CHAPTER II

HISTORY AND DEVELOPMENT OF SUGAR INDUSTRY IN INDIA

### 2.0. HISTORY AND DEVELOPMENT OF SUGAR INDUSTRY IN INDIA

#### 2.1. Introduction

Published literature in all the countries says without any doubt that sugarcane was born in India, thousands of years ago and was taken later on to other countries. Organised development of sugarcane in India started in the year 1856 and later on, breeding of new varieties of sugarcane was started with the establishment of Sugarcane Breeding Institute at Coimbatore in 1912. Some of the Co-varieties of sugarcane evolved at this Institute, are flourishing in 17 other countries.

In India, Textile Industry is the first largest industry and Sugar Industry is the second. The production of sugar from sugarcane is very old process in India. The system of sugar production from sugarcane was introduced by Dutch at North Bihar in 1840. Sugarcane was used for making Gur and Khandsari because there was no factory system of sugar production. In 1903 the first successful factory was established by British Entrepreneurs.

The past protection story of India's sugar industry is revealing from a scarcity of 32 working units in 1931-32.

The number of factories rose to 130 in 1934-35 and the volume of sugar output which stood at 1.62 lakh tonnes. In 1935-36 it rose upto 9.47 lakh tonnes. After independence, the industry made a steady progress especially with the commencement of the five year plan era and the only phase of dissatisfactory performance was at the beginning of the plan holiday i.e. 1966-69. The production during the first year of the 4th Plan (1969-70) was an all time record of 42.6 lakh tonnes. The production, however, could not be maintained at this level in 1970-71 and declined to 37.4 lakh tonnes during that period. In 1983-84 there were 325 sugar factories in operation and crushed 59024000 tonnes of sugarcane and produced 5917000 tonnes of sugar.\*1

India is the biggest producer of sweetness in the world including sugar and gur.

Table No.II-1 shows the area under sugarcane, yield and the total production of sugarcane in some of the countries, which grow considerable quantities of sugarcane.

It may be seen from Table No.II-1 that India is highest amongst the cane growing countries regarding the area under sugarcane and production of sugar, the average yield of sugarcane per hectare in India is of the order of

<sup>\*1</sup> Co-operative Sugar November 1985, Vol.17 No.3, Page 222.

Table No.II-1

Country	Yield 1982 (Tonnes/ Hectare)	1982 Area of sugarcane ('000 Hec.)	1982 Production (Million/Tonnes)
India	55.4	3192	183.6
Brazil	55.2	2886	168.0
Cuba	48.4	1550	75.0
China	58.2	739	43.3
Mexico	82.2	450	37.0
Pakistan	38.6	947	36.6
U.S.A.	88•5	296	26.2
Australia	80.9	319	25.8
Indonesia	103.7	210	21.8
Thailand	52.9	571	30•2
Philippines	50.0	420	21.0
S. Africa	76.1	240	19.8
Peru	144.0	50	7.2
Zimbabwe	110.0	33	3.5

Source : Co-operative Sugar, November 1985, Vol. 17, Page 180. 56 tonnes, which is not very low as compared to other countries. India occupies 11th position among all the 80 cane sugar producing countries of the world in regard to yield of sugarcane per hectare. Countries like Surinam, Venezuela, Iran, Japan, Spain, Guyana, Columbia etc. produce very little quantity of sugarcane with slightly higher yields than India, but they are not taken into account here.

In India, the yield of sugarcane is 92.3 tonnes per hectare in Tamil Nadu, 90.3 in Maharashtra, 75.5 in Gujarat, 67.7 in Orissa, 73.2 in Karnataka, 46.4 in Uttar Pradesh, 68.8 in Andhra Pradesh, 44.3 in Hariyana and 30.4 in Bihar. A sugar average recovery of 10.02 is obtained for the whole season, is considered satisfactory in Uttar Pradesh and Bihar, while a recovery of 11.5 % and above is easily obtained in Maharashtra. Few factories obtain the recovery of 12.5 % and over as an average for a six months season. As a result of these high recoveries of sugar industry has shifted more and more to the Deccan from its original home in the North. For many years, Uttar Pradesh produced 50 % of all sugar produced in India. But during the last few years the centre of production has shifted to South and at present Maharashtra is responsible for producing 33 % of sugar in region. climate in Deccan is more suitable for sugarcane being warm

and equitable and as such noble causes with higher yield per hectare and more present sugarcane, can grow there. This gives the sugar industry in the Deccan an edge over the sugar industry in the northern regions.

In India, there are as many as 8,000 manufacturers of Khandsari sugar and millions of manufacturers of gur, as many growers convert their sugarcane into gur for their own consumption.

The first vacuum pan sugar factory was established in India in the year 1930. By the year 1930 the number of sugar factories established in India was only 30. The production of sugar by 30 sugar factories and a few gur refineries was also of the order of 0.1 million tonnes per annum. India was importing about one million tonne of sugar from other countries mainly Jawa (Indonesia) for meeting its internal requirement of sugar. In order to develop the Indian sugar industry and to protect it from foreign sugar, the Government of India promulgated the Indian Sugar Industry (Protection) Act, 1932, imposing a protective tariff on imported sugar. Immediately after the grant of protection to the Indian Sugar Industry, there was a sudden spurt in the number of sugar factories established in India by 1939-40 there was 142 sugar factories producing about 1.2 million

tonnes of sugar per annum. Subsequently, under the different Five Year Development Plans introduced by the Government of India from 1951 onwards, the sugar industry developed to a considerable extent.

One of the significant features of the development of the Indian Sugar Industry during the different Five Year Plan periods have been the establishment of growers' Co-operative Sugar Factories in order to improve the economic status of the rural population. The Government of India, in its Industrial Policy Resolution of 1948, stressed the need of rapid industrialisation of the country by building up a large co-operative sector with the financial assistance of the Government. Therefore, the Licencing Policy of the Government of India was also amended to give preference for the establishment of growers' co-operative sugar factories in the country wherever possible, failing which the establishment of sugar factories in the Public Sector (State owned), and Private Sector was considered. As a result of this preferential policy, a number of growers' co-operative sugar factories were established from 1955 onwards, particularly in the State of Maharashtra. This development can be seen from the fact that out of total number of 140 sugar factories that existed in the year 1950-51, only one was a growers' co-operative

sugar factory, whereas during the year 1984-85 crushing season out of total number of 355 sugar factories existing as many as 183 are growers' co-operative sugar factories. In addition to this 32 new co-operative sugar factories are under various stages of establishment.

#### 2.2. Guidelines for Sixth Plan Licencing

In order to develop the sugar industry the different Five Year Plans by the establishment of new sugar factories and effecting substantial expansion in the existing sugar factories, the Government of India had been issuing guidelines from time to time. The guidelines for Sixth Five Year Plan, are as follows:

- a) The present policy of granting licence for the establishment of new sugar factories in the co-operative sector / public sector will continue in the Sixth Plan. However, in areas where proposals from the co-operative / public sector are not received, proposals from private sector could be considered.
- b) A new sugar factory can be installed in an area where there is abundant sugarcane already existing or good potential for development of sugarcane exists in a compact

area, around the site of the proposed factory.

- c) To ensure supply of adequate quality of sugarcane to the existing unit as well as future expansion, no licence should normally be granted for the establishment of new sugar factories within a distance of 30 Km of the existing units.
- d) Where there are a large number of sugar factories located in one district, state Governments should make proper zoning of sugarcane areas of each existing sugar factory, before a request for expanding the capacity in any existing factory or installation of new sugar factory in that district is considered.

#### 2.3. Revised Guidelines for Sixth Plan Licencing

The Government of India vide its Press Note dated 24th September, 1984, revised guidelines for licencing in the sugar industry during the remaining period i.e. upto 30-9-1985. The guidelines are as under:

i) Expansion in existing units will normally not be permitted beyond 3500 TCD and only in exceptional cases and purely on merits and techno-economic considerations, with a view to establish agro-industrial complex that expansion beyond 3500 TCD would be permitted.

ii) Subject to economic feasibility, licencing of new sugar factories might be confined to districts, where sufficient cane is grown at present but where no sugar factories are existing or have been licenced.

## 2.4. Seventh Plan Programme

The Planning Commission in August 1983, had set up a working group on sugar industry compressing 21 members to formulate targets for the 7th Five Year Plan period 1985-90, as well as for the perspective period of 15 years. The National Federation of Co-operative Sugar Factories also represented in the group. This group recommended that in order to meet the increased requirements of the sweetening agents during the Seventh Plan period, the sugar factories should be made responsible for the development of sugarcane in their respective area and the technical guidance and support for the purpose might be provided by the Central and State Extention Agencies. Each sugar factory should also have a farm of its own, which can provide seed and can also help in the training of farmers and extension workers. The cane areas of every factory should statutory demarcated. The sugarcane pricing policy should be framed in such a fashion so that a minimum sugarcane price which is equivalent to cost of production of cane is ensured to the farmers and the practice of State Governments announcing payment of a higher price than a statutory price fixed by the Government should be stopped. The Bhargava Formula should be more operative.

A sizable buffer-stock and long term pragmatic policy taking into account the interest of the farmer, the industry and the consumer should be framed.

## 2.5. Co-operative Sugar Factories - Historical Background

The beginning of co-operative sugar factories can be traced back to 1933, when few sugar mills on co-operative basis were started. For nearly two decades, however, there was no further development in this direction. An effective starting point for the sugar industry in co-operative sector was provided by the establishment of co-operative sugar mills at Pravaranagar in Maharashtra. The success of this co-operative mill inspired the growers and state authorities elsewhere to promote similar organisations. During the First Plan period licences were granted to establish 13 co-operative sugar mills in Bombay and 3 in Punjab. During the Second Plan period 24 licences were issued.

It was since the beginning of the Second Plan, that the co-operative processing of agricultural produce gained impetus. At the end of the Third Plan there were 78 co-operative sugar factories.

One of the most hopeful developments of the last decade in the field of co-operative processing has been the rapid establishment of co-operative sugar factories in the country. Beginning with a modest share of 1.4 % in the national output of sugar in 1955-56, the co-operative sugar factories have now come to account 54.7 % of the total production of sugar in the country.

The rapid progress of the co-operative sugar factories has been made possible on account of policy decision of the Government to give preference to co-operatives in the licencing new units.

# 2.6. Statewise position of Co-operative Sugar Factories at a glance

The statewise position of co-operative sugar factories licenced, established and yet to be established as on 30-9-1984 is given in Table No.II-2.

Table No.II-2

S. No.	State	Licenced/ Converted to co-op- eratives	Already establ- ished	To:be establ- ished	Order for Plant and Machinery placed	Yet to place order for Plant and Machinery
1	U.P.	30	21	09	08	01
2	Punjab	09	04	05	02	03
3	Hariyana	07	04	03	03	-
4	Asam	02	01	01	01	-
5	Rajastan	01	01	-	-	-
6	M.P.	03	03	-	-	-
7	Orisa	04	02	02	01	01
8	Maharashtra	89	69	20	12	08
9	Gujarat	17	15	02	01	01
10	Goa	01	01	-	-	**
11	Tamil Nadu	12	11	01	-	01
12	Karnataka	19	14	05	04	01
13	Andhra	18	18	•	-	•
14	Pondichery	01	01	-	•	-
15	Kerala	02	02	-	-	-
	All India	215	167	48	32	16

<sup>\*</sup> Nowgong in Asam converted from Public Sector to Co-operative. Ulundurpet and Tiruttani in Tamil Nadu converted from Public Sector to Co-operative and Nayagarh and Badamba in Orisa converted from Public Sector to Co-operative Sector.

## 2.7. Progress of Co-operative Sector

During the last 22 years of planned development, the sugar industry has made rapid strides. Both the terms of number of units and the contribution to the total sugar produced in the country, this sector has shown steady progress. The yearwise details are given in Table No.II-3.

The co-operative sugar factories in India has introduced many socio-economic activities in their factory areas which has been responsible for converting the rural parts of India into modern towns with all amenities. They have not only established sugar factories, but have mobilised the funds of the growers for establishing industries based on bye-products like paper from bagasse, alcohol from molasses and alcohol based chemicals.

They have also established educational institutions like Primary Schools, High Schools, Degree Colleges,

Technical Training Centres, Engineering Colleges and Medical Colleges too. To improve the medical facilities in the rural parts of the country, they have established primary health centres, dispensaries, family planning centres, hospitals and modern equipment and also nursing training colleges.

They have introduced many recreational and communication

Table No.II-3\*\*

Year	No. of sugar factories in operation		Sugar production (Lakh tonnes)		Percentage Cooperatives
	Cooperatives	Total	Cooperatives	Total	Total
1961-62	34	180	4.75	27.29	17.4
1962-63	41	186	4.73	21.39	22.1
1963-64	48	194	6.01	25.73	23.4
1964-65	50	198	7.95	32.32	24.6
1965-66	53	200	9.41	35.41	26.6
1966-67	55	200	6.62	21.51	30.8
1967-68	58	200	7.05	22.48	31.4
1968-69	63	205	12.06	35.59	33.9
1969-70	70	215	13.82	42.62	32.4
1970-71	73	215	12.62	37.40	33.8
1971-72	79	220	12.85	31.13	41.3
1972-73	85	228	14.67	38.73	37.9
1973-74	84	229	15.54	39.48	39.4
1974-75	96	246	20.93	47.97	43.7
1975-76	103	252	20.33	42.82	47.7
1976-77	116	270	23.13	48.40	47#8
1977-78	129	287	31.75	64.61	49.1
1978-79	136	298	30.52	58.41	52.3
1979-80	138	300	20.32	38.58	52.7
1980-81	149	315	29.03	51.48	56.4
1981-82	153	320	46.04	84.37	54.6
1982-83	156	320	45.10	82.40	54.7
1983-84*	160	325	31.88	59.17	53.9

<sup>\*</sup> Provisional. \*\* Source : Co-operative Sugar Directory and Year Book 1983-84, Pages 8, 12.

facilities in the factory areas. All these facilities are meant for not only to the sugar factory workers, but for the entire rural population.

They have also introduced many other activities like poultry farms, dairy farms, milk processing units, super markets, lift irrigation schemes - all on co-operative basis only.

#### 2.8. Sugar Exports

The world sugar production during 1983-84 was around 96.06 million tonnes as compared to 100.66 million tonnes during 1982-83. On the other hand, consumption has increased from 94.62 million tonnes during 1982-83 to 96.88 million tonnes during 1983-84. The final stock in 1983-84 was around 36.63 million tonnes as against 37.94 million tonnes in the previous year. In the view of the above situation, the final stock of sugar as percentage of the consumption is of the order of 38 % as against the normal figure of 25 %. Bumper sugar production and heavy carry over stocks during 1982-83 and 1983-84 kept the sugar prices at a low level in the international market. From a major exporter in one year, we became importers in the next year. A quantity of 7.06 lakh tonnes was exported in 1983-84. However, in view of

internal shortages and in the absence of International Sugar Agreement, the Government of India suspended the export of any further quantity during 1984-85 except a committed quantity of E.E.C., U.S. and Nepal.

## 2.9. Sugar Imports

The Government of India had to resort to sugar imports due to poor sugar production in 1983-84 and equally poor production estimates in 1984-85. This situation is partly due to mishandling of sugar releases during the last 2 years as heavy releases were made to depress the sugar prices. Though the Government has succeeded in keeping the sugar prices at a low level, they had to go in for about 0.64 lakh tonnes import of sugar in 1983-84. The Government had already imported a quantity of about 4.2 lakh tonnes in 1984-85 and it is reported that a contract of another 4.0 lakh tonnes of import has already been made by State Trading Corporation. Thus, a huge amount of foreign exchange is frittered away in the process.