

CHAPTER – III

**PROFILES OF FACTORY
AND
SUGAR INDUSTRY**

PROFILE OF THE FACTORY

- 1 Name of the factory : Shri Halsidhanath Sahakari Sakhar
Karkhana Ltd., Nipani.
- 2 Date of Registration No : DSK/REG-80-81 at 24-04-1981
& date
- 3 Date of commencement of : 04-01-1987
Crushing
- 4 Crushing capacity : 1250TCD
- 5 Area of operation : 43 villages in Tal – Chikodi,
Dist - Belgaum
- 1 Letter of Indent No : LI/466/82 dtd 9-8-82
- 2 License No. : IL/415/1986 dtd 30-10-86.

The Halasidhanath Sahakari Sakhar Karakhana Ltd., is situated at Nipani, Chikodi Taluka of Belgaum District. Nipani is one of the advance town in Belgaum district being most poplars and perhaps the richest town in Chikodi Taluka. It is situated at a distance of 70 km from Belgaum And 40km. From Kolhapur, District of Maharashtra. The main crops of this area are Tobacco, Sugarcane, paddy, chilies, power, groundnut etc. Nipani is popularly know as the tobacco town and has one of the important tobacco market in the country. It is famous for tobacco and Bidi production in the Country.

Size of the plant :-

The operation performance of factories highly influenced by its size of Sugar plant. The Halasugar has minimum size that is 1250 TCD daily crushing capacity.

Table 3.1 Showing the capacity and cane crushed in the Year.

Year	Daily Crushing capacity in tones	Cane crushed in tones
1997-1998	1250	193090
1998-1999	1250	288135
1999-2000	1250	222237
2000-2001	1250	225227
2001-2002	1250	229000
2002-2003	1250	213246
2003-2004	1250	166572
2004-2005	1250	141430
2005-2006	1250	210556
2006-2007	1250	241130

Source Records of the factory.

Now the Board of directors are trying to expand the factory capacity from 1250 TCD to 2500 TCD daily crushing capacity. The board of directors has already obtained permission from central Govt. to expand factory's crushing capacity.

MEMBERSHIP OF THE FACTORY

There are three classes of member of the factory.

- a) Grower members called 'A' class.
- b) Following co-op institution including non-grower member called as 'B' class.
 - i) co-operative institutions.
 - ii) The Belgaum District Central Co-operative Bank Ltd. Belgaum
 - iii) The Karnataka state agro Industries Corporation Belgaum
- c) State Govt. called 'C' classes.

Table 3.2 shows the trend in the membership of Halasidhnath Sugar Factory between 2002-2003 and 2006-2007.

Year	Grower members 'A' class	Institutions members 'B' class	Non Growers 'B' class	State Govt members 'c' class	Total
2000-01	15907	97	2954	1	18959
2001-02	15907	97	2954	1	18959
2002-03	15911	97	2959	1	18968
2003-04	15919	97	2963	1	18980
2004-05	15920	98	2964	1	18983
2005-06	15924	98	2965	1	18988
2006-07	15924	100	2965	1	18990

Source :- Annual report of the factory.

Table 3.3 showing share capital contribution from different categories of membership of 'Halasidhanath Sugar Factory'

Year	Grower Member 'A' class	Institution Member 'B' class	Non-Grower, Member 'B' class	State Govt. Member 'C' class	Total
2000-2001	15906000	3118000	-	37582000	56606000
2001-2002	15905000	3119000	-	37582000	56606000
2002-2003	16409250	176000	3178000	37582000	57345250
2003-2004	42777049	176000	3178000	37582000	83713049
2004-2005	4774000	3524000	-	37582000	88846000
2005-2006	54319000	5266000	-	37582000	97239000
2006-2007	61352000	6006000	-	37582000	104940000

Source :- Annual report of the factory

Table 3.4 showing the performance of Crushing Season
between 2002-03 to 2006-07

Year	Cane crushed In MTS	Sugar processed In Qt/s	Average Recovery (%)	Day	Rate paid per tone
2002- 2003	213244.104	258500	12.08%		750
2003- 2004	166572.98	174800	10.43%		880
2004- 2005	141430.85	151480	10.70%	115	1200
2005- 2006	210556	239930	11.41%	131	1200
2006- 2007	241130.370	275240.92	11.42%	161	811

Source :- Annual report of the factory.

Objectives and function of the Factory :-

- 1) To prepare and implements the programmer for harvesting and transportation of Sugarcane on . of the members from their field to factory to avoid delay in supply of Sugarcane to factory for crushing and to avoid probable losses of Sugar in cane.
- 2) To manufacture Sugars, jiggery & It is allied by product from the Sugarcane Supplied by the members and after and to sale these product at good price.
- 3) To install the factory for manufacture of Sugar on Large Scale basis and take all necessary steps to sum it efficiently.
- 4) To install the necessary machinery required for processing of bagasse, molasses, press mud etc. (by product) and to purchase law material for the same and to sell finished goods.
- 5) To introduce and promote the modern techniques of agriculture and cane cultivation, Sugar cane and other crops production of seeds fertilizes and agriculture implements or to supply the same to the members and the agriculturists belonging to the area of operation for achieving their overall development and welfare.
- 6) To produce electricity at factory and to make all round development of the shareholders of the concerned area.
- 7) To acquire, to purchase land and to make available on lease basis for the particular period, for construction of building required for electron of machinery and cultivation of sugarcane, other crops or such other purpose of the society.

- 8) To inspire for promoting self – confidence, thrift and co-operation amongst the members.
- 9) To raise Loans and amount by way of subsidy under the subsidized industrial housing scheme of the Govt. of India on the terms, stipulated by the Govt. (but without viola from of the bye – law) and to utilize the amount for construction of residential quarters for the employees who are covered by the factory Act 1948 and to enter into proper agreement with the employees to the terms stipulated by the Govt. for Loan and subsidy :
- 10) To prepare to participate or to implement the lift irrigation scheme, agricultural development scheme and allied business schemes for the agriculturists belonging to the area of operation of the society.
- 11) To purchase the means of transportation and to run to give and to take on hire basis.
- 12) To undertake to implement and to run various schemes for members of the society, employees and people residing in the area of operation of the society for their overall development in respect of educational, cultural, intelligence and health and to bear expenses for the same;
- 13) To install research centers and to assist the existing research institution and to undertake research work helpful to sugar cane, sugar and allied industry.
- 14) To undertake programme for construction of new roads, repairs to existing roads with a view to minimize the expenditure and time for transportation of sugarcane from field to the factory.

- 15) To install co-generation project based on bagasses and to utilize the generated electricity for the factory and to give the excess electricity to the Karnataka state electricity Board or third party on the reasonable terms and conditions and to undertake allied scheme;
- 16) To encourage self help, thrift and co-operation among members.
- 17) To raise fund for development of land, purchase of machinery and construction for implementation of above project on the assets of above projects or by mortgaging the land and fixed assets of the beneficiary members who will be benefited by the lift irrigation and other schemes.
- 18) To encourage raising food and cash crops in the area where sugar cane is not grown.

The objective of the factories are to encourage proper development of agricultural production among members on co-operative lines by introducing improved methods of agriculture and by promotions of principle of co-operative and joint farming method with a view to secure the advantage of modern large scale agricultural production to the owner of tenant cultivators.

AREA OF OPERATION :

The area of operation of 'Society' shall be the revenue territories of entire Chikodi Taluka and 1) Alur, (2) Bhairapur, (3) Kanagala, (4) Shippur, (5) Karajaga, (6) Rashing, (7) Baad, , (8) Nanganur, (9) Mattiwade, (10) Hitani, (11) ShekinHasur, (12) Konankeri, (13) Hadalaga thirteen (13) villages in Hukkeri Taluka, (1) Belgaum in Belgaum Taluka and Soundatti in Raibag Taluka, all these are part of the Belgaum district in the state of

Karnataka and (1) Arjuni, (2) Lingnoor, (3) Chikodi, (4) Gorambe, (5) Shendur, (6) Shankarwadi, (7) Vandoor, (8) Karnoor, all these eight (8) Villages in Kagal Taluka in part of Kolhapur District in the Maharashtra State. Thus it will comprise of part of Belgaum District and part of Kolhapur District, from two adjoining states.

Funds :

Funds may be required by factory in the following ways :

- i) Entrance Fees.
- ii) Issue of Shares.
- iii) Receiving Deposit from members.
- iv) Raising loan or overdraft from Karnataka state Co-operative Apex Bank, The District Central Co-operative Bank, or any other scheduled Banks or state Bank of India, industrial Finance Corporation of India or life insurance corporation of India or Housing and urban Development Corporation, New Delhi or Karnataka Housing Board Urban Co-operative Bank Ltd., Nipani.

PURCHASE OF SUGARCANE :

The factory may purchase sugarcane from any person either from the area of operation or outside the area of operation. The Board of Director shall draw up a program of Sugarcane cultivation within the area of operation of the Society and to give appropriate instructions to the producer members in this behalf.

First charge on cane :- The factory shall have the first charge on the cane to cultivated by the members for recovery of any dues from him and such dues will be recovered from the return on his cane.

ADVANCE AGAINST SUGARCANE :

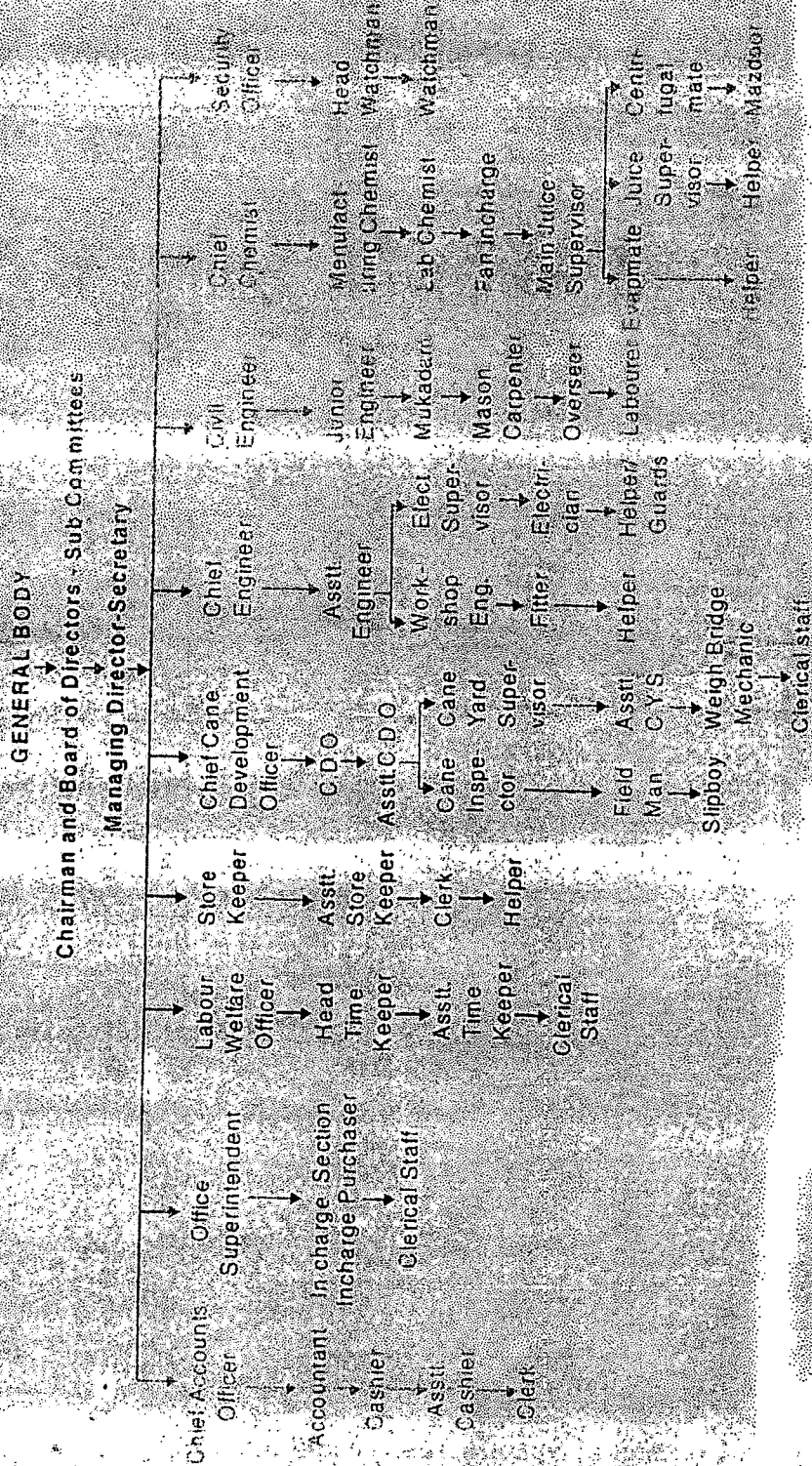
The advance against sugarcane shall be paid as per the orders of the commissioner for cane Development and directors of Sugar, Bangalore, Karnataka State to the members and non-members on receipt of their sugarcane for crushing, the prior permission of the commissioner for cane Development and Director of Sugar, Bangalore, Karnataka State will have to be obtained for advance more than this limit.

RATE OF RETURN ON CANE :

The Board of Directors shall every year, fix the rate of return on per ton of can supplied by the members. This rate will be of ex-field Sugarcane. The Board of Directors will fix the rate of that after taking into consideration the byelaws and to objects of the society and working result of the said year.

Chart 'A'

ORGANISATIONAL CHART OF HALASUGAR



MEETINGS :

Table 3.5 showing datewise meetings of General Body of HalSugar Factory.

Name of the Meetings	For the year	Date of Meetings.
Twelfth Annual General Body Meeting	1999-2000	30-09-2000
Thirteen Annual General Body Meeting	2000-2001	30-09-2001
Fourteenth Annual General Body Meeting	2001-2002	30-09-2002
Fifteenth Annual General Body Meeting	2002-2003	22-09-2003
Sixteenth Annual General Body Meeting	2003-2004	24-09-2004
Seventeenth Annual General Body Meeting	2004-2005	20-09-2005
Eighteenth Annual General Body Meeting	2005-2006	19-09-2006
Nineteenth Annual General Body Meeting	2006-2007	13-09-2007

Source :- Annual Report of the Factory.

PURPOSE OF ANNUAL GENERAL MEETINGS :

- a) Consideration of the Audited statement of accounts.
- b) Consideration of audit compliance report.
- c) Disposal of Net Profit.
- d) Review of actual utilization of reserve and other fund.
- e) Approval of the annual Budget.
- f) Creation of Specific reserve and other fund.
- g) Review of operational deficit, if any.
- h) Approval of the long-term perspective plan and the annual operational plan.

- i) Amendments of bye-laws, if any.
- j) Expulsion of members.
- k) List of employees who are relatives of members of the board or of the Chief Executive.
- l) Election and removal of member of the board, if any.
- m) Formation of code of conduct for the members of the board.

SPECIAL GENERAL BODY MEETING :-

The Chief Executive may at any time, on the direction of the Board, call a special general body meeting of the factory and shall call such within one month after the receipt of a requisition on writing from the central Register or from 1/5 of the total number of the factory.

AGRO – CLIMATIC CONDITIONS :

The setting up of the factory is mainly based on the availability of favourable climatic conditions like abundant rainfall, black soil which alone hold moisture for a long time and is required for the sugarcane crop. This determines the availability of sugarcane in an adequate quantity within the vicinity of a compait area. Sugarcane is a tropical crop and needs hot and humid climate. Fortunately this area lies under the tropical belt and it's hot climate and humid atmosphere are favourable for the growth of sugarcane.

SOCIO-ECONOMIC PROFILE :

The socio-economic and political conditions play a vital role in establishment of any factory. The basic factors that determine the location of factory are infrastructure facilities and entrepreneurship. The availability of sugarcane and future prospects for the development of sugarcane area, existence of basic infrastructure facilities, etc. permanent sources of local skilled and semi-skilled labour, adequate transport provisions, irrigation facility, in the area are also taken in to consideration. Only by fulfilling these preliminary condition in the region and then can initiated and encouraged the local can growers to establish their own sugarcane factory. The important factors which are responsible for the establishment of Sugar factories at Nipani in Belgaum are as follows :

IRRIGATION FACILITY :

The setting up of any factory is mainly based on irrigation facility. Sugarcane needs water and it cannot be raised with rain only. Sugarcane is a highly water intensive crop.

The sources of irrigation under Halasidhanath Factory.

Table 3.6 showing the irrigation facility of Halsugar Factory.

Source of Water	River	Lift Irrigation	Dams	Bore Wells	Open Well
Total	04	05	02	288	1012

Source : Personal observation

The analysis of the data as given table reveals that in the area where Halasidhanath factory is situated, irrigation facility is favourable to cane growers.

TRANSPORT FACILITY :

The transport facility is also important for setting up of any sugar factory for the movement of raw material and output easily.

Table 3.7 showing road linkage of the factory.

Name of the roads	National High-way	District Main Road.	Taluka Main Road.	Village or Rough Road.
No. of Roads.	01	05	09	205.

Source : Personal observation

The table show that the Halasidhanath Factory had sufficient road facility. Factory is located between Belgaum and Kolhapur on the side of National Highway No. 4 a little away from Nipani at a distance of three Kms. The five important District main roads are linked with the factory area village roads are helping transport of raw material and sugarcane to this factory.

AVAILABILITY OF LABOUR :

Labour is one of the factor of production and which is prime consideration for the establishment of sugar factory to harvest and transport the sugar cane about 2000 labourers are essential for 1250 T.C.D. daily crushing capacity.

LABOUR AND STAFF CLASSIFICATION :

General Classification are :

- 1) Managerial, 2) Supervisory category, these are two types
- (a) Technical (b) Non-Technical.
- 3) Labour force is divided in to :
 - (a) Skilled (b) Semi-skilled & (c) On skilled.

Table 3.8 shows approved strength and appointed as on 2006 of Halasugar factory.

Appointed Strength		Approved Strength	
Permanent	Seasonal	Permanent	Seasonal
202	264	224	274

Source :- Factory records.

Table 3.9 showing wage structure of factory as on 2006.

Grade of Employee	Scale
Supervisory 'A'	2600 – 75 – 3350 – 90 – 4250 – 105 – 5825
Supervisory 'B'	2400 – 60 – 3000 – 65 – 3650 – 70 – 4700
Supervisory 'C' and Clerical 1 st	2300 – 55 – 2850 – 60 – 3450 – 65 – 4425
Highly skilled & Clerical 2 nd	2200 – 50 – 2700 – 55 – 3250 – 60 – 4150
Skilled A & Clerical 3 rd	2100 – 45 – 2550 – 50 – 3050 – 55 – 3850
Skilled B & Clerical 4 th	1950 – 40 – 2350 – 45 – 2800 – 50 – 3550
Semi skilled	1800 – 30 – 2100 – 35 – 2450 – 40 – 3050
Unskilled	1700 – 25 – 1950 – 30 – 2250 – 35 – 2775

Source :- Factory records

These workers are paid on monthly basis and payment are made before the seventh day of every month.

During the production season, the working hours is divided into three shift.

First Shift	:	4.00 A.M. to 12.00 P.M.
Second Shift	:	12.00 A.M. to 8.00 P.M.
Third Shift	:	8.00 p.m. to 4.00 P.M.
General	:	8.30 A.M. to 5.30 P.M.
Office Time	:	10.30 A.M. to 5.30 P.M.

RECRUITMENT :

If factory fails to procure the services of persons with required qualifications, skill and caliber continuously a time may come ultimately when all the qualified persons retired and then the factory is bound to suffer. Recruitment, therefore, is the corner stone of the whole personnel structure. According to the nature of work qualifications are fixed by board.

The recruitment of employees in Halasidhanath Sugar factory is carried out in three ways. They are as under :

- i) Appointment by the State Govt.
- ii) Recruitment by recruitment committee of the factory.
- iii) Recruitment by the Board of Directors.

i) Appointment by the State Government :

Appointment by the state Govt. include the appointment of the Managing Director, Secretary, Chief Accountant and Internal Auditors to the factory. Only these four important posts are filled by the Govt.

ii) By Recruitment Committee of the Factory. :

The recruitment committee includes chairman and two Board of Directors, Employment officer of the District, Managing Director, Representative of Directorate of Sugar Co-operative Factory and backward and social welfare officer. General the permanent post are recruited by the recruitment committee.

iii) By the Board of Directors :

The Board of Directors recruit generally the labour force which is required for the factory every year. Below the level of first division clerks employee like junior clerk, skilled, unskilled and Semi skilled posts are recruit by the Board of Director.

TRAINING :

It is application of knowledge. It gives employees awareness of the rules and procedure to guide their work. It attempts to improve performance and employees. Training is essential to new recruit and also orient the old ones in acquiring new skill. Training makes man perfect.

The Hal Sugar factory send some technical person for training from time to time. The MD, Secretary, Cane Development Officer etc. attend some important seminars and conferences which are useful for further development of the factory. The Halasugar factory send a small number of staff for training that is hardly 30 to 40 members.

PROMOTION :

Promotion definitely helps the person to perform functions efficiently and build up healthy competitive spirit among the employees.

In the factory, the Board of Management promotes some staff within the factory on the basis of seniority cum merit principle but some time caste and party influence are taken into consideration.

SOME FACILITIES PROVIDE TO EMPLOYEE BY**HALASUGAR FACTORY :****1) HOUSING FACILITY :**

The employee working at Halasidhanath Sugar Factory have been provided some residential quarters. Remaining labourers commute from their local area. The residence were also having the provision of free water supply and electricity. The Halasidhanath Sugar factory quarter's site area is ten acres and at present provided accommodation to 50 families is residing at quarters.

2) MEDICAL FACILITY :

The Halasidhanath Sugar have this own Hospital in their factory area with a medical officer, compounded, a dresser and a peon. All the workers are entitle for medical treatment. Year wise medical expenses of Halasidhanath Sugar since 2002-2003 to 2006-2007 in Table 3.10

Year	Amount in Rs.
2002-2003	81028
2003-2004	21710
2004-2005	44699
2005-2006	119440
2006-2007	159905

Source : Annual Report of the Factory.

3) EDUCATION FACILITIES :

The Halasidhanath Sugar factory has school in its premises.

4) CANTEEN :

The Halasidhanath Sugar has its own canteen for the employees. Factory has provided free accommodation, furniture, water, electricity etc. in their canteen.

5) UNIFORMS :

The Halasidhanath Sugar factory have provided uniforms only to watchmen, attenders and security officers and not for all the employees.

6) WORKING CONDITIONS :

The Halasidhanath Sugar factory have taken every possible care to provide the pleasant atmosphere for their employee. The factory provides satisfactory salary, adequate opportunities for promotion, facility for leave. An employee can get 12 days causal leave; 06 days sick leave and 13 days leave without pay in the factory.

DISPOSAL OF NET PROFIT :

Subject to the provision of the act and rules framed there under, the net profit of the factory shall be distributed by the General Body as follows :

- i) Transfer as least 25% of net profit to the reserve fund;
- ii) Credit 1% of its net profit to the co-operative education fund being maintained by the National Co-operative union of India.
- iii) Transfer 10% of the Net Profit to the Reserve Fund for meeting unforeseen losses.
- iv) Payment of dividend to the members at rate of not exceeding 10% of the paid up share capital of the member.
- v) Transfer an amount not exceeding 5% of the Net profit for donation for any purpose connected with the development of co-operative movement.
- vi) Payment of ex-gratia amount to employees at the rate not exceeding 10% of the net profit.
- vii) Remaining undistributed and unutilized net profit shall be added to the reserve fund.

INDIAN SUGAR INDUSTRY :

India is the largest consumer and second largest producer of sugar in the world. The Indian sugar industry is second largest agro-industry located on the rural India. The Indian sugar industry has a turnover of Rs. 500 billion per annum and it contributes almost Rs. 22.5 billion to the central and state exchequer as tax, cess, and excise duty every year. It is the second largest agro-processing industry in the country after cotton textiles. With 453 operating sugar mills in different parts of the country, Indian sugar industry has been a focal point for socio-economic development in the rural areas. About 50 million sugarcane farmers and a large number of agricultural laborers are involved in sugarcane cultivation and ancillary activities, constituting 7.5% of the rural population. Besides, the industry provides employment to about 2 million skilled workers and others mostly from the rural areas.

The industry not only generates power for its own requirement but surplus power for export to the grid based on byproduct bagasse. It also produces ethanol, an ecology friendly and renewable energy for blending with petrol.

The sugar industry in the country uses only sugarcane as input, hence sugar Companies have been established in large sugarcane growing states like Uttar Pradesh, Maharashtra, Karnataka, Gujarat, Tamil Nadu, and Andhra Pradesh. These six states contribute more than 85% of total sugar production in the country; Uttar Pradesh and maharashtra together contribute more than 57% of total production. Indian sugar industry has grown horizontally with

large number of small sized sugar plants set up throughout the country as opposed to the consolidation of capacity in the rest of the important sugar production countries, where greater emphasis has been laid on larger capacity of sugar plants.

SUGAR INDUSTRY GLOBAL

Brazil and India are the largest sugar producing countries by China, USA, Thailand, Australia, Mexico, Pakistan, France and Germany. Global sugar production increased from approximately 125.88 MMT in 1995-1996 to 149.4 MMT in 2002-2003 and then declined to 143.7 MMT in 2003-2004, whereas consumption increased steadily from 118.1 MMT in 1995-1996 to 142 MMT in 2003-2004.

The consumption is projected to grow to 160.7MMT in 2010, and 176.1 MMT by 2015 According to ISO, the world sugar output is forecasted to reach 145.0 MMT and consumption to reach 147.0 MMT in 2004-2005, resulting in a deficit of around 2 MMT in 2004-2005. further, since October 2003, nearly 5 MMT of surplus sugar are expected to have been removed from the world sugar balance, reducing the stock/ consumption ratio to less than 42%.

Indian sugar industry has grown horizontally with large number of small sized sugar plants set up throughout the country as opposed to the consolidation of capacity in the rest of the important sugar producing countries, where greater emphasis has been laid on larger capacity of sugar plants. The average sugarcane crushing capacity in India, Brazil and Thailand is given below:

Table 3.11 Showing the

AVERAGE SUGARCANE CRUSHING CAPACITY

Country	Age. Capacity (TCD)
Thailand	10,300
Brazil	9,200
India	3,500

(Source : ISMA Website accessed on May 16,2005)

MAIN PRODUCTION CENTER

In India, major sugarcane growing states are Uttar Pradesh, Maharashtra, Karnataka, Gujarat, Tamil Nadu and Andhra Pradesh. These Six states contribute more than 85% of total sugar production in the country; Uttar Pradesh and Maharashtra together contribute more than 57% of total production.

SUGAR PRODUCTION AND SUPPLY

The sugar industry in the country uses only sugarcane as input, hence sugar companies have been established in large sugarcane growing states like Uttar Pradesh, Maharashtra, Karnataka, Gujarat, Tamil Nadu and Andhra Pradesh. These Six States contribute more than 85% of total sugar production in the country; Uttar Pradesh and Maharashtra together contribute more than 57% of total production in 2002-03 and 2003-04.

Table 3.12 showing the State-Wise Sugar Production in India

State-Wise Sugar Production.					
Particulars	Sugar Season (October-September)				
	2004-05	2005-06	2006-07	2006-07	2007-08
Maharashtra	22.17	51.97	90.95	89.69	88.50
Uttar Pradesh	50.37	57.84	84.75	84.61	73.00
Karnataka	10.40	19.43	26.59	24.99	27.93
Tamil Nadu	11.26	21.70	25.99	17.62	16.77
Andhra Pradesh	9.82	12.36	16.80	16.55	13.24
Gujarat	7.97	11.68	14.17	13.97	13.60
Haryana	4.00	4.09	6.52	6.38	5.77
Punjab	3.15	3.38	4.86	4.70	5.09
Uttarakhand	3.81	4.26	5.35	5.35	3.98
Bihar	2.53	4.22	4.51	4.48	3.36
Madhya Pradesh	0.82	1.12	1.84	1.79	1.92
Others**	0.61	0.62	0.95	0.96	0.86
ALL-INDIA	126.91	192.67	283.28	271.09	254.02

(Source : ISMA Website accessed on May 16,2005)

According to official estimates, total output in the season up to May, 31 amounted to 254.02. It, down from the 271.09. It for the corresponding period of 2006-07. Mills have closed down for the season in virtually all States, barring Tamil Nadu (TN), Maharashtra and Karnataka.

SUGAR IMPORTED :

To remedy the current sugar shortage, the Government of India initiated measures to support imports of raw sugar by the mills against future export commitments. Presently, almost all of the sugar imported into India is raw sugar imported by the mills for processing into refined sugar under the 'Advanced Licensing Scheme (ALS)'. Indian mills are finding it advantageous to import raw sugar to process and sell in the domestic market, as domestic sugar prices are currently well above the international prices, even after accounting for processing, transportation, and distribution costs, and future export obligations.

Under the ALS, mills are allowed to import raw sugar at zero duty against a future export commitment. The mills can refine the imported raw sugar and sell it in the domestic market, but must re-export 1.00 ton of refined sugar for every 1.05 ton of raw sugar imported within a specified period, which is currently 36 months.

Trade sources report that about 1.35 million tons of raw sugar was imported from October, 2004 through March, 2005 at prices ranging from \$200 to \$255 per ton CIF at Indian port, mostly from Brazil and South Africa. With the recent strengthening of international prices, imports are expected to slow as compared to the first half of the marketing year, and SY 2004-05 imports are expected to reach 2.0 million tons.

India imposes an ad valorem duty of 60 percent on the CIF value, plus a countervailing duty (CVD) of Rs. 850 (\$19.50) per ton, on 'general' imports of raw and refined sugar (tariff code 1701). The CVD is in lieu of the local taxes and fees on the domestic sugar (central excise tax of Rs. 340 (\$7.80) per ton, additional excise duty of Rs. 370 (\$8.50) per ton and cess of Rs. 140 (\$3.22) per ton. The imported sugar is also subject to non-tariff barriers like the 'levy sugar obligation', the market quota release system, and other local regulations applicable to domestic sugar. The high import duties and other non-tariff barriers preclude imports of refined sugar by traders.

SUGAR EXPORTED :

Export of sugar from the country has been de-canalized since 1997, enabling sugar mills to undertake exports on their own and to compete directly in the international market. Further, exports from a mill do not form part of the quota under the market quota release system. Despite this, India has not been a consistent exporter of sugar in the past. It has been exporting sugar occasionally in periods of sugar surpluses. In the last five years it exported 4.07 MMT sugar. In these years, India had an average exportable surplus of 6.23 million tones every year.

Against this, on an average, the sugar exported was only 0.81 MMT or 7.69% of the total exportable surplus. This is primarily because domestic prices have remained higher than international prices. However, should quotas for LOME / APEC for India increase; there will be enough incentive for Indian manufacturers to export.

Table 3.13 showing the **EXPORTABLE SURPLUS, SUGAR STOCK & ACTUAL EXPORTS.**

Year	Closing Stock (MMT)	Exportable Surplus (MMT)	Actual Export (MMT)	% export of Surplus Stock.
1999- 00	9.38	5.38	0.07	1.30
2000- 01	10.4	6.4	1.2	18.75
2001- 02	11.3	7.3	1.1	15.06
2002- 03	11.6	7.6	1.5	19.73
2003- 04	8.5	4.5	0.2	4.44
Aver	10.23	6.23	0.81	7.69

(Source : ISMA Website accessed on May 16,2005)

SUGAR CONSUMPTION OF INDIA :

Total Indian Consumption of Sugar has grown at a Compounded Annual Growth Rate of 3.6% from 14.7 MMT in 1997-98 to 18.2 MMT in 2003-2004.

Apart from white sugar, India also consumes alternate sweeteners – gur and Khandsari, which are placed at about 9 MMT per annum. Taking into account all the 3 sweeteners i.e. white sugar, gur and Khandsari, on a per capita basis, Indian consumption is more than the world average (See the table below). However, white sugar consumption is much lower than the world average.

The consumption of white sugar in India is generally urban based. In rural areas the alternate sweeteners gur and Khandsari are consumed in larger quantities. The consumption of sugar in urban areas in some of the Indian states with higher GDP and income levels, matches favourably with various developed countries. The highest per capita consumption of sugar is in the states of Punjab and Haryana which are adjoining the sugar producing region of western UP. As income levels and GDP rises, it can be expected that there will be a gradual shift from consumption of alternate sweeteners to white sugar. Also, as can be seen from the following table, the total per capita consumption of sweeteners in urban India is higher than total India average by around 5 kg. per annum. This clearly implies that per capita consumption of sweeteners in rural India is much lower. It can be expected

that this gap will close with increase in urbanization leading to a growth in the total sweeteners market in India.

Table 3.14 showing the **PER CAPITA CONSUMPTION OF SUGAR IN URBAN INDIA**

States	Kgs. Per Annum.
Punjab	71.5
Haryana	68.5
Maharashtra	40.9
Gujarat	40.9
Kerala	41.5
Uttar Pradesh	35.2
Tamil Nadu	29.1
Karnataka	23.3
All India	31.5

(Source : ISMA Website accessed on May 16,2005)

SUGAR PRICING :

The Government has been following a dual pricing policy for sugar, under which, a fixed percentage of the total production is to be necessarily sold by the sugar mills to the Government or its nominees at a pre-determined price referred to as "levy sugar". The sugar so collected is distributed to consumers through Fair Price Shops under the Public Distribution.

The balance sugar referred to as “free sale sugar” can be sold in the open market. Free sale sugar is also regulated to some extent, by way of a release mechanism, whereby the Government determines the quantum of sugar that can be sold every month. This helps the Government maintain stability in sugar prices, by regulating the supply of sugar based on the underlying demand. Thus, the Government statutorily determines the price of levy sugar, while the price for the free market sugar is market determined, affected to some extent by the release mechanism. As per Tuteja Committee, the Central Government decided, in February 2002, to dispense with the release mechanism with effect from April 1, 2003. However, in March 2003, it was decided to continue with the release mechanism up to September 2005 and to review the position in February, 2005. The Tuteja Committee has also recommended that the Central Government may dispense with the release mechanism for free sale sugar with effect from October 1, 2005.

The levy imposed has reduced from 40% in the 1990s to 10% effective from March, 2002. The Tuteja committee has also recommended continuing with the 10% levy obligation level. The Committee has also recommended that beyond the initial time limit, a maximum of 3 months may be permitted for lifting of levy sugar by the Government, where after, the levy sugar quota would automatically be converted into free sale sugar, without any recurring levy obligation on this portion of levy sugar.

Table 3.15 showing the LEVY OBLIGATION OVER THE YEARS

Year	Levy Sugar : Free Sale Sugar Ratio
1996-1997	40:60
1997-1998	40:60
1998-1999	40:60
1999-2000	40:60
2000-2001	30:70 (w.e.f. January 2000)
2001-2002	15:85 (w.e.f. February 2001)
2002-2003	10:90 (w.e.f. March 2002)
2003-2004	10:90
2004-2005	10:90

(Source : ISMA Website accessed on May 16,2005)

Sugar Industry Cycle

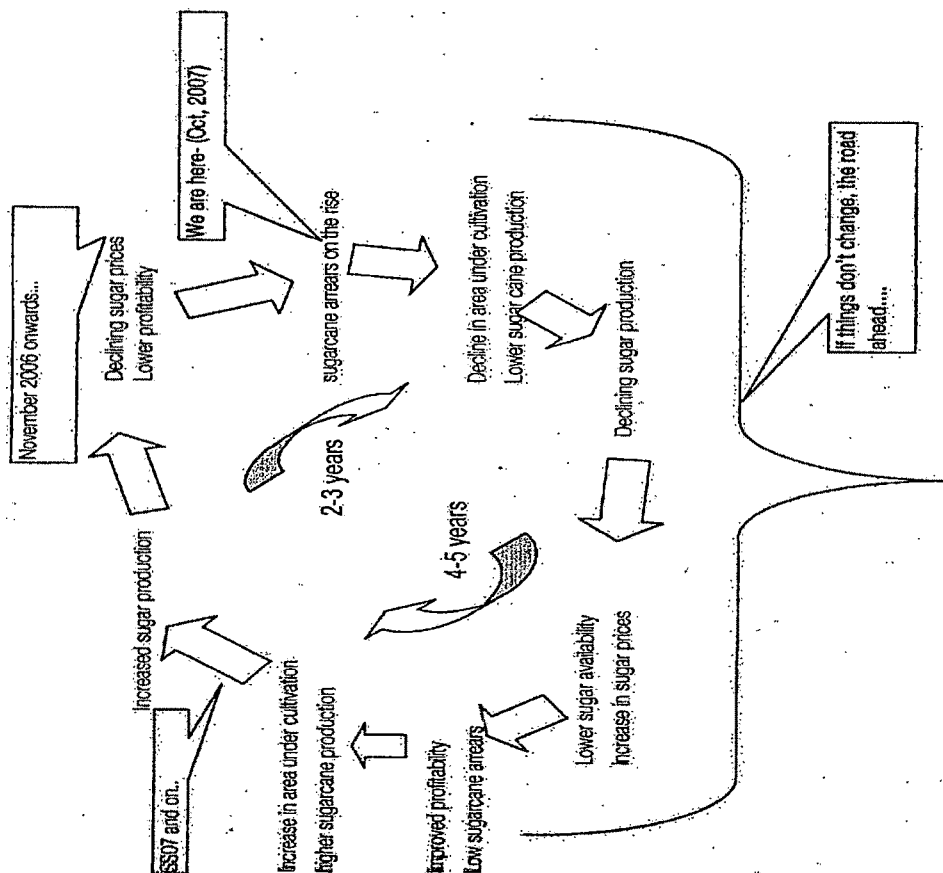
The domestic sugar industry typically follows a 5 to 7 years cycle. Higher sugar cane and sugar production results in a fall in sugar prices and non-payment of dues to farmers. This compels the farmers to switch to other crops thereby causing a shortage of sugarcane, causing an increase in sugarcane prices and extraordinary profits. Taking into account the prevalent higher prices for sugarcane, farmers then switch back to sugarcane.

For example, the bumper crops in sugar seasons (October – September) 2001-2002 and 2002-2003 resulted in higher production of sugar and consequently lower prices for sugar. This coupled with rising SMP/SAP in Uttar Pradesh, resulted in large sugarcane arrears leading to harsh times for sugarcane growers. To manage these arrears, mills had to approach the courts to allow them to sell over and above their monthly quota under the

release mechanism. The resulting deluge of sugar led to further decline in sugar prices.

Taking into account the experience of 2002-2003, many farmers shifted to other crops leading to drop in sugarcane production in the country, as a consequence of which sugar production in 2003-04 was low. Liquation of accumulated stocks led to increasing prices in 2004-2005. To attract more sugarcane for their factories sugar manufacturers are expected to make higher and prompt payment to farmers during the net season. As shown in the illustration below, the Indian Sugar Industry has entered an up-cycle, which typically last 3-4 years.

SUGAR CYCLE :



SUGAR AVAILABILITY DEPENDS ON :

- Area under sugarcane cultivation: The area under cultivation of Sugarcane in the proximity of the mill determines the amount of sugarcane that can be made available. Crops switching from Sugar Cane to other crops effectively lowers the area under cultivation of sugar cane.
- Climate and irrigation facilities: Sugarcane is a tropical crop which requires adequate water and sunshine. In addition, monsoons can affect the crop yield and quality of the crop. The state of UP is supplied water from the Ganga, which along with its tributaries and associated canal system accounts for 34% of the total river water available in the country (Source: Ministry of Water). This available perennial water reduces the state's reliance on seasonal monsoons.
- Crop diseases and pests: Crop diseases affect both the quantity and quality of sugarcane. Harvests have been impacted severely by insects and pests (Eg. Wholly Aphid). Several Sugar factories are currently investing in research and development in the field of Entomology to control such pest outbreaks.
- Sugarcane yield: This is the total sugarcane output per hectare of land. It depends upon several factors like climate, soil, variety of sugarcane, and development measures undertaken by sugarcane farmers, agencies, co-operatives, government, and sugar manufacturers. Agricultural

engineering and extension services, usually undertaken by individual sugar mills, have played an important role in increasing sugarcane yields.

- Diversion of sugarcane to other products: The sugarcane producers may not supply the sugarcane to a sugar manufacturer and divert the production to other products like gur, and Khandsari which are form of crude sugar.

Table 3.16 showing the **SUGARCANE AREA AND PRODUCTION**
FROM 1980 – 1981 TO 2004-2005

Year	Area under sugarcane (Million hectares)	Sugarcane Production (MMT)
1980-81	2.7	154.3
1990-91	3.7	241.1
1999-00	4.2	299.2
2001-02	4.4	298.4
2002-03	4.3	281.6
2003-04	3.9	221.2
2004-05	3.7	201.9

(Source : ISMA Website accessed on May 16,2005)

From a level of 154 MMT in 1980-81, the sugarcane production increased to 241 MMT in 1990-1991 and further to 296 MMT in 2000-2001. Since then it has been hovering around 300 MMT until few years. In the

season 2003-2004, however, sugarcane production declined to 236 MMT mainly due to drought.

Sugarcane occupies about 2.7% of the total cultivated area and it is one of the most important cash crops in the country. The area under sugarcane has gradually increased over the years mainly because of much larger diversion of land from other crops to sugarcane by the farmers for economic reasons. The sugarcane area has, however, declined in the year 2003-04 mainly due to drought and pest attacks. Following table shows area under sugarcane farming and total can production govt. regulation.

- The Essential Commodities Act (ESA) was amended and the sugar release mechanism was brought within the direct purview of the ESA. This will bring discipline in the sugar release mechanism by making it legally enforceable.
- In the past, the Government permitted only small sized units of 1,250 TCD and 2,500 TCD. Expansions for 5,000 TCD and above were discouraged. The industry has grown horizontally as a result of this. The Government of India de-licensed sugar sector in August 1998 encouraging entrepreneurs to set up sugar mills without a license but at a distance of 15 Kms away from existing factories. The delicensing is applicable not only for new capacity initiatives but also for expansion of existing capacities.

-
- The Government permitted futures trading in sugar and granted approval to three Companies for setting up Future Exchange. Consequently, certain sugar Companies floated Public Limited Companies to cater to this new segment. Future trading will allow sugar companies to hedge and manage their risk better.
 - The Government of Uttar Pradesh has issued a new UP Sugar Policy. The UP Sugar Policy recognizes the need to attract new private mills because the Government sector and the Co-operative sector may not be able to put up these mills due to constraints of funds. The incentive package under the UP Sugar Policy includes capital subsidies, reimbursement of transportation costs of sugar, etc. For details of the policy and other regulations governing the sugar industry, see the section titled “Regulations and Policies” of this Draft Red Herring Prospectus.

Some of the Acts, Orders, Rules and Regulations relating to the sugar industry are :

The Essential Commodities Act, 1955.

Sugar (Control) Order, 1966

Sugarcane (Control) Order, 1966

The Sugar Undertaking (Taking Over of Management) Act, 1978

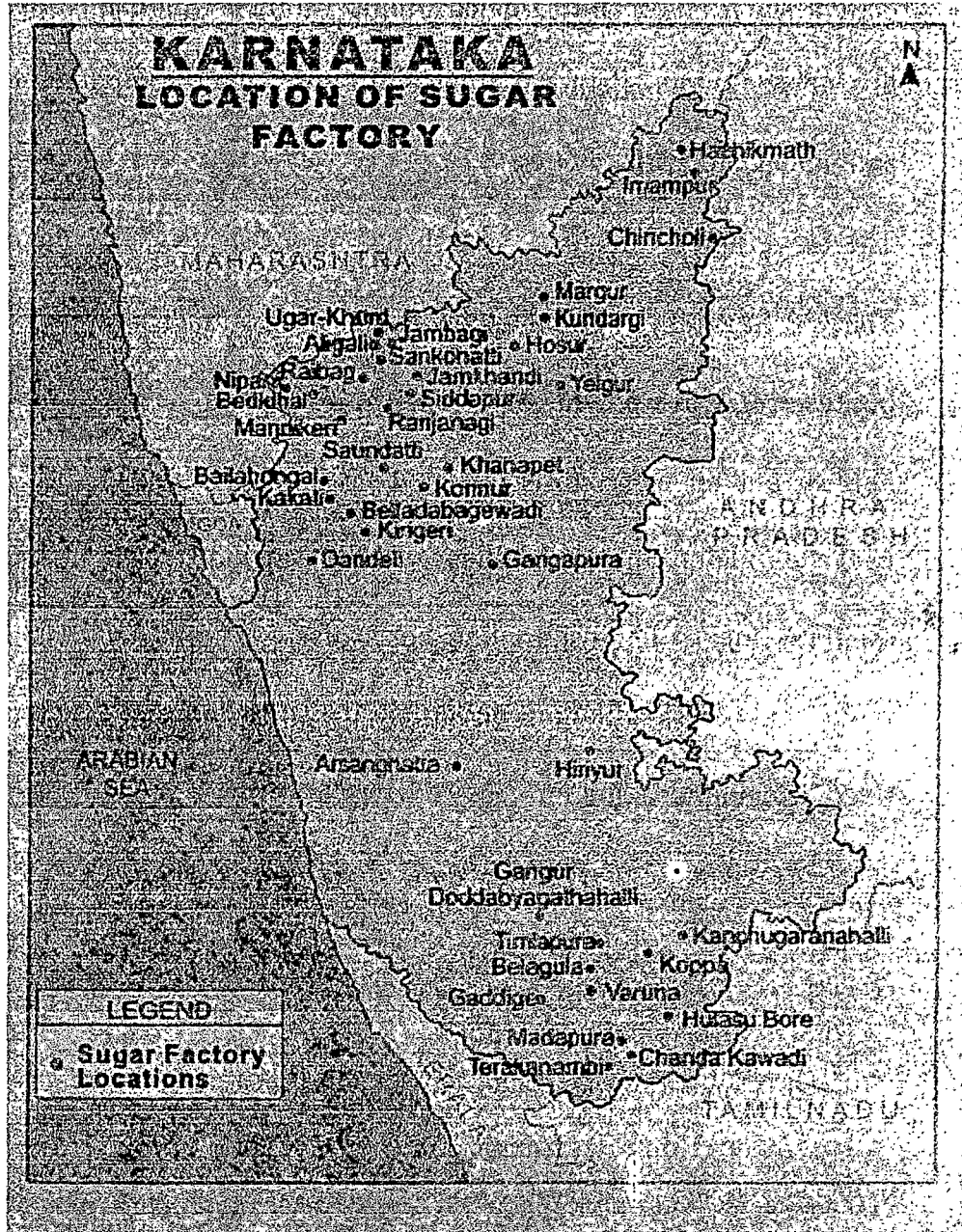
Levy Sugar Supply (Control) Order, 1979

Levy Sugar Price Equalization Fund Act, 1976

Sugar (Packing and Marking) Order, 1970

Sugar Development Fund Act, 1982 and Rules (1983) made there under – as amended from time to time.

Chart 'B'



The post-independence period witnessed remarkable growth in the cooperative sector; despite corruption and financial misappropriations, cooperative sugar factories continue to play an important role in sustaining the agrarian economy. The cooperative principle was applied to other sectors such as dairying, fishing, health, marketing, farming and finance. Added to this list are multi-State cooperative societies in boundary areas.

The cooperative movement also underlines the philosophy of self-help groups (SHGs), the majority of which are run by women.

According to official sources, there are 5,49,000 cooperative societies in the country with 23 crore members. In Karnataka, there are 32,804 cooperative societies with 1.95 lakh registered members, and the State stands third in the country after Gujarat and Maharashtra. However, 2,514 societies have now become defunct and there are valid apprehensions of many going bust as they have debts to clear.

In Karnataka, sugar factories have become synonymous with the cooperative movement and their performance are considered as a measure of the success or failure of the movement. But these institutions are slowly turning out to be financially unviable: many sugar factories are in the doldrums and have stopped operations, helplessly looking for government aid or private funds for revival. Will the cooperative movement witness the same pace of growth and continue to get sponsorship from the Government

at a time when the latter is aggressively promoting globalisation and privatisation? Will these institutions reconcile with the changing economic order and rules of the game, and strive to strengthen their position? How will the media play its role in helping these institutions to sustain themselves, are some of the questions that the seminar will address.

Karnataka Sugar Institute is an autonomous body set up by the Govt. of Karnataka jointly with the sugar industry in the State. The Institute is housed at Zadshahapur, Belgaum-Khanapur NH No. 4A, Belgaum-590 014 (Ph.:0831-2412466/2412477/3090844; Fax: 0831-2412477; e-mail: ksibgm@yahoo.com)

Mohd. Rehmatullah, an Officer of the Rank of Additional Registrar of Co-operative Societies is presently the Director of KSI

Table 3.17 showing the Sugar industry profile
(As of season 2006-07)

Sl.N	Particulars	2006-07	
		Karnataka	All-India
0			
-	-		
1	Sugarcane acreage (Hectares)	-	-
2	Sugarcane prodn.(lakh tonnes)	-	-
3	Sugarcane yield (tonnes/Hectare)	-	-
4	Cane crushed (lakh MTs)	251.49	2784.23
5	Sugar production (lakh MTs)	26.60	283.00
6	Avg. recovery (%)	10.58	10.16
7	Molasses prodn.	10.56	129.83

8	No. of factories worked	47	500
9	Duration of crushing-season (days simple avg.)	180	165
10	Ethanol production (No. of units)	9	-
11	Co-generation of power (No. of units)	19	80

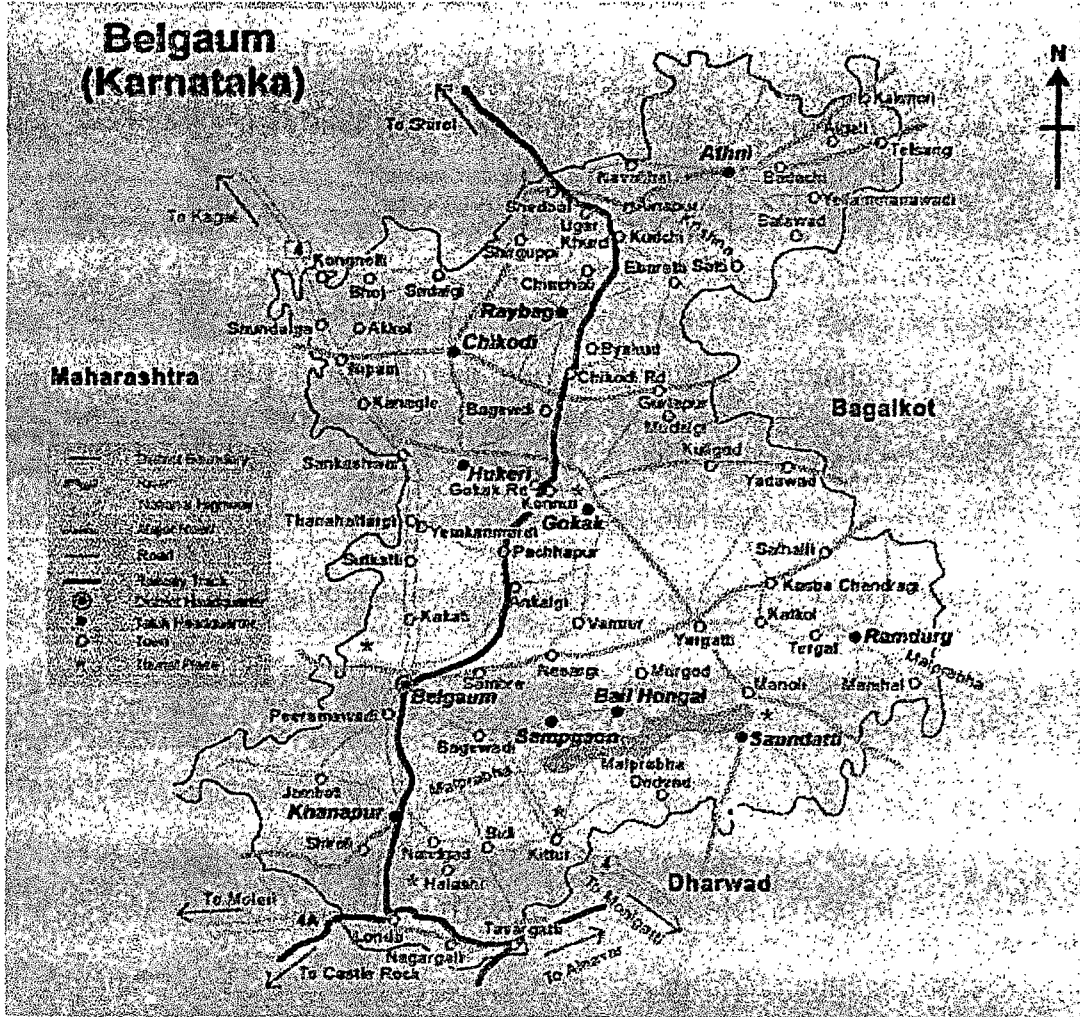
Karnataka Sugar Industry ranks 3rd in terms of its contribution of sugar in the total sugar production in the country. The Sugar Industry in Karnataka is able to manufacture sugar in such huge quantities due to the fact that sugarcane is abundantly available in the state. In fact, Karnataka stands 4th in the country in the cultivation of sugarcane. The Sugar Industry in Karnataka has around 41 sugar factories which are distributed all over the state. The various locations of the sugar factories of Karnataka Sugar Industry are Konnur, Varuna, Koppa, Madapura, Dandeli, Jambagi, Hosur, Margur, Yelgur, Siddapur, and Arsanghatta. The major benefits of Karnataka Sugar Industry are that it has generated many facilities in the state such as communication, employment, and transport. It has also benefited the state by helping in the development of the rural areas of the state by mobilizing the various resources of the villages. The major sugar factories of Karnataka Sugar Industry are: Bannari Amman Sugar Ltd. with the sugarcane crushing capacity of 5000 TCD Davangere Sugar Company Ltd. with the sugarcane crushing capacity of 2500 TCD Sri Chamundeswari Sugars Ltd. with the sugarcane crushing capacity of 4000 TCD Godavari Sugar Mills Ltd. with the sugarcane crushing capacity of 7500 TCD Mysore Sugar Company Ltd. with the sugarcane crushing capacity of 5000 TCD Athani Farmers Sugar Factory Ltd. with the sugarcane crushing capacity of 2500 TCD The Sugar

Industry in Karnataka can be divided into 2 groups that are the unorganized sector which comprises of the producers of the traditional sweeteners such as gur and khandsari and the organized sector which consists of the sugar mills. The manufacture of khandsari and gur is considered to be rural industry and are produced in huge quantities. The gur and khandsari are consumed mostly by the rural people as sources of nutrition and also as sweeteners. The total sugar production of Karnataka Sugar Industry came to 17.98 lakh tons in 2002-2003, in 2003-2004 the figure came to 11.57 lakh tons, and in 2004-2005 the figure stood at 13 lakh tons.

The Sugar Industry in Karnataka contributes around Rs. 36 crore per year to the state exchequer in central excise duty. It also contributes more than Rs. 900 crore in the form of turnover tax and sales tax to the state exchequer. The state government in an attempt to boost Karnataka Sugar Industry has set up the Karnataka Sugar Institute (KSI) which has emerged as a center for education and training for sugar technology. The Karnataka Sugar Institute also provides important support to the Sugar Industry in Karnataka by doing R&D in the various aspects of sugarcane processing and production.

Karnataka Sugar Industry has contributed a great deal to India's total level of sugar production and thus has helped the country to meet its demand for sugar. The Karnataka state government must make more efforts in order to boost the sugar industry in Karnataka.

Chart 'C'



Belgaum District is situated in the North Western part of Karnataka State adjoining Goa and Maharashtra states, Belgaum is a mixed geographical area of Western Ghats, rain shadow and plains.

Co-operative Movement in Belgaum District is very active and it is under progress constantly. The co-operative societies are striving hard for the overall development of its members. The success of co-operative movement in Maharashtra state has much influence on the co-operative societies in this district thereby encouraging the co-operative movement in this border district of Karnataka.

Belgaum district is having distinguished place in the co-operative movement of Karnataka due to having unique type of co-operatives. The members of these co-operative societies and public in general have good faith in the principles of co-operation and keeping faith in movement, are co-operating in the overall development of co-operative societies in the district. There are 3187 co-operative societies in existence in the district with a membership of 20,97,652.

Belgaum District has 13 sugar factories, of which 7 are now working and remaining are under various stages of construction and organisation. During 1999-2000, 35,45,867 M.T. sugarcane has been crushed and produced 40,41,432 Quintals of sugar. The district is having one central Co - Op Bank with membership of 2192 and Rs. 3036.00 Lakhs share capital. The bank has advanced loans of Rs. 203.71 Crores to the co - operative societies and also individuals and earned Rs. 365.09 Lakhs profit. The Belgaum District is having one milk producers' union with 527 Milk Societies as its members. The value of milk purchased is Rs. 1828.13 Lakhs and sales is Rs. 2004.77 Lakhs during 2000-2001. In the district there are 10 talukas marketing societies of which 7 are working with Rs. 170.82 Lakhs share

capital and Rs. 770.45 Lakhs working capital. During the year 2000-2001 these societies have purchased Rs. 3769.39 Lakhs worth goods and sold Rs. 3848.92 Lakhs. There are 46 urban Co- op banks with 3 women Co - op banks in the district with 217950 members and Rs. 2718.57 Lakhs share capital. These banks' working capital is Rs. 49745.37 Lakhs and advanced Rs. 21315.01 Lakhs loan to the members. There are 10 taluka primary Co - op Agriculture and Rural Development Banks in the District, these banks are having 67,694 members with Rs. 491.98 Lakhs share capital and Rs. 6525.61 Lakhs working capital. These banks have advanced loans Rs. 882.42 Lakhs to its members. 535 Primary Agriculture Co - op Credit societies in the district with 4,45,136 members and Rs. 4218.66 Lakhs share capital. These societies are having Rs. 37494.24 Lakhs working capital and advanced Rs. 114804.74 Lakhs loans to its members.

Belgaum District is having special types of societies, of which some are:

- The Belgaum Manufacturers Coop. Industrial Estate, Belgaum
- Hukkeri Rural Electric Co - Operative Society Ltd., Hukkeri
- The Sports Promotion and Development Coop. Ltd., Chandargi
- Athani Taluka Grape Growers and Processing Coop. Society Ltd., Athani
- Shri Jagadguru Gurusiddeshwar Coop. Hospital and Research Institute Ltd. Ghataprabha