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# **SUGAR INDUSTRY IN INDIA**

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### **ABSTRACT:**

The origin of sugar has been a matter of long controversy, though it has generally been accepted that sugar was produced in matter from sugarcane in India. Its origin in the sub-continent, its traditional accommodation to all manner of government taxes, regulations and interferences, its political importance in the trade commerce, the speculation surrounding its marketing, the multiplicity of the terms of weigh, packing, grades and value in the various countries of origin, the dietary and medical disputes over its use, these are merely a few high points-what news sugar has been in past and now.

Being the second largest agro-based industry after only cotton, sugar industry has been attracting attention of the government, researchers and experts in the field. Giving full details of their findings and analysis is beyond the scope of the present study. But here, an attempt is made to give a brief overview of the committees/ commissions and researches, as they are either sponsored keeping in view a specific set of problems or objectives of have been influenced by changes/developments in the field. Therefore, for a meaningful analysis of the various studies, it will be ideal to keep in view the time frame and context in which those have been conducted or addressed to.

**KEYWORDS:** sugar industry traversed, Sugar factories and sugar production, production fluctuations

#### **INTRODUCTION:**

The sugar industry traversed a long way since its inception in early nineteen thirties. Sugar is a sensitive product in the essential commodities group it has come a long way since its modest beginning during pre-independence in India and is one of the largest organized agro industry in the country. It has a prominent place in the international, market and thus plays a vital role in the economic growth of India as a whole. It is believed, rather said India is the birth place of sugarcane and art of making sugar has been known to Indians.

According to the World Bank, India is the second largest producer of sugarcane in the world. This



year, India is the second largest producer of sugar in the world. The sugar industry is the second largest agrobased processing industry in India, having certain unique features of its own. It is a seasonal industry based on a perishable raw material, namely, sugarcane. The by-products of the industry have opened up fresh areas of enterprise in the diverse directions. Molasses, an important by-product, is utilized for important by-product apart from meeting fuel requirements of the industry, offers the potential to make the country self-sufficient in its requirements of paper and news print. There are 653 sugar factories in the country, 62 in the public sector, 296 in the private sector and 295 in the co-operative sector. These units having produce the production of sugar is 18912 thousand tonnes during the year. The six decades old history of the industry has, however, been characterized by cyclical fluctuations in production due to a lack of coherence between the pricing policies for cane and sugar.

# **PRE-INDEPENDENCE PERIOD**

In 1610 first two sugar factories are established at Musulipattam and petapli by Captain Hippon, captain best and Dowton in 1612 established one more factory at Surat. By the year 1815 there are six sugar factories functioning in India. Due to heavy duty on sugar in

West Indies many planters migrated to India during two years from 1834. They planted sugar cane in Bihar and Uttar Pradesh. Seerdha, Barrachaikia, Birdpur, Belsund, Jamo, Bagga, Gorakhpur, Padravna and Gowahati. A sugar factory established at Dooban in Bengal is the largest with a capacity to produce 7000 tonnes sugar per year. In Madras state two sugar factories are erected by Binny and company and by parry and company in 1865. India exported unrefined sugar in large quantities up to 1863- 64.cane sugar from Mauritius and beet sugar from Europe captured sugar market. The situation reversed and India began to import Javian sugar. Import duty on sugar was raised from 50 percent to 100 percent. Government of India being lulled by the substantial earnings from import duty adopted a negative policy towards Indian sugar industry. As a result only six factories are established up to 1905. However sugar industry is greatly located in 1912 at Coimbatore. Wynnes sayer and J.Mackenna committee are appointed to compile relevant data on sugarcane and examine the possibility of developing sugarcane track in India. However, both the reports were shelved. In 1929 Imperial Council of Agricultural Research submitted at report to the Government highlighting the sugar committee (1929) recommended levy of protective import duty to provide an umbrella to Indian sugar industry for the period of ten years. Indian Tariff Board (1930) also recommended a protection to Sugar industry for a period of fifteen years. Considering recommendations of both the bodies' sugar industry protection Act is passed in 1932. Protective duty continued till March 1950. This measure provides impetus to the development of sugar industry.

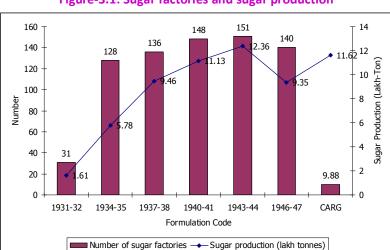
As shown in table 3.1, fluctuations in the trend in the number of sugar factories as well as quantity of sugar production during preindependence period (1931-32 to 1946-47). This is mainly because of prospects of availability of sugarcane for crushing varied and fluctuations in the demand for sugar. In this period compound annual growth rate of sugar factories and sugar production increased to 9.88 per cent and 11.62 per cent. This indicates that the production of sugar is greater than the sugar factories. It is also analyses that growth rate in factories and production are very high during 1934-35. Similarly low growth rate is also same period during 1946-47.

Year	Number of sugar factories	Annual growth rate (%)	Sugar production (lakh tonnes)	Annual growth rate rate (%)					
1931-32	31	-	1.61	-					
1934-35	128	312.90	5.78	259					
1937-38	136	6.25	9.46	63.67					
1940-41	148	8.82	11.13	17.65					
1943-44	151	2.02	12.36	11.05					
1946-47	140	-7.28	9.35	-24.35					
CARG	9.88		11.62						

Table-1: Sugar factories and	sugar production du	uring pre-independ	ence period
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Source: Co-operative Sugars, National Federation of Co-operative Sugar Factories Ltd., New

Delhi. August 1972. p. 613.



# Figure-3.1: Sugar factories and sugar production



	19	47-48	19	50-51	Increase percent (%)	
Provinces	Sugar factories (No.)	Sugar production (tonnes)	Sugar factories (No.)	Sugar production (tonnes)	Sugar factories	Sugar production
Bhiar	29	168	29	225	-	33.93
Bombay	14	109	15	222	7.14	103.67
Madras	11	60	12	92	9.09	53.33
Punjab	1	12	1	11	-	-8.33
Odisha	1	3	1	2.5	-	-16.66
Uttar Pradesh	65	634	67	593	3.08	-6.47
West Bengal	1	5	1	4	-	-20.00
Hyderabad	1	20	1	24	-	20.00
Madhya Pradesh	4	16	4	9	-	-43.75
Mysore	1	17	1	15	-	-11.76
Pepsu	2	19	2	9.5	-	-50.00
Rajesthan	2	7	2	1.5	-	78.57
Saurashtra	1	0.50	-	-	-	-
Travancore and cohin	-	-	1	3.5	-	100
Ajmer	1	5	1	*	-	-
Bhopal	1	0.50	1	*	-	-
Vindhya Pradesh	1	*	-	-	-	-
Kashmir	1	*	-	-	-	-
Total	137	1076	139	1212	1.46	12.64

\* Actual figures are not shown as sugar production is negligible.

Source: Indian sugar statistics (1950-51) Directorate of economics and statistics, Ministry of food and Agriculture, Government of India, New Delhi, 1951; pp. 24, 43-44.

#### **POST-INDEPENDENCE PERIOD**

During post independence period (1947-48 to 1950-51) as can be seen from the table 3.2, number of sugar factories increased with 1.46 per cent (137 to 139), however production of sugar raised to 12.64 per cent. Figures of sugar factories and sugar production are project that lead indicators of sugarcane belts likely to be developed in future. Bihar, Bombay, Madras, and Uttar Pradesh appeared to be most prospective regions.

#### **GROWTH OF SUGAR INDUSTRY**

In India, sugar production started in 1903 with one factory each in Uttar Pradesh and Bihar. The growth of the sugar industry till the First World War was rather slow and production capacity of the industry is not very significant. With the onset of First World War, sugar imports declined and indigenous sugar industry got impetus for production. In order to facilitate the growth of sugar industry, the Indian sugar committee is set up in 1919 to suggest measures for its rapid and widespread growth the sugar industry (protection) Act, 1932 was enacted to benefit the sugar industry and the cane growers. The government thereafter passed central sugarcane Act 1934, empowering the state Government to fix a minimum price for sugarcane to be paid by the sugar factories in the interest of the growers. The government further imposed statutory control over the distribution and pricing of sugar in April 1942 by the sugar control order issued under the defense of India rules. By the year 2009-10 there are 653 sugar factories in India, of these, 62 are in the public sector with a total investment of over 1350 crores and the total value of sugar cane produced in the country is estimated at Rs.24000 crores per year. The industry contribution to the exchequer of the central and state government is above Rs.1650 crores by way of excise and other duties. Besides the state governments realize about Rs.600 crores annually through purchase taxes, cess, etc. Sugar has also made significant contribution to the foreign exchange earnings which steadily increased from Rs.12 crores in 1957 to peak level of Rs.472 crores in 1975-76. Thereafter, there is a decline and the figure stands at Rs.220 crores for the year 1991-92 and much less at Rs.121 crores by 2003-04. The per capita consumption of sugar is three kilograms per annum in 1950-57 and it has increased to 11.4 kg/per annum in 1986- 87 and 17.2 kg/per annum in 2002-03. There were only 29 sugar factories in India in the year 1931. Protection granted to the sugar industry in 1931 led to a tremendous growth in the number of sugar mill. The number of factories in operation has risen from 29 in 1931 to 140 in 1950-51, out of which 110 factories are in the northern region. During the next decade, the number of factories increased to 174 out of which 116 are in subtropical region in northern India. Finally, the number of factories has grown from 200 in 1965-66 to 403 in 1990-91, of which nearly 75 per cent of the factories are located in northern India. By 2009-10 the total number of sugar units in the country mounted up to 653 with the dominance of the private sector (296) followed by the co-operative sector (177). The sugar industry provides direct employment to about 3.25 lakh workers besides providing indirect sustenance to about 30 million cane growers all over the country. Further, it accounts for providing employment to scores of thousands in the trade, in the transport of sugarcane, sugar, etc. Moreover the sugar industry is transforming the rural structure by establishing links of sugar factories with sugarcane growers on permanent basis not only in the co-operative sector but also in private and public sectors.

# THE EMERGENCE OF STATE SECTOR IN SUGAR INDUSTRY

The post-colonial period, noticed a trend of the emergence of the state sector. Most of the sugar mills in public sector are concentrated in Uttar Pradesh and Bihar. Emergence of state sector is not the results of a well thought out national policy. It is more of popular political decision. More specifically, it is the sickness of some private and cooperative mills, which compelled the government to take over to save

growers and labour from hardships. Development or expansion of a particular industry rests upon numerous internal and external factors. Important among the internal factors are availability of resource potential, local demand, infrastructure and other backward linkages of the industry. The main external factor is the relevance of the industry in terms of its contributions to the national economy and earning of the foreign exchange. As stated earlier contributing to the national income, sugar is the second largest industry of India, occupying an important place in the national economy besides giving employment to the people directly through manufacturing process and thereby stimulating farmers for coverage of large area under this cash crop. The industry is also important from the point earning the foreign exchange. During the era of planned development programme in India starting from 1951-52 there has been commendable progress in units, Productive capital employed, employment and output of the sugar industry. The progress of sugar industry, however, depends upon many factors. The most crucial factors are area under sugarcane, its production and productivity2. It is therefore, pertinent in the present context to study the trends in relation to these aspects during different five year plans. A continuous rise in the availability of sugarcane provided a resource base in terms of raw material for the establishment of new sugar factories in India during the successive five year plans. The integrated picture of the sugar factories in India at the end of 1973 is as follows, the total number of factories is 97, of which 79 are licensed in co-operative sector and there are only 18 units belonging to the private sector. Thus the ratio between the private and co-operative sector units stood at 1:5. During the period of fifth plan, there has been more than three-fold increase in sugar factories from 97 in 1973 to 341 units by the end of 1978-79. Out of these units, 167 (nearly 50 percent) are in the cooperative sector, 140 in private sector and 34 units in public sector factories have largely come up during the fifth plan and secondly, the proportion of sugar factories in private sector to the total number of factories increased quite significantly. The state participation in sugar industry is on the rise during the period.

#### SUGAR INDUSTRY-PAST AND PRESENT

The modern vacuum pan sugar industry in India is set up in early 30s in the Indo-Gangetic plains of Bihar and east Uttar Pradesh. In these areas, sugarcane is a natural crop, having been grown from times immemorial. Until mid 50s, the sugar industry is almost wholly confined to the state of Uttar Pradesh and Bihar. The industry dispersed in the southern India, western India and other parts of northern India after late fifties /early sixties. In the year 1965, the Government introduced a discriminating licensing policy which inter alias provided for an over-riding priority to new units proposed in the cooperative sector. Under this policy, many new cooperative sugar factories were licensed.

However, considerable delays are reported in the implementation of the projects of new sugar mills by the cooperative societies despite substantial financial support from the respective state governments. On their request, the central government introduced an incentive scheme for new sugar factories in the year 1974. This scheme absolved the units from the obligation to supply levy sugar at control prices, admittedly well below the actual cost of production. The existing sugar mills, however, are required to supply initially up to 65 percent of their production as levy sugar at controlled prices under the policy of partial decontrol or dual pricing. Even though, the new licensing policy provide only for preferential treatment to the cooperative sector, in actual practice, the new units are almost wholly licensed in this sector in the 70s and till about mid 80s as this sector had assumed significant political leverage by then. It is only in mid 80s when the government once again began licensing of new sugar factories in the private sector as well. The ice, in fact, is broken by the then government in Tamilnadu where few sugar mills are permitted in the private sector, on the recommendations of the state government. In other states too, new units in the private sector are allowed, although in a much smaller way.

## **CURRENT SCENARIO**

The state government which had sponsored a number of new sugar mills in the cooperative sector, however, found it difficult to continue this process in 90s as many such units, despite preferential treatment, had accumulated sizeable losses to service the capital provided by the state government and the financial institutions. The financial institutions were also reluctant to fund new cooperative factories on the guarantees of the respective state governments and they insisted on prior repayments of the over dues against loans earlier sanctioned. It is under these circumstances that most of the new licenses are awarded to the private sector, in 90s, out of 551 units in the country, 307 are in the cooperative sector, 177 are in the private sector are in various stages of implementation. Few such units are also under implementation stage in the cooperative sector as well. No new units have been proposed in the public sector. Interestingly, public sector in the sugar industry principally emerged by way of nationalization of the private sector units which could not fulfill their obligations under the rigid policy pursued by the government. More interestingly, the public sector corporations so created ever since their inception have been incurring sizeable losses. The accumulated loss stands at a colossal figure of over Rs.1000 crores. Many state governments are, therefore attempting to disinvest such public sector corporations in the sugar industry. Similarly, many state governments are also finding it beyond their means to continue to support the cooperative sector as in the earlier years. Some of these units have been privatized in the recent past. In the foreseeable future the numbers of such units are likely to increase further. Clearly, in future, the private sector is again bound to assume a dominant position in the Indian sugar sector. This will be in keeping with the general trends. This trend is clearly visible now. Very recently, there has been a perceptible change in the sectoral growth of the sugar industry. Contribution of the private sector has been increasing both in terms of number of units as well as in terms of sugar production. Sugar industry continues to be the most highly regulated industry in India not withstanding the visible change in the economy policy of the Government of India since early 90s. Controls on the sugar sector have been continued on extra economic considerations and also because of the support of the cooperative sector as they owe their very existence to the presently prevailing discriminatory system of controls. As sugar factories are located in rural areas, they have an intrinsic symbiotic relationship with the rural masses and have proved to be effective instruments for carrying progressive trends to the rural areas. Another salient feature of the sugar industry is that it generates its own power, using by-product bagasse, a renewable non-conventional energy resource. Some sugar mills are also in a position to supply surplus power to the grid from the bagasse based co-generation systems. This gives an idea of the important of the Indian sugar industry in the industrial scenario of the country as well as in nation building.

#### **SUGAR POLICY**

The Indian sugar industry could not develop on sound economic principles largely due to the complex web of controls and regulation which govern every aspect of the industry. This industry is completely regulated, starting from sugarcane to the end product i.e. sugar. The development of the sugar industry is thus very closely linked with the policy measures adopted by the government from time to time. A number of expert bodies in the past, such as the Sugar Industry Enquiry Commission have held the view that most of the evils of the industry are mainly on account of the adhoc policies followed by the government. The report of the group constituted by the Reserve Bank of India for the study of sickness in the sugar industry observed that the sugar policy which has been re-oriented/adjusted frequently is unable to overcome multi faceted dilemma and there has been ameliorative measure largely on adhoc basis submitting to immediate pressure and unable to provide long run stability. For the past three decades,

beginning with 1967-68, the sugar industry has been operating under a policy of partial decontrol which is commonly known as the dual pricing policy. Under this policy, the government of India procures 40 percent of the sugar produced by the sugar mills as levy sugar at noticed prices which are admittedly far below the cost of production. This is because the price of sugarcane fixed by the Central Government, ignoring completely much higher sugarcane prices which the sugar mills are coerced to pay in actual practice by various state governments on political considerations. Only recently, some of the high courts have ruled such state advised cane prices as illegal. Even so, many state governments continue to fix State Advised Prices (SAPs). The dual pricing policy, however, has become an instrument of instability, causing sharp variations in sugar output and giving birth to the infamous Indian sugar cycles.

#### **HORIZONTAL GROWTH**

Sugar industry in India has grown horizontally under the licensing policy pursued by the government. Since early 70s, government decide to prompt the cooperative sector in this industry and a large number of new sugar mills are licensed and put up in the cooperative sector with the aid of discriminatory incentive scheme. But, after the incentive entitlement is over, many of them have been rendered sick because intrinsically these plants are not viable. This is in utter contrast to the situation prevailing in other advanced sugar producing countries of the world where much greater emphasis has been given on consolidation and higher capacity. In Australia, for instance, number of sugar mills has been gradually reduced from 32 to 28 while average capacity of sugar plants increased from 7,200 tones to around 9,200 tones. Similarly, in Thailand, Brazil, U.S., E.U., etc., the trend has been to encourage much higher capacity plants to achieve economies of scale. Most of the smaller sized sugar plants in India, which have been dropped down by the government policy, over a period of time, have lost viability with consequent adverse chain reaction all round.

## THE SUGAR ECONOMY OF INDIA SINCE 1930-31 TO 2009-10

The different parameters are presented in table 3.3. The presentation and the analysis help to observe the growth trends over the year during 1930-31 to 2009-10 upto 1990-91, the decennial growth rates are presented. In the post reform and liberalization period, the growth rates are presented and analyzed during 2000-01 to 2009-10.

Table-3: Statement showing figures of area under sugarcane, yield of sugar, production of sugar cane, number of factories in operation, average actual capacity, cane crushed, recovery, sugar production, and duration and molasses production during 1930-31 to 2009-10

Year	Area under sugar-cane (000)	Yield of cane (tones per hectare)	Production of sugar-cane (000 tonnes)	No. of factories in operation	Average actual capacity (tonnes) per 24 hours	Total cane crushed (000 tonnes)	Recovery of sugar cane (%)	Total sugar produced (000 Tonnes)	Average Duration (days)	Molasses Production (000 tonnes)
1930-31	1176	30.9	36354	29	-	1339	8.96	120	-	-
1940-41	1617	32.1	51978	148	750	11492	9.70	1113	113	431
1950-51	1707	40.5	69220	138	859	10971	10.03	1101	101	402
1960-61	2456	45.0	110544	173	1175	31109	9.74	3028	167	1240
1970-71	2615	48.3	126368	216	1408	38204	9.78	3740	137	1620
1980-81	2667	57.8	154248	314	1707	51598	9.98	5147	105	2126
1990-91	3686	65.4	241046	385	2088	122319	9.85	12046	166	5444
2000-01	4316	68.6	295956	436	3180	176651	10.48	18511	139	7820
2001-02	4412	67.4	297208	434	3238	180321	10.27	18527	140	8066
2002-03	4520	63.6	287383	453	3319	194324	10.36	20140	141	8873
2003-04	3938	59.4	233862	423	3417	132511	10.22	13546	100	5905
2004-05	3661	64.8	237088	400	3545	124771	10.17	12691	96	5514
2005-06	4202	66.9	281172	453	3606	188672	10.22	19267	126	8551
2006-07	5151	69.0	355520	504	3474	279249	10.17	28361	174	13109
2007-08	5055	68.9	348188	516	3546	249906	10.55	26356	149	11313
2008-09	4415	64.5	271254	488	3725	144978	10.03	14538	87	6542
2009-10	4202	66.1	277750	490	3825	185548	10.20	18912	108	8400

#### AREA UNDER SUGARCANE

As evident from the table, during 1930-31, there is an area of 1,176 thousand hectares under sugarcane cultivation which consistently increased to 4, 202 thousand hectares with annual growth rate of 1.60 per cent. Between 1930-31 and 2009-10, the area under cane cultivation increased art a decennial rate ranging between 3.2 per cent (1930-31 to 1940-41) and 3.7 per cent (1950-51 to 1960-61) in the post reform period i.e. .since 1991, the rate of increase in the area is 1.5 per cent, and annual growth rate during 2000-01 to 2009-10 is declined to -0.26 per cent.

#### **PRODUCTION OF SUGARCANE**

The production of sugarcane which is 36,354 thousand tonnes during 1930-31 increased to 2, 41,046 thousand tonnes by 1990-91 and stood at 2, 77,750 thousand tonnes during 2009-10 with an annual growth rate of 2.57 per cent. This signifies that the growth in sugarcane production over the year stood greater than that of the area under cultivation.

# **CANE CRUSHED**

The total cane crushed is 1,339 thousand tonnes during 1930- 31 increased at a growth rate of 6.3 per cent over the years and stood at 1, 85,548 thousand tonnes during 2009-10. A comparative analysis of the three parameters so far discussed reveal that the growth rate over the years in the total cane crushed is recorded at higher. The reasons are increase in the number of factories in operation which are only 29 during 1930-31 and stood at 490 by 2009-10. Moreover, the increasing share of the total cane utilized for the production of white sugar is another significant.

### SUGAR INDUSTRY IN INDIA-TODAY AND TOMORROW-PERSPECTIVE

India is the second largest producer of sugar in the world. In terms of sugarcane production, India and Brazil are almost equally placed. The annual projected growth rate in the area under sugarcane is at 1.5 per cent per annum, and has doubled during the last five years. This is, because it is considered to be an assured cash crop with good returns to the farmers, vis-a-vis other competing crops. India is currently passing through a glut situation, with closing stocks at the end of the year of over 100 lakh tonnes since 1999-2000. Sugarcane crop occupied merely 2.2-2.7 per cent of India's cultivable land. Cane crushing starts around October and keeps crushers occupied for, up to six months.

The accounting year in the context of sugar – the sugar season – is October to September. Around 20 per cent of sugar mill production procured by the government at a predetermined Price for subsidized distribution, in the Public Distribution System (*PDS*). Perhaps, it is the only industry providing subsidized sugar to the Below Poverty Line (*BPL*) families, via a nationwide public distribution system, accounting for around 13 per cent of the global sugar production. Sugar industry contributed 0.7 per cent to India's GDP in 2009.

Around 2/3rd of the sugar produced in India is consumed by soft-drink manufacturers, candy or toffee makers and other confectioners, among others. Each tonne of cane yields 300 kg of bagasse and 1.2 barrels of petroleum equivalent. India's sugarcane and sugar production typically follows a 6-8 year cycle, wherein 3- 4 years of glut are followed by 2-3 years of deficiency. After two consecutive years of declining sugar production (2007-2008 and 2008-2009), production surged in 2009-2010, and is set to be robust in 2010-2011.

Despite production fluctuations, India's sugar consumption increased at an annual rate of 3.5 per cent over the past decade. Driven by the continuing switch from the consumption of gur to sugar, rising

incomes and growing population, India's sugar consumption is projected to increase at 2.5-3 per cent annually, well into the medium term. Another notable trend is, the shift from Gur and Khandasari to sugar in the rural areas. This should further increase the per capita consumption of sugar, in India (currently around 15.6 kg).

Moreover, the growth of sugar demand by food industries and other non-household users, estimated to account for about 60 per cent of total consumption, could provide additional impetus to longer-term market growth. Sugar consumption was estimated at 23.5 million tonnes in 2009-2010. Per capita sugar consumption increased from 19.9 kg in 2008-2009 to 20 kg in 2009-2010, while that of gur and khandsari declined from 9.3 kg to 8.9 kg. Indian urban market is slowly moving towards branded sugar. The potency in this segment seems to be very high. With effect from 2009-2010, the term **'Statutory Minimum Price (SMP)'** was replaced by **'Fair and Remunerative Price (FRP)**.

S. No.	Particulars	For the season				
	Particulars	2010-2011	2011-2012	2012-2013		
1.	Opening stock as on 1 <sup>st</sup> October	100.72	44.00	58.50		
2.	Production during the season	145.38	187.50	250.00		
3.	Imports	25.00	42.00	5.00		
4.	Total availability	271.10	273.50	313.50		
5.	Domestic consumption	225.00	215.00	225.00		
6.	Exports	2.00	-	10.00		
7.	Closing Stock	44.00	58.50	78.50		

#### **Table-4: India's Sugar Balance**

Exports: India's sugar export balance was nil during 2009-2010 from 0.2 million tonnes in the previous year. The country expects to export in 2010-2011, following a rise in sugar production in 2012-2013, and a projected surplus in 2012-2013 (October 2012-September 2013).

Imports: To control sugar prices, the government permitted sugar imports at zero customs duty. For the sugar season October 2011-September 2012, imports were estimated at 4.2 million tonnes, after taking into account the opening inventory of 1.2 million tonnes of raw sugar. Indian sugar millers cancelled a number of import contracts, owing to a decline in domestic prices, and are unlikely to sign new deals, following expectations of a surge in local output.

# **CONCLUDING:**

As the study is about the Cost Benefits Analysis of Sugar Industry in Gulbarga District this chapter is designed to reflect upon the scenario of sugar industry in India. In the process the researcher has gone into the annals of the sugar industry focusing on pre-independence India followed by the post-independence period. The growth of the sugar industry, the emergence of the state sector in the sugar industry besides the state and trajectories of the industry over the period is presented in this chapter. To focus on the status of the industry in the global scenario, the position of sugar industry in the dimensions of production, exports are presented in this chapter.

#### **REFERENCES:**

Bharadwaj.H, "The planter and sugar manufacturer", Indian sugar journal, vol. lxxix, No.14, ISMA, New Delhi, January 1972, p. 263.

Jahnavi.P, "the Sugar Economy", Sugar, Vol.xii, No.16, March 2002, ISMA, New Delhi. p.

Nikam, G.A., "General Efficient of Sugar Co-Operatives; A Recovery Approach, Indian Co-Operative Review", Vol. No.1, 1988. Zaleza, T., "African Sugar on the World Market", Journal of Eastern Affairs Research and Development, No.18, 1988.

Sudaryanto, T., "World Sugar Situation: The Seemingly Changes on Co-Operative Advantages", Indonesian Agriculture Research and Development Journal, Vol.10, No.2, 1988.

Summer, U., "The Sugar Market', Der Market Furzuker Agrawirtchartt, Vol. 37, No.12, 1988.



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