wastage of molasses and reduce dependence on petrol imports. Subsequently, the Act was repealed in 2000, ethanol made its foray into the transport sector as a fuel additive in 2001. Oil Marketing Companies (OMC) in 2001 marketed five percent ethanol gasoline blend during the pilot project in three locations each in Maharashtra and Uttar Pradesh. Based on the success of these pilot projects and to enhance the country's energy security, Government of India mandated blending of ethanol with petrol at five percent in nine States and four Union Territories in the year 2003 and subsequently mandated five percent blending of ethanol with petrol in 20 States and eight Union Territories in November 2006 on an all-India basis except a few North East states and Jammu and Kashmir [7]. In 2008, the blending level of bio-ethanol at five percent with petrol was made mandatory [8]. The Government of India approved 'National Bio-fuel Policy' on 24th December, 2009. The policy encourages use of renewable fuel as an alternative to petroleum and proposes to supplement India's fuel supply with a 20 percent bio-fuel (bio-ethanol and bio-diesel) mandated by the end of 12th Five-Year Plan (2017). In a bid to renew its' focus and implement the Ethanol Blending Program (EBP) on 22nd November, 2012, the Cabinet Committee on Economic Affairs (CCEA) recommended a five percent ethanol blending mandatory. It also recommended that the procurement price of ethanol would be decided between the OMC's and Private Sector suppliers of ethanol. The Government of India's current target of five percent blending of ethanol in gasoline has been partially successful in years of surplus sugar production and unfulfilled when sugar production declines. But these path breaking policies did not result as expected and Government of India reasons it as because of less availability of ethanol [9]. In 2015, the EBP is implemented in a total of 13 states with blending level of about 2.10 percent (and is expected to touch 2.50 percent blending by end of 2015) [10]. The Cabinet Committee on Economic Affairs (CCEA) is fixing the delivered price of Ethanol. But, OMCs are reluctant to procure ethanol which is a substitute of petrol at a price higher than the petrol price. The government hiked prices of ethanol extracted from final or C-molasses for the 2018-19 season which would eventually help boost production of ethanol, used in blending with petrol, and also enable mills to divert some of the sugarcane juice during the surplus crop year. The study also suggest full flexibility to sugar mills to produce sugar or alcohol based on the demand and supply of the raw material, as recommended by Thorat Committee.

Partial Decontrol

In the history of Indian sugar industry several Committees including Mahajan

Committee (1998), Tuteja Committee (2004), Thorat Committee (2009) and Nanda Kumar's Committee (2010) has recommended for a decontrol of the Indian sugar industry [5], but no action was taken to decontrol in except in some cases that too on ad hoc basis. But after Rangarajan Committee's report in 2012 and on April, 2013 the then Indian Government released some of its clutches on sugar industry calling it as a 'Partial Decontrol'. The sugar industry will continue to be subject to production controls by State Governments, including sugar industry licensing, specified cane procurement areas for sugar mills and cane pricing. After Partial decontrol the controls exerted by the centre had reduced. The State Government holds back all the controls over sugar industry. The Central Government controls the Jute packaging, tariff rates on sugar and fixing the MFRP and FRP. The sugar industry in India was under 'partial decontrol' during several periods of time. The Government imposed a statutory control over production, distribution and price of sugar during 1942. The control was lifted from December, 1947 to September, 1949. Decontrol was not functioning properly and several irregularities committed by the Sugar Syndicate and its' members came to light. There were allegations of heavy premium being charged by factories and selling agents over the price informally agreed to by the industry. The prices of sugar also rose in several markets. Again from 1967-68 the Government of India called it as a 'partial de-control' as it allowed the sugar industry a free sale of 60 percent of its produce whereas 40 percent was still under levy system.

The New System for Distribution of Sugar in the Public Distribution System (PDS)

The partial decontrol of sugar industry by the Central Government is in the form of removing the levy obligation and regulated release mechanism on open market sale of sugar. Before which the sugar mills were required to supply 10 percent of their production to meet the Public Distribution System (PDS) demand. After Partial decontrol, the mills could sell their entire production as per their commercial prudence. However, under the new dispensation, to make sugar available in the PDS at the existing retail issue price the State Governments and Union Territories administrations have been asked to procure it from the open market through a transparent system. The Central Government is reimbursing the States and Union Territories limited to the quantity based on their existing allocations. Further, with a view to ease out the financial burden of the State Governments, the Government releases advance subsidy, on quarterly basis, to all the State Governments who approach the Central Government for the same.

Revenue Sharing Principle

The Rangarajan Committee had recommended sharing of 70 percent of the revenue from sale of sugar produced from a quintal of cane, to rationalize pricing of cane. Loading the value of by-products (molasses, bagasse and press-mud) on value of sugar, this pricing formula worked out to about 75 percent of the ex-mill value of sugar produced from a quintal of cane [11]. Though Shri. Nandakumar's Committee had previously given a similar formula; it was not brought into effect. Under the Revenue Sharing Principle (RSP), sugarcane growers will, in the first place, be paid some Minimum Fair and Remunerative Price (MFRP) as fixed by the CACP, with the balance paid at a later stage after realization of revenues by the mills. The MFRP is fixed on the basis of trend in sugar prices minus one or half of a standard deviation, say one or half sigma, which sets a floor for farmers as far as cane prices are concerned. A similar revenue sharing principle of 70 percent: 30 percent was followed by the Government of Thailand for pricing sugarcane since 1982-83. The CACP's calculations show that RSP will not only ensure a fair and stable return to farmers, but also assure mills a reasonable return on their investments [12,13]. Maharashtra, Karnataka and Tamil Nadu are the three states to adopt the revenue sharing formula, which deserves credit. To empirically map this revenue sharing principle, one needs to get, (1) the cost of producing cane by farmers and (2) cost of converting cane into sugar and its by-products by millers [13].

Funding Mechanisms for Sugar Mills

The Government of India supports mills thru funding systems such as Sugarcane Development Fund (SDF) and Levy Sugar Price Equalisation Fund (LSPEF). A

specific fixed amount is collected ascess from mills in support of the Sugarcane Development Fund (SDF), which is used to support research, extension and technological improvement in the sugar sector. The major criteria for loans under SDF are Sugarcane development, Modernization or rehabilitation of sugar mills, Bagasse-based cogeneration, Production of anhydrous alcohol or ethanol and for undertaking potentially viable sick sugar. The Levy Sugar Price Equalisation Fund Act, 1976 (LSPEF Act) was enacted to provide for the establishment, in the public interest, of a Fund to ensure that the price of levy sugar may be uniform throughout India and for matters connected therewith or incidental thereto. The LSPEF Act provides for establishment of a fund called the Levy Sugar Price Equalisation Fund (LSPEF) into which shall be created (a) the amounts representing all excess realisations made by the producers either before or after the commencement of the Act and (b) the amounts of loans advanced or grants made, if any, by the Central Government for carrying out the objects of the Fund. The Fund shall be administered by the Central Government (Section 3). Funds remaining unclaimed for a period of six months from the date on which they are credited shall vest in the Central Government and shall be utilised, having regard to the interests of consumers of levy sugar, as a class and the need to ensure that the retail issue price of levy sugar is uniform throughout the Country (Section 8). The LSPEF Act also empowers the Central Government to recover excess realisations made by sugar factories as "Arrears of Land Revenue" (Section 11) [14]. The sugar recovery rate varies significantly between the sugar mills in Private Sector and those of Public and Co-operative sector. The High Powered Committee on Cooperatives has classified the Co-operative sugar mills in India as the 'sick and non-viable co-operative organizations' [15].

Cane Arrears

Having given all the policies governing sugar industry, cane arrears appears in picture. Sugarcane MSP and cane arrears are often in headlines. Either the farmers protest to increase the cane MSP or to solve cane arrears issue. The sugar industry is indebted to the cane farmers to a whopping amount of Rs. 16000 Crore June till 2018. The cane arrears are the difference between the amount paid by the industry and the cane MSP/ FRP fixed by the Government. The Government had taken various initiatives even to help loss-making sugar mills, such as increasing the import duty on sugar even up to 100 percent and total scrapping of export duty. The package at times included creation of buffer stock, providing soft loan with interest subsidy for expansion of ethanol capacity, besides a production-linked subsidy to clear sugarcane arrears of the farmers. The Government policies had reduced the cane arrears at various incidents.

Lobbying by Farmers and Sugar Mills Association

Sugar being an essential commodity, whoever runs the Government ought to satisfy three groups, the farmers, the sugar mills and the consumers. India has the largest population of consumers. There are five crore cane farmers [16] and many farmers associations which have influence over the FRP being fixed. On the other hand, there are 513 sugar mills distributed across 18 states in the country [17] and their associations. There are 288 Private Sector sugar mills, 214 Co-operative Sector sugar mills and only 11 Public Sector sugar mills in India. Associations on both the sides lobby for remunerative price for their produce [18,19]. The Indian Sugar Mill Association (ISMA) estimated the production of sugarcane and sugar prior to every season and requests the government for policy changes accordingly. It is much eager to amend the Revenue Sharing principle of Shri. Rangarajan Committee. Irrespective of Alliance the Government should satisfy or at the least pacify the different stakeholders (farmers, mills and consumers) for a peaceful regime.

Conclusion

India second largest agro-based industry is administered by an array of policies and politics plays its role in the choice of policies and amendments. Many of the policies of the Government had encouraged and protected sugar production by providing a safe environment for sugar mills to operate. Meanwhile it has also acted like a Mother who had share good things and also the discipline between its children equally.

The government policies though at times influenced by politics had provided the sugarcane producers also with good remunerative price. The government has borne the burden of subsidizing the sugar thru PDS in the new system after Partial decontrol to support the consumers and also the sugar mills. The Government had also encouraged sugar mills to export at times of good production and discouraged the same when the sugar prices at retail surged up. It also encourages the integration of sugar mills with distillery and co-generation plant. It bails out the industry at times of high cane arrears. The policies and politics surrounding the sugar industry are increasing the efficacy of sugar industry. In the meantime, the Government has to be swift in designing and amending problem specific policies without space for lobbying. The efficiency of Public Sector and Co-operative Sector sugar mills has to be reviewed by the Government at intervals for betterment of sugar industry. The Indian Government had formed different committees for sugar industry. The recommendations of the committees have to be considered while framing policies for sugar industry.

Application of review: Study and survey of Government policies for sugarcane producers and sugar mills

Review Category: Agricultural Economics

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