

CHAPTER - III

HISTORY OF
SUGAR INDUSTRY
IN
INDIA
(In General)

3.1 : HISTORY OF SUGAR INDUSTRY IN INDIA :

Generally, it is believed that sugarcane is originated in North part of India. Its first mention being in some of the legends concerning "Buddha" about the 4th Century B.C. During the 9th and 10th Century its Commercial Manufacture and refining developed in Egypt. In Europe its wide spread started after it brought in France in the 11th and 12th Centuries. In Germany, France and England the Sugar Industries were built in 16th Century. The mention of Sugar (Sharkara) is also seen in the ancient Shastras of the Hindus. It has been classed as one of the Five celestial sweets. In Marathi it is called "PANCHA-AMRITAS". In this sense India is the birth place of this important crop. Beet was discovered under the inspiration of Neapolian in about 1882, so the Beet sugar industry was established in Europe by about 1814 which destroyed the Indian Sugar Industry practically. The first refineries were started in England in 1544. In 1688, 50 Refineries were working in Great Britain.

Sugarcane was used in India for making "Khand" or 'Khandasari' for confectionery making". This most important process of making Khand or Khandasari industry was located in Uttar Pradesh. This industry however began to decline with the arrived imported foreign beet-sugar. In the Second half of the 16th Century and subsequently of such Khandasari factories have closed down.

The modern factory system for making 'white-sugar' from sugarcane perhaps introduced for the first time in India by the Dutch in North Bihar near by 1840, but this was rather an unsuccessful attempt. It remained in an experimental stage upto the end of the 19th century and the first successful factory was established by the British enterpreneurs probably in 1903.

Now the Khandsari Industry declined very fast because of modern sugar factories which are producing white and clean sugar. Until 1930 the Indian Sugar Industry was in its infancy and could not successfully complete with Foreign Sugar.

The modern industry began to flourish only after the grant of protection of sugar industry in 1932. In this year "Sugar Industry Protection Act" was passed by British Government. At that time there were only 32 Sugar Factories out of that 26 factories were in Uttar Pradesh and Bihar. The Government with the twin objectives of developing the home industry and making itself sufficient in matters of sugar and to avoid foreign competition decided to grant protection to the home industry in pursuance of the recommendation of the Tariff Board of 1931-32.

In India Sugar Manufacture got a spurt because the Government granted its protection in 1932, from the dependence on imports the country became self-sufficient within 4 years and after that the modern industry began to flourish because of the grant protection. The production of sugar of all

32 industries was 1.6 lakh tonnes, total area under the sugarcane was 27.7 lakh acres, but within a few years a number of factories were increased upto 137. As a result, production rose to 10 lakh tonnes by 1937 and the total area under the sugarcane also increased upto 41.48 lakh acres.

The tariff board recommended in 1939 further protection of 8 years and sugar industry protection act was passed with import duty of Rs. 6.12 per c.w.T. and protection was continued from 1932 upto 1942, the protection given was to be with drawn in 1946, but due to economic conditions it was extended upto 1st April, 1950.

3.2 : INDUSTRY DURING 1939 TO 1971 :

Due to World War II, demand of sugar was increased, due to a Sugar famine developed during that period, Government introduced sugar control therefore production decline from 11.8 lakh tonnes to 9.5 lakhs tonnes with compared to pre-war period. The consumption also decline from 13.2 lakh tonnes in 1942-43 to 9.7 lakhs tonnes in 1946-47, but by decontrol of industry in 1947 production and consumption increased.

Progress in the Post-Independence Period :TABLE NO. 1PRODUCTION AND CONSUMPTION OF SUGAR

(In Lakh Tonnes)

	Opening Stock	Production	Consumption
1950-51	2	11	11
1960-61	13	30	21
1970-71	21	37	40
1978-79	33	59	62
1979-80	21	39	52
1980-81	7	51	50
1981-82	10	84	35

Source : RBI, Report on Currency And Finance, 1981-82.

The production was 11 lakh tonnes in 1950-51 and 14.94 lakh tonnes in 1951-52. The production of sugar again declined to 12.48 lakhs tonnes in 1952-53 and to 10.8 lakh tonnes in 1953-54. This due to low prices of sugar-cane and use of sugarcane for producing 'Gur'. Again output of sugar increased to 18.14 lakh tonnes on 1954-55 due to opening of new factories increasing in crushing season and low price to 'Gur'. The production of sugar 18.59 lakh tonnes in 1956-57. This increase was due to increased capacity to 1.96 million tonnes from 1.74 million tonnes in 1955-56. The number of opening factories increased to 143 to 149 due to growing competition of Khandsari and increasing tax burden in 1957-58 production declined to 19.75 lakh tonnes.

Control were reintroduced in 1957-58 so that the production declined to 19.38 lakh tonnes. In 1958-59 with Government incentives for higher production. The production reached to 29.8 lakh tonnes with 1958-60 and to 30 lakh tonnes in 1960-61. Due to use of sugar cane for 'Gur' and 'Khandsari', the production declined to 27.14 to 21.52 lakh tonnes in 1961-62 and 1962-63 respectively. In 1963-64 and 1964-65 it was 25.6 and 32.6 lakh tonnes respectively. During 1965-66 there was a record production of 35.2 lakh tonnes. Therefore export increased from 2.80 lakh tonnes in 1964-65 to 4.30 lakh tonnes in 1965-66. In 1966-67 the production was only 21.6 lakh tonnes. In 1968-69 it was about 30 lakh tonnes. The production in 1969-70 was 42.6 lakh tonnes and 37 lakh tonnes in 1970-71, In 1971 the total number of factories was 220 in operation.

3.3 : SUGAR INDUSTRY DURING 1971-83 :

On 25th May 1971 the Government decontrolled sugar a partial control was reimposed from 1st July, 1972. The proportion between levy and free being 60:40. However for the season 1972-73 Government reduced the share of free sugar to 30 leaving the balance 70% for levy. The same position was maintained for the season 1973-74, but for 1974-75 the proportion between levy and free was changed to 65:35 respectively. The Government allowed 5% free sugar to sugar industry to cover cost increase with effect from Jan. 1975, the same proportion have been extended to 1976-77 and 1977-78 seasons on 16th August 1978 sugar was once again

decontrolled by the Government of India with effect from 1st March, 1979. The industry adopted a voluntary scheme of regulation of monthly releases and the Government reinstated the monthly releases system in the month of June 1979.

The Government imposed complete control on sugar with effect from 17th Sept. 1979, the policy was revised on 17th Dec. 1979 to that of partial control with 65% for levy and 35% for free sale. The same policy was in force for 1979-80, 1980-81, 1981-82 and 1982-83 seasons.

TABLE NO. 2

Following Table Showing the Yearly Cane-Crushing
in Lakhs M.T.

YEAR	IN INDIA	IN MAHARASHTRA
1980-81	515.84	188.83
1981-82	873.42	282.92
1982-83	826.95	276.25

Source :- Indian Sugar.

TABLE NO. 3

Following Table Showing The Yearly Sugar Production
in Lakhs M.T.

YEAR	IN INDIA	IN MAHARASHTRA
1980-81	41.47	20.85
1981-82	84.36	30.26
1982-83	82.26	30.25

Source : Indian Sugar.

3.4 : A PERSPECTIVE OF INDIAN SUGAR INDUSTRY :

India is the biggest producer of sweetness in the World including sugar and gur. India is the fourth major sugar producing country in the World, the first three being U.S.S.R. Brazil and Cuba in that order. It ranks third largest industry in terms of its contribution to the net value added by manufacture and has a total capital investment of over Rs.1300 crores and employs nearly 3 lakh workers. Besides creating extensive indirect employment for 25 million cultivators of sugarcane, the various agencies of distributive trade through subsidiary industries such as confectionary. It is also an important source of excise duty for the Central Government.

The World Energy Congress has been held recently in New Delhi in Sept. 1983, It emphasized the need of identifying renewable sources of energy. The energy congress chairmanship of Shri. J.P. Mukherje had gone into various details of surplus power that could be generated by the sugar industry in India and supply the same to rural areas for agricultural and other purpose.

Sugar factories in India function as Centres of commendable socio-economic development in rural areas. The sugar factories changed the whole seen of the rural areas. The infrastructure development setting up of educational institutions including Engineering College etc. establishment of Hospitals and Medical Colleges, Dairy and Dairy Based Industries etc. by sugar factories in rural areas has indeed made a tremendous impact and contributed immensely to the upliftment of vast masses of rural population.

It is a matter of gratification to refer that many a sugar factory in India has made considerable progress in developing by-product industries using alcohol as raw-material. A few units have been producing since long acetic acid from alcohol, acetone, acetic anhydride. These would improve the profitability of sugar factories and ultimately benefit the grower community at large.

Following are the largest Units in India with their
Crushing Capacity in Tonnes.

TABLE NO. 4

Sr. No.	Name	State	Capacity (In Tonnes)
1.	Shri. Khedut Sahakari Khand Udyog, Mandali Ltd.,	Gujarat	7000
2.	The K.C.P. Sugar Factory Ltd.	Andhara Pradesh	6000
3.	Saraswati Sugar Mills	Haryana	5200
4.	Shetkari Sahakari Sakhar Karkhana Ltd., Sangli.	Maharashtra	5000
5.	Krishna Sahakari Sakhar Karkhana Ltd., Rathare Budruk	Maharashtra	5000
6.	Shri. Panchganga Sahakari Sakhar Karkhana Ltd.,	Maharashtra	5000
7.	The Mysore Sugar Co. Ltd.,	Karnataka	4500
8.	Sakti Sugar Ltd.,	Madras	4000
9.	E.I.D. Parry Ltd.,	Tamil Nadu	4000
10.	Aruna Sugar Ltd.,	Tamil Nadu	4000
11.	Pravara Sahakari Sakhar Karkhana Ltd., Pravaranagar	Maharashtra	4000

(Source : Times of India, Directory & Year Book 1983).

3.5 : LOCATION OF THE SUGAR INDUSTRY :

Area under the Sugar Cane Cultivation in last 3 years in major producing State is as follows:-

TABLE NO. 5

AREA UNDER SUGAR-CANE IN INDIA				
(in 000 Hectares)				
Sr. No.	State	1980-81	1981-82	1982-83
1.	Andhra Pradesh	132	180	170
2.	Bihar	111	124	124
3.	Gujarat	75	84	95
4.	Haryana	115	147	147
5.	Karnataka	157	175	177
6.	Madhya Pradesh	39	43	54
7.	Maharashtra	256	297	326
8.	Orissa	49	50	51
9.	Punjab	71	109	104
10.	Tamil Nadu	183	201	171
11.	Uttar Pradesh	1363	1652	1803

(Source : Co-operative Sugar, Nov. 1983 P.No. 183).

.6 : SUGAR RESEARCH INSTITUTION IN INDIA:

During the last 10 years the Sugar Industry in India has undergone a significant and praiseworthy technological revolution. Number of new innovation and technological developments have been adopted. New varieties of sugarcane such as COJ 64, Coll 48, Coll 58, Co 6907, Co 997, Co 740, Coc 671 etc. have indeed changed the lot of the sugar industry in many states of India like Punjab, Uttar Pradesh, Tamil Nadu and Maharashtra etc. The Research work being carried out in many research institutions in India.

Following are some responsible institutions in research for the noteworthy progress in cane cultivation that occurred in many parts of our country.

A) Sugar Cane Breeding and Cultivation :

- i) Sugarcane Breeding Institute - Research Centre, Cannanore (Kerala).
- ii) Sugarcane Breeding Institute Coimbatore.

B) Control of Pests and Diseases of Sugar-cane:

- i) Commonwealth Institute of Biological Control (CIBC)
Bangalore - 560 024.
- ii) Indian Institute of Horticultural Research,
Bangalore - 560 006.
- iii) Directorate of Plant Protection Quarantine & Storage,
Ministry of Agriculture, Faridabad (Haryana).

- iv) Indian Institute of Sugarcane Research, Lucknow.
- v) Sugarcane Research Station, Jallundar.
- vi) Haryana Agricultural University, Research Station Karnal.
- vii) The University of Agricultural Sciences, Bangalore-560024.
- viii) Andhara Pradesh Agricultural University, (Sugarcane Research Station, Anakapalle).
- ix) The Sugarcane Research Station, Padegaon (Maharashtra).
- x) Tamil Nadu Agricultural University, Coimbatore.

C) Sugarcane Processing And By Product Utilisation:

- i) National Sugar Institute, Kanpur (U.P.).
- ii) The Deccan Sugar Institute, Pune.
- iii) The Regional Research Laboratory, Jammu.
- iv) National Chemical Laboratory, Pune.
- v) General Glass & Ceramic Research Institute, Calcutta.

Besides these Research Institutes there are many other Agricultural Universities which have this as a subsidiary subject.

To help these Research Institutions there are important Sugar Publishing Houses and Management Institutions such as -

- i) National Federation of Co-operative Sugar Factories Ltd., New Delhi was set up in 1960 with the object of co-ordinating and facilitating the working of the co-operative Sugar Factories, State and Zonal Federations and to assist in the promotion of Co-operative Sugar Factories.

So far **licenses**, letters of intent have been issued for establishment of Co-operative Sugar Factories of these 156 in operation. This Federation also brings out the following publications.

- 1) Co-operative Sugar.
- 2) Co-operative Directory and Year Book.

ii) The Indian Sugar Mills Associations, New Delhi.

This Association brings out the following publications:

- 1) Indian Sugar.
- 2) Indian Sugar Year Book.
- 3) List of Sugar Mills in India and Bangla Desh and Pakistan.
- 4) The Working Results of Sugar Factories.
- 5) Press News and Sugar in Parliament.

3.7: SUBSIDIARY INDUSTRIES:

The growth of Sugar Industry has also led to the establishment of a host of subsidiary and by-products industries in the country. The confectionary industry **which** depends for its raw material - Sugar - on this industry has developed side by side with the Sugar Industry. Biscuit Industry in India is one of the important subsidiary industries of sugar. The other favourable development in regard to by-product utilisation related to bagasses press mud and molasses. These are used as raw material by

a number of industries. Bagasses is utilised in the manufacture for Paper Mills and Card Board and are used for manufacturing insulation Board (Celotex), furfural (Chemicals). Decolourising Carbon, Bagasse, Plastic etc. considerable work is being done in respect of extraction of way from Press mud and other articles in the manufacture of which press-mud can be used are Shoe Polish, Carbon Paper and Mineral Wool. Molasses are used in the manufacture of aconitic acid, plastics, synthetic rubber, industrial and power alcohol, chemicals, toilet preparations, tobacco cusing, golden syrups etc.

In 1973-74 there were 88 distilleries in India which produced alcohol from Cane molasses. Out of which 6 distilleries were established in Maharashtra.

3.8: SUGAR INDUSTRIES IN CO-OPERATIVE LINES:

"THE BRIGHTEST STAR"

"The Co-operative Sugar Factories have been the brightest star of Co-operation on the horizon of India. I think co-operators all over the World can feel proud of what has been accomplished through the Co-operative Sugar Factories in India and for giving an organised voice to the otherwise dumb and mute farmers whose lot it has been throughout the Centuries to slogan obscurity. I would, therefore, like to congratulate the pioneers who started the Co-operative Sugar Factories and more so the pioneers particularly in Maharashtra

State, which accounts for nearly half the total number of Co-operative Sugar Factories in the Country".

- S.K. Dey.

The Sugar Production on Co-operative processing lines was first attempted in India in 1933. Upto the year 1935 there were four co-operative sugar factories in India. Three factories were in Andhara Pradesh at Thummapata, Etikoppaka, and Vuyyuru and one in Uttar Pradesh at Biswan. Vuyyuru Factory had a crushing capacity of 800 tonnes at the same time other three factories ranged between 30 to 150 tonnes. The factory of Etikoppaka has survived and is the oldest co-operative factory today. Pravaranagar Factory on Co-operative lines is the most significant factory in India, which has registered in 1948 in Maharashtra. 450 tonnes was the initial crushing capacity of this factory. Today it has a Plant of 1450 tonnes capacity. The success of Pravaranagar Co-operative Sugar Factory were synebronised with the decontrol of sugar in 1952. Industrial Policy Resolution was announced by the Government of India in April 1956.

In the light of success of Pravaranagar Sugar Factory and Industrial Resolution 1956, Government adopted a preferential policy for establishment of Co-operative Sugar Factories. The rural base of the country probably wanted the changes and the farmers started farming the Co-operative

Societies as Sugar Industry is licensed industry.

The licence is given under the Industries (Development and Regulation) Act of 1951. Significance of this policy of expansion of the Government of India lay in giving Preference to Co-operative Sugar Factories. Accordingly 13 licences were granted to Co-operative Sugar Factories in the old Bombay State and 3 in Punjab. Under the First Five Year Plan, 69 Co-operative Sugar Factories in Maharashtra at the end of Sixth Five Year Plan.

The Co-operative Sugar Industry was fostered initially with Government encouragement and to that other industries in the country are exception. The Co-operative Sugar Factories are set in backward area, unlike Joint Stock Factories. The Share Capital has to come from the growers residing within a radius of 22 to 25 K.M. only. In serving cane growers interest Co-operative Units stand out. The Co-operative units have not only met the internal need of the country, but have also distinguished themselves by productivity much of the quantum. The country has undertaken Sugar to export. Co-operative units are poised for higher achievement in serving internal needs of consumers and fulfilling export obligation of the country, and at the same time providing social justice to cane growers.

Co-operative Sugar Factories have long been accepted as an instrument of economic development, particularly, in rural areas since the beginning of India's Programme of

"Planned Development". This is because of the Co-operative enterprise observe the overall purpose of having a society based on values of democracy and socialism. With the new shift of accent of development from industry to agriculture and within the industrial sector, to the growth of intensive small and village industries, the Government given a new orientation and direction to the Co-operative role in the achievement of the national income goals.

.9: NATIONAL CO-OPERATIVE POLICY 1977 :

Government of India declared a new Co-operative Policy in 1977. And that policy became conclusive for the growth of Co-operative Sugar Factories.

.10: DEVELOPMENT OF CO-OPERATIVE SUGAR INDUSTRY:

In presence of this policy further the agro-based Sugar Industry was encouraged in the Co-operative sector. This is being perusad through Government deliberate policy of preferential industrial licensing backed by financial assistance through State participation in the Share Capital and long term loan, Central Financing Institutions as well as enthusiastic response from the farmers. As a result, Co-operative sector in Sugar Industry has made a steady and remarkable progress.

After the establishment of factory, further resources raised by way of contribution from growers out of their cane price to be utilised towards repayment of term loans and towards capitalisation. In this process sugar co-operatives

are a useful instrument for mobilising rural savings. The sugar factories are mostly established in a rural setting. A considerable amount is set a part by many Co-operative Factories each year for social service activities, such as establishing health centres for medical facilities, schools and colleges, sports and recreation, housing for homeless, landless labourers, irrigation schemes, construction of roads, cattle's breeding, Gobar gas plants etc. as a result the economic and social fabric in these areas have undergone a progressive change for a better life for the community as a whole.

3.11: SIXTH PLAN TARGET FOR SUGAR PRODUCTION :

According to revised document sugar requirement by 1984-85, the end of Sixth Plan is estimated at 77 lakh tonnes including 10 lakhs tonnes for export. To achieve this production goal, the licenced capacity in sugar industry is proposed to be raised from 74 lakh tonnes at capacity. This is considered necessary in order to ensure the targetted production by Sixth Plan end.

It is estimated that expansion existing limits can take of 40% of the additional capacity to be licenced and the balance 60% of the capacity should be unlicenced by way of new units of standard 1250 T.C.D. capacity in various parts of country. Where potential for cane development exists. This is also necessary for balanced economic development.

And as this development and help of Government policy, no doubt the Co-operative Sugar Industries in India will achieve the aims of India's Co-operative Policy within few years.

3.12: CO-OPERATIVE SUGAR FACTORIES IN MAHARASHTRA:

Sugar is such a crop that every Maharashtraan person must be proud of cane crop. It is not a common crop, because this crop has gone under many chemical processes and many sugar factories were built in Maharashtra. Almost all the sugar factories were Co-operative. This is a outstanding thing in this field. The first Co-operative Sugar Factory started in Maharashtra at Pravaranagar and it spread successfully all over the Maharashtra.

Co-operative Sugar Factories were the turning point in Agricultural and agricultural business. It started a new era of development of rural Maharashtra. The farmers began to get fixed rate for the agricultural goods. So many farmers turned to this crop and area under this crop increased voilantly.

In such sugar factories, many by-products started from baggass and molasses. From this molassis they began paper mill, alcohol, spirit etc. And many other Co-operative Factories were building these Plants. In this sense sugarcane is not used only for Sugar Production but for many other

productions. These factories need many other things because these factories have big machinery so for repairing these machinery there are started many small scale industries. In this way it helped to start many small scale industries in rural areas.

These Co-operative Sugar Factories changed completely the face of rural Maharashtra in every walk of life. They started Engineering and Medical Colleges and many High Schools in rural area in Maharashtra. Because of all the facilities the rural students became educated. These educated sons of farmer will change the complete rural life in Maharashtra very shortly. These facilities changed the educational, social, economical, cultural views of rural farmer. And they brought a new light in their hard life. The life in rural area of Maharashtra became bearable and comfortable. They changed the society as a whole. Now farmers were getting fixed rates and markets to their goods. They have established Marketing Federation on Co-operative basis. So as to get good rates for their agricultural goods. For all these changes in the rural life only Co-operative Sugar Factories are responsible.

Over a third of the country's sugar is produced in Maharashtra, and Western Maharashtra accounts for 60 of the State's 76 Factories. Of these 90% are in the Co-operative sector. The turnover of the State's Sugar Factories was

Rs. 800 crores this year and the extent of the Co-operatives Control of the industry can be gauged by the fact that they employ 60,000 workers annually and 2.5 lakh seasonally. About 3 lakh farmers sale cane and about 2 lakh of them are members of Co-operatives Factories.

Thus the introduction of Co-operative Sugar Factories in Maharashtra has brought about an agricultural revolution, the result of which are an increase in the standard of living, development of education facilities and an increase in social, cultural activities.