

CHAPTER II
SUGAR SCINARIO IN KARNATAKA

- 2.1 Introduction**
- 2.2 Geographical Outline Of The State**
- 2.3 Sugarcane Crop Growth Tend**
- 2.4 Dispersion Of Sugarcane Crop In
The State**
- 2.5 The Sugarcane Verieties In
Karnataka State**
- 2.6 Performance And Problems Of
Sugar Industry In Karnataka**

CHAPTER-II

SUGAR SCENARIO IN KARNATAKA

2.1 INTRODUCTION

The sugar industry is one of the largest agro-based industries in the country, next only to the cotton textile. It is generally observed that sugar industry being situated mostly in rural area, are playing the vital role in upliftment of the rural economy. It occupies a prominent position in the industrial sector of the country. During the recent years, sugar industry has acquired even more important position in earning the sizeble foreign exchanges by exporting the sugar.

The state of Karnataka has a prominent place in the sugar economy of India. During 1992-93, the state shared 8.0 percent of the total sugar production in the country. The state occupies the 4th rank in the country both in sugar production and sugarcane production. The total sugarcane production during 1994-95 was 30.33 million tonnes which was 11.2 percent of total sugarcane production in the country. The state has a ample potentials of the development of sugar industry.

2.2 GEOGRAPHICAL OUTLINE OF THE STATE

I. Geographical Area:

Karnataka is the eighth largest state in India with a geographical area of about 19050 thousand hectares. The state is situated in the western

part of the Deccan peninsula of Indian Union and is stretched in between 11.31 and 18.45 north latitudes and 74.12 and 78.40 east longitudes. The state is covered with the north, Gao and Arabian sea in the west. It has coman borders with Andhra Pradesh on the east and with physiographically the state is divided into four regions viz

- a). The coastal regions; a narrow coastal plain, between the western ghats edge and the Arabian sea.
- b). The Malanad hilly country lying east of the western ghats edge.
- c). The Northern Trappean less undulating plateau.
- d). The southern broad archaean undulating plateau. Each of these regions are having their own physical features .

II) Land Use and Cropping Pattern.:

Out of the total geographical area of 191 lakh hectares , 65% was the gross cropped area in 1994-95 which includes net area sown and area sown more than once. Net area sown was 56.6 percent. Fallow land accounted for 7.9 percent. Area under forest formed 16%. Other uncultivated land excluding fallow was 8.7 % of the total area.

The distribution pattern of land holdings in Karnataka consists of numerous marginal and small holdings. According to census of land holdings the average size of land holdings in Karnataka was 4.37 hectares in 1955-56. During 1971, the size of land holding came down to 3.20 hectares . It was 2.98 hectares in 1976-77. During 1980-81 the size further came down to 2.72 hectares and to 2.41 hectares in 1985-86. During 1990-91 the size has further slashed down to 2.13 hectares . This clearly

shows that the average size of land holdings in the state has been steadily declining .

The cropping pattern in the state during 1993-94 revealed the fact that food crops accounted for 64 percent of the total cropped area and the remaining 36 percent was under non-food crops. As compared to 1992-93, the area under food crops declined and that of non food increased by 6.91 percent.

The quick estimates of production of foodgrains is estimated at 86.59 lakh tonnes during 1993-94 which was higher by 2.00 percent as compared to 1992-93.

Karnatak has made impressive strides in agricultural production during the last few decades. The total production which was just 33 lakh tonnes in 1950 has crossed 84 lakh tonnes in 1995. Similarly there is a considerable progress in the production of oil seeds, pulses, cotton, sugarcane tobacco etc. The state has also made good progress in the production of plantation crops such as coffee, tea, rubber, paper, cocount, aracanut, cardamom, cashewnut, fruits like mango, grapes, citrus, guava, pineapple, and sapota. Recently large area has been brought under ber cultivation which has also created a much impact on the state's economic performance.

III. Irrigation:

The state posses good irrigational facilities. The main sources of irrigation includes:

1. Tanks: These are either solely rain fed or fed by channels taken from rivers.
2. Rivers: From which water is taken for irrigation through lift irrigation system by construction of dams etc.
3. Channels tapping under ground flow: It is common in the river beds and the spring areas in the eastern districts of Tumkur and Kolar.
4. Wells: Irrigation wells are common in the district of Chitradurga, Tumkur, Kolar & Banglore. Table No. 2.1 shows the irrigation potentials created in the state during 1992-93 and 1993-94.

Tabel No. 2.1

Irrigation Potential Created in the state:

	1992-93	1993-94
a) Major and medium project (000 He)	1423	1493
b) Minor Irrigation (surface) (000He)	904	911
c) Total 000 He)	2327	2404
d) Ultimate Irrigation potential under major medium and minor irrigation project (lakh hect)	46	46
Area Irrigation : (000'he) Net Area Irigatated by		
a) canal	904	935
b) Tank	257	273
c) Well	725	778
d) Other	309	342
e) Total	2195	2328

Source : Karnataka Economic Review, Director of Economics and State Bangalore (1993-94). *rr-*

IV. Rainfall:

The state receive normal rainfall of 1139.0 mm. The actual rainfall during 1993-94 was little more, it was 1164 mm. The south west monsoon constitutes nearly 65 percent of the annual rainfall.

V. Water wealth:

Karnataka is blessed with water wealth in its numerous rivers and streams and to a limited extent in its ground water. The river in Karnataka swells in monsoons and many of them thin out there after to a more trickle. The river of the coastal belt are west flowing. The Sharavti the Kalinadi the Netravati, the Varthi and the Aghanashini are the important rivers all of which have considerable hydro electric potential. They rise in the western ghats and flow into the Arebean Sea. In the northern maiden, major rivers are the Krishna, the Ghataprabha, the Malaprabha and the Tungabhadra.

VI. Agro Industries :

The Government of Karnataka is committed to a policy of rapid industrialisation. The state Govt. is granting several incentives and concessions with a view to attract raw-materials, investments in the state, particularly in the less developed areas. Karnataka has been the first state to enunciate industrial policy of its own.

The new industrial policy of Karnataka (1990) aims at development of tiny & small scale industrial units. And also offers an equal thrust for promotion of medium large scale industries.

Number of registered working factories during June 1991 was 9856 comprising of textiles 3460, chemical & chemical products 381 and food products 1617.

The production of selected industries in 1992-93 was comprising of Sugar 848 (000 tonnes), Vanaspati 13.9(tonnes), Coffee(000 tonnes) 123, Tea 4.0 (mill. kgs), Alcohol 84(mill.ltrs), Cement 5270 (000'tones), Electronic goods 1760(Rs. crores)

During 1993-94, 556 new industrial units registered as compared to 370 in 1992-93. There is an increase in the number of units registered under food products, wood and wood products of other type of industries as paper, paper products, metals and alloys, chemicals, transport equipment and textiles during 1993-94 as compared to 1992-93.

Small scale industries contributes substantially to the industrial production and helping in generating employment in the state. Number of registered small scale units during 1993-94 was Rs. 12614 with an investment of 198.91 crores providing employment to 6963 persons. The cumulative growth of small scale industries up to 1993-94 in terms of employment was 1003 thousand and investment to the tune of 167153 lakh.

With this profile it can be concluded that the Karnataka state has good climate for producing various crops among which sugarcane is prominent, since, it is situated in the tropical belt with, good irrigation facilities, temperature, humidity, soil conditions, and sunshine.

2.3 SUGARCANE CROP: GROWTH TREND:

Sugarcane is essentially a tropical crop. However, it can also be grown even in subtropical belt. It is a perishable article susceptible to the diseases and pest and is subject to variation of weather. It grows to a height of 10 to 15 feet. It needs high temperature plenty of sunlight and huge quantity of water. As it is heavy feeder it needs fertile soil and high doses of fertilizers. Good drainage is an essential requirement of the crop. The ideal climate is one which has a long warm summer growing season and a fairly dry, frost free ripening season. The long growing period gives, high yields. By and large it grows from 9 months to 18 months. The optimum temperature for sprouting of cutting(sets) used in planting is 32 c. Adequate rainfall and timely availability of irrigation water have a considerable impact on the growth of yield of sugarcane.

Sugarcane is an important commercial crop of the Karnataka state. Sugarcane has made the tremendous impact on the economy of the state. Both the area under sugarcane, and sugarcane production and yield(per hectare) are highest in the state. The cultivation of sugarcane helps to check rural urban migration.

The growth trend in the area under sugarcane, production and yield in Karnataka is quite satisfactory. Which is evident from Table No. 2.2

Table No.2.2

Area Sugarcane Production and Yield of Sugarcane in Karnataka

Year	Area under sugar cane (in 000 he)	outturn (in 000 tonnes)	yield (in tonnes per hectare)
1983-84	172.70	12916.40	79
1984-85	171.90	13353.00	82
1985-86	171.00	14110.50	84
1986-87	180.80	14372.80	83
1987-88	202.50	17580.00	93
1988-89	239.00	18733.00	82
1989-90	265.00	21088.00	84
1990-91	N.A	N.A	80
1991-92	N.A	N.A	89
1992-93	261.50	22479.58	91
1993-94	300.60	26602.90	93

Source: Karnataka At a Glance: Directorate of Economics & Statistics, Bangalore. Year 1993

The area under sugarcane in Karnataka has increased from 172.7 thousand hectares to 300.6 in 1993-94. Which shows an overall increase of 74.05 percent during the period. Similarly, the cane production has gone up from 12916.4 to 26602.90 thousand tonnes showing a rise of 105.96 percent during the same period.

It is also seen from the table No.2.2 that the growth of sugarcane area and production is increasing gradually except 1985-86 and 1992-93. The cane yield has shown a declining trend due to the reasons like lack of

irrigation, failure of monsoons, crop diseases and pests in different parts of Karnataka.

The fluctuations in the production of sugarcane area also caused by acreage shifts in response to changes in cane price realised by the cane cultivation from sugar factories, Khandasari and Gur manufacturing units.

Inspite of the fixation of minimum price for cane, the cultivators realisation have tended to fluctuate considerably.

From 1991-92 onwards there is a decreasing trend mainly because of diversion of sugarcane area to oil seeds. It may be attributed to the increased cost of production and rainfall variation.

However, the sharp fluctuations in the sugarcane production is mainly due to the following reasons:

1. Variations in rainfall.
2. Non availability of labour for timely operation of cultivation.
3. Fluctuations in agricultural prices.
4. Nonavailability of good quality sugarcane variety.
5. Lifting of sugarcane stalks by the factories from the farmers etc.

Table No. 2.3
Proportion of Area(in %)

Year	Plantation	Ratoon
1989-90	58	42
1990-91	57	43
1991-92	60	40
1992-93	59	41
1993-94	61	39
1994-95	59	41
1995-96	60	40

Source: Official Record, Directorate of Sugar, Bangalore.

The table No. 2.3 exhibits that the area under plantation crop is higher as compared to ratoon crop. Generally plantation crop gives more yield than ratoons. The average yield of planted crop varies from 90-100(tonnes/ha). The average yield of ratoon crop varies from 80-90 (tonnes/ha).

Table No. 2.4

Districtwise Trend (%) of sugarcane Area as Compared to States Total

Sr No	District	1970-71	1980-81	1990-91	1993-94
1	Bangalore	N.A	N.A	2.45	5.47
2	Bangalore	4.89	6.82	8.41	14.18
3	Chitradurga	9.95	11.43	32.68	43.77
4	Kolar	18.56	15.31	23.28	27.32
5	Shimoga	4.79	4.77	7.06	8.52
6	Tumkur	9.47	17.48	32.57	40.70
7	Belgaum	16.30	15.09	15.74	16.33
8	Bijapur	13.62	13.02	34.85	38.23
9	Dharwad	15.62	12.33	24.51	19.83
10	Uttar Kannada	1.49	5.29	4.33	8.56
11	Bellary	14.94	12.72	29.11	34.55
12	Bidder	13.44	14.93	16.22	17.03
13	Gulbarga	24.44	16.96	26.92	40.69
14	Raichur	16.01	15.08	31.78	35.87
15	Chikmagalur	5.02	6.65	8.74	18.71
16	Dakshina Kannada	0.38	4.36	1.29	9.13
17	Hassan	3.15	3.39	5.61	16.73
18	Kodagu	0.21	0.05	0.06	0.52
19	Mandya	3.93	3.63	7.20	12.87
20	Mysore	9.06	8.23	8.82	14.90
	Total	12.85	12.04	21.70	27.19

Source: Crop Estimation Survey Directorate of Economics & statistics
Bangalore.

Table No.2.4 shows the trend in percentage of area under sugarcane to the total cropped area. It is clear that the overall percentage of sugarcane area has gone up from 12.85 percent in 1970-71 to 27.19 percent in 1993-94 showing an increase of more than 200 percent.

The percentage has increased gradually in the districts like Chitradurga, Kolar, Bijapur, Bellary, Gulbarga, Raichur. This is because of various reasons like favourable climatic conditions helped in sustaining the tempo of cane production, adopted extensive cultivation etc.

The district like Bangalore, Shimoga, Dakshina Kannada, Kodagu have shown "low trend". Since, lack of irrigation facilities in many parts of the state has adversely affected the growth in the acreage under cane cultivation and sugarcane cultivation has been exposed to draught which often damages the crop. Therefore, the rate of acreage under cultivation has to be increased. The areas under cultivation should be given top priority.

For this purpose the state Govt. has executed certain development programmes to tackle the problem of low yield of sugarcane as well as to raise cane production in the state. They are given below:

1. Universities research stations have been initiated to take up breeder seeds production in their farms, in turn the same may be supplied to the factories for further multiplication as well as in the farmer's fields.

2. The sugar factories have been advised to install hot water treatment plants in their areas for treating the seed sets to check the seed borne diseases.
3. Sugarcane growers are being advised to select fields with well drained soil & with adequate irrigation facilities during the summer season.
4. The farmers have been advised to use farm yard manual compost/green manuring & also in the recent years use of wormic compost also advised to use before planting.
5. Thrust has been given to the integrated nutrient management and weed management.
6. Timely staggered planting of suitable varieties to cover the entire crushing.
7. Timely control of weeds by manual or by using weedicides.
8. Need based plant protection measures to control pests and diseases.
9. Thrash mulching in between rows and avoid moisture losses through evaporation during summer months.
10. Intercropping of soyabean in sugarcane.
11. Good ratoon management has also been suggested.
12. Timely irrigation & judicious use of available water by using drip irrigation system.

2.4 SUGARCANE CROP IN THE STATE :

The state of Karnataka has good irrigational facilities, temperature, humidity, duration of sunshine & soil conditions which are all suitable for the cultivation of sugarcane. The sugarcane has got a vital place in the cropping pattern of the state. However, the sugarcane crop is mainly

grown in Belgaum, Mandya, Shimoga, Bijapur, Mysore & Bidar districts. The other important sugar producing districts are Mangalore, Chitridurga, Bellary & Raichure.

Table No. 2.5 elaborates the districtwise dispersion of sugarcane crop in the area under sugarcane production in the state for the year 1993-94 and 1994-95.

Table No. 2.5

Districtwise Area Under Sugarcane (Hq) and Sugarcane Production (tonnes)

Sr No	District	1993-94	1994-95	Production	
				1993-94	1994-95
1	Bangalore	36	108	3188	10363
2	Bangalore(R)	1357	1815	141807	174149
3	Chitradurga	7269	9573	656027	827586
4	Kolar	4242	4608	443289	376474
5	Shimoga	16244	17331	1668326	1975734
6	Tumkur	2898	2963	261545	256151
7	Belgaum	107053	115145	8441129	9297959
8	Bijapur	50766	64475	4822770	6921391
9	Dharwad	9026	11993	574505	900075
10	Uttar Kannad	2004	1845	154208	138467
11	Bellary	6877	7864	437721	605135
12	Bidder	18425	20911	1120240	2006410
13	Gulbarga	4918	6755	369096	519797
14	Raichur	3133	4630	235132	444249
15	Chikmagalur	2056	2079	212660	205405
16	D. Kannada	3957	4338	267093	424473
17	Hassan	9227	10688	876565	1157510
18	Kodagu	44	44	3887	4222
19	Mandya	32265	35298	3555603	4627568
20	Mysore	20018	22465	2358120	2219542
	State	301785	344928	26602904	33092660

Source: Karnataka At a Glance-Publication of Directorate of Economics & statistics, Bangalore.

Table No. 2.5 shows the districtwise cane area and production in Karnataka during 1993-94 and 1994-95 seasons. The table depicts the fact that among almost all 20 districts the Belgaum district, is leading in both area and production of sugarcane. The district possesses suitable weather conditions, irrigational facilities, sufficient rainfall which is favourable for the cultivation of sugarcane. As a result the number of sugar factories located in the districts are large as compared to other districts.

The other districts which are contributing the corresponding area under sugarcane cultivation are Mandya, Bidder, Shimoga. These districts have also a suitable temperature, soil conditions, duration of sunshine which is required for the cultivation of sugarcane. The Kodagu, Bangalore, Chikkamanglore, Raichure are not showing much progress in this respect.

In the aspect of production of sugarcane, the Belgaum district occupied the first position with the record production of 8441129 tonnes which is followed by mandya (3555603 tonnes) and Mysore(2358120 tonnes) Whereas the districts like Bangalore and Kodagu are having the lowest quantities of sugarcane production.

Only few districts play a dominant role in formulating the sugar economy of the Karnataka state.

2.5 THE SUGARCANE VARIETIES IN KARNATAKA STATE:

Looking at the needs of the climate and soils for sugarcane crop it is obvious that Karnataka land is vary well suited for sugarcane cultivation. The average maximum 30.2 c and 42.2 c which is quite suitable for the growth of sugarcane. The annual average rainfall is about 135 cm. Maximum received is during the rainy season from June to September. Which is also more suitable for the cultivation of sugarcane.

There are four sugarcane growing zones in Karnataka viz

- a) Mandya zone(under v.c. canal tract)
- b) Raichur and Bellary zones(under Tungabhadra project area)
- c).Chitragurga and Shimoga zone (under Bhadra project and well irrigation) and
- d) Belgaum zone(lift irrigation form wells, Krishna river and Ghataprabha project area) A part from these, are certain minor sugarcane growing areas like Gouribidanur, Kungal, Hasan, Bidar, Kollegal and Coastal tract of south Karnataka in the state.

The Karnataka has sugarcane growing area to the extent of 525000 acres which is about 5.5% of total cultivated land area. About 4.5% of nation's total sugarcane growing area is in Karnataka, which produces around 8.5 crore tonnes of sugarcane during a season. This is due to the various steps taken for the development of sugarcane. An introduction of various varieties of sugarcane by the research centers, with the help of Sugarcane Breeding Institute Coimbotture which was started in 1912, many new varieties have been introduced in the state. The suitable varieties are released from this center for cultivation.

In Karnataka, improvement in the varieties of sugarcane was started in 1919. As a result of continued research HM-320, HM-645, M661, IC225, and K.H.S.-2045 types were released. The sugarcane varieties introduced in different parts of the state are HM 320 in Hebbal, HM641, HM645 in Shimoga IC 20 in Kolar. The other varieties like CO-441, CO-449, CO-6415, CO-62175, IC-225, KHS-2055 and B37127 have been invented in the research centre of Sankeshwar, Arabavi, Gangavati, Biddar, Siraguppa, where new pattern of agricultural production has been recommended. COC-671 is a type which ripens early and is suitable for multiple cropping. More detail features of the some other sugarcane varieties are enumerated below:

1. CO-419(POJ-28 X 78 CO-290)

An introduction of this type of variety is for making it possible to cultivate in all parts of the state. It is a medium type of variety and can be harvested within the period of 13 to 14 months. It is green as well as ash red in color & contains good percentage of jaggery and sugar. It can be grown in areas where water do not percolate & even in water scarce areas also. Sugar proportion is more. Jaggery is reddish yellow and stays for long. Ratoon crop also yield 40 to 50 tonnes per acre. Recently this variety is affected by red disease. Therefore, it has become very essential to treat the seeds before plantation.

2. CO-740(P-3242 X P4775)

It is a long term variety. This is recommended to grow in Bidder, Belgaum & Tungabhadra basement area. The 18 months duration of such

variety is sufficiently higher. It is also medium variety which gives plenty of green. It has good sugar portion and useful for jaggery making.

It does not lose its characteristics so quickly even after ripening. The ratoon crop is affected by black disease. The 18 months of crop yields around 70 to 75 tonnes per acre, whereas annual crop yield is 30 to 40 tonnes.

3. IC-225

This was released in 1968. It is a 10 months crop & is cultivated in Bidar. Good jaggery can be made through this medium of variety. The ratoon crop also gives good amount of yield by around 30 to 35 tonnes per acre.

4. CO-62175(CO951 X OC419)

This variety was released in 1925. This is best suited for Tungahbhadra and Mandya area. It is of 12-13 months crop. Delay in cutting produce haplownes (pith) at the centre Buds are prominently visible and thick and spread during grown up period. If left unharvested after 13 months it produces pith and also decreases the sugar recovery. The application of the recommended advanced agricultural techniques gives 50 to 55 tonnes of yield per acre in a season.

5. CO-6415(CO-1258 X CO-740)

It is a short term variety and is cultivated in Bidar & Belgaum districts. As it has greater immunity for black disease, it is a suitable

variety for areas which are afforded by black diseases. The average is around 40 to 45 tonnes per acre.

6. H-2540:

This is recommended to Mandya region. It is medium size variety having whitish green color. Quality jaggery can be made by this. The ratoon crop also gives good yield. The average yield per care is around 30-35 tonnes.

7. CO-7219(Sanjivani)

It is a medium term variety. It has a strong immunity to red & black diseases. It can be grown in north Karnataka (dry land area). It will not crack even after its harvesting expiry. The yield per acre is around 50 to 60 tonnes.

8. CO-C-671(Q-63~~X~~Co-775)

The leaves of such variety is green and of medium length and breadth. New leaves are straight while old ones bent and down swing.

The size of stalk is pumphy and egg shaped towards bud point. The inner part is light green & salt at middle and hallow at centre. The cane verity of such type sugarcane posses the thorny sharpness at the edge of the leaves. This variety has been recently introduced in Tamilnadu for cultivation. The COC 671 has good length of stalk. It matures early and has great amount of sucrose and it grows very fast at its beginning age.

9. CO-8014(CO778~~X~~CO775)

The leaves are dark green, very long and broad. Both old and new leaves bent broadly.

The stalk is moderately plummy & little egg shaped towards the bud point. The inner part of the cane is light green. The inner part is hard while at the centre has a hollow. The stalk is yellowish green.

This variety is released in Andra pradesh so as to utilise it during the mid term of sugar production for better recovery. It is famous for higher yield and good quality. It is cultivated in Krishna Godavari districts of Andra pradesh state.

Table No. 2.6 shows the duration of cultivation, the time of plantation & their distribution in the state

Table No. 2.6

The Recommended Varieties For Different Regions

Variety	Plantation time	Duration in months	Growing regions
CO-419	Jun-Aug Oct- Nov Jan-Feb	12-16	All parts of the state
CO-740	Oct-Nov Jan- Feb	11-18	Belgaum Bidar Tungabhadra base
CO-449	Jan-Feb	12-14	Coastal line
CO-62175	Jun-feb	11-13	Tungabadra, Bhadra, Mandya
CO-6415	Jan-feb	11-16	Belgaum Bijapur
B-37172	Jan-Mar	12-	Southern Karnataka

Sources: Vijaykumar Giddanavar-"Kabhu" Priyadarshni publishers Dharwad-1994

Varietywise area and production of sugarcane is exhibited in table No. 2.7. It's observed from the table that the traditional sugarcane

varieties like CO-419 and CO-740 have been replaced by new good quality varieties of sugarcane like CO-7219, CO-6415 and 13-37172.

Table No. 2.7

Veritywise Area Under Sugarcane And Yield Levels 1993_94

Sr. No	Varieties	Plantation		Ratoon	
		Area (He)	Productivity (Ton/He)	Area(He)	Productivity
1	CO-419	24500	75.80	17200	70.80
2	CO-740	20100	80.88	17800	75.80
3	CO-449	15500	70.85	10200	60.85
4	CO-62175	22300	90.95	16500	80.90
5	CO-6415	12400	75.80	8800	70.75
6	COC-671	10200	85.90	8900	80.85
7	B-37172	12100	80.90	3000	75.80
8	CO-7219	15000	85.90	12600	80.85
9	OTHERS	9200	70.75	7700	60.70
1994-95					
1	CO-419	23200	75.80	18500	75.80
2	CO-740	18800	80.85	14700	75.80
3	CO-449	15300	70.85	10300	60.85
4	CO-62175	22700	90.95	16300	80.90
5	CO-6415	13100	75.80	8400	70.75
6	COC-671	11400	85.90	9700	80.85
7	B-37172	12700	80.90	5100	75.80
8	CO-7219	15500	85.90	10300	80.85
9	OTHERS	3000	70.75	1000	60.70

1995-96					
Plantation			Ratoon		
Sr. No	Varieties	Area (He)	Productivity (Ton/He)	Area(He)	Productivity
1	CO-419	25800	75.80	20100	75.80
2	CO-740	21000	80.85	61000	75.80
3	CO-449	17100	70.85	11100	60.85
4	CO-62175	25300	90.95	17300	80.90
5	CO-6415	15400	75.80	9100	70.75
6	COC-671	12500	85.90	10200	80.85
7	B-37172	14000	80.90	5200	75.80
8	CO-7219	17300	85.90	11600	80.85
9	OTHERS	3400	70.75	1100	60.70

Source: Directorate of Sugar Bangalore

2.6 PERFORMANCE AND PROBLEMS OF SUGAR INDUSTRY IN KARNATAKA

According to the report of sugar industry in Karnataka(1988), sugar industry is providing direct employment to about 25000 persons in the state. Sugarcane is an important cash crop in Karnataka with an annual production of 144 lakh tonnes of sugarcane in 1988, it went up to 33.33 million tonnes in 1994-95. In respect of sugar recovery, Karnataka ranked third in the country with 10.2 percent recovery being first Maharashtra posses 11.2 percent recovery & Gujarat with 10.46 percent recovery stood

second in the rank. The sugar industry is contributing 90 crores of direct and indirect revenue to the state government.

The first sugar factory was established in Bellary district in 1934.(The ISR Hospet) The Maysore sugar co. Mandya (1938) and the Ugar sugar works are the oldest sugar factories in the state Table No. 2.8 shows the growth of sugar factories in Karnataka.

Table No. 2.8
Growth of Sugar Factories in Karnataka

Years	Number of sugar factories
1950-51	3
1960-61	5
1970-71	9
1980-81	22
1990-91	28
1991-92	30

Source: Official Records: Directorate of Sugar Bangalore

The number of sugar factories in the state was 3 in 1950 to 5 in 1970 to 22 and 1990. An increase in the sugarcane cultivation in the state affected largely to establish the sugar factories. The sugarcane being the commercial crop return remunerative prices to the farmers. There is favour among the farmers to cultivate sugarcane . As a result the number of sugar factories has gone up to 30 by the end of 1990-91.

It should be noted that, all is not good with the sugar factories specially with technical and financial aspects in Karnataka. Hence, there is an urgent need to identify the basic reasons for the same and to find out suitable measures to overcome the problems faced by factories in Karnataka.

As compared to sugarcane production and its potentiality in Karnataka, Government's reluctancy towards the industry's performances is noteworthy. There are only 30 sugar factories in the state. Many of them have outdated technology.

Table No. 2.9 illustrates the performance of sugar industry's in Karnataka. It is observed from table No.2.9 that, many sugar factories in the state have low crushing capacity. The crushing capacity ranged from 1.5 lakh tonnes to 12 lakhs tonnes in season. Very few factories such as Ugar, Godavari and Chamundeswari in private sector and Malaprabha, Hirannyakesi in co-oeprative sector have a capacity between 6 to 12 lakh tonnes. Rest of the sugar factories have capacity between 1.5 to 5 lakh tonnes only.

Low crushing capacity again is followed by low recovery among these factories. A few factories like, Ugar,Doodhganga Krishna, Godavari, Ghataprabha, Nandi, karnataka, Malaprabha, Raibag and Halasidhanath have more than 11 recovery. Rest of the factories have recovery between 9 to 10.

Table No.2.9
Industry's Performance

Name of 1994-95			1993-94			
the sugar factory						
	sugarcane -crushed	sugar produce d	Recover- y	Sugarcane crushed	sugar produced	Recov ery
A) PRIVATE SECTOR						
Ugar	1121608	138820	12.30	680272	85194	12.61
Godavari	1192578	139574	11.63	825960	93917	11.30
India	285628	28494	9.97	167302	16310	9.76
Shiragupp a D	163640	17339	10.55	89703	9400	10.53
Deve Sugars	320507	31380	9.76	176209	17438	9.90
Shiragupp a G	193484	17978	9.25	54568	8494	9.18
Chamund eswari	580928	51229	9.80	364440	34987	9.48
Mahades war	252530	21724	8.39	Not crushed		
Bannari Ammar	371093	36907	9.79	137849	13381	9.27
Salarjang		NOT	CRUSH	ED		
Average	448696	483445	10.77	2496303	276121	9.27
B)PUBLIC SECTOR-						
Mysore	418968	43909	10.36	251122	25488	10.11

paper						
Mysore Sugar	523103	48082	9.16	2923106	25737	8.96
Average	942071	91911	9.76	544228	51225	9.41

C) JOINT SECTOR

Gangavati i	165289	16225	9.83	59990	5842	9.80
Davangir i	2744848	23006	9.32	116307	11104	8.97
Average	410137	39231	9.12	176297	16942	9.61

D) CO-OPERATIVE SECTOR

Biddar	442616	35193	7.86	249297	22059	8.85
Bhadra	239361	23038	9.53	142037	13326	9.40
Aland	215039	16571	7.70	35453	3045	8.89
Nandi	396116	45283	11.42	164442	17931	10.90
Hirannya- keshi	946037	99447	10.42	641147	70278	10.93
Raibag	306556	32292	10.52	239875	26158	11.03
Halsidha- nath	271345	29156	10.76	214020	23780	11.11
Ghatapra -bha	357831	40039	11.18	188899	21292	11.23
Doodh- ganga Krishna	444103	54316	12.77	319326	40523	12.52

Name of the sugar factory	1994-95			1993-94		
	sugar- cane crushed	sugar produced	Reco- very	Sugar- cane crushed	sugar produce- d	Recovery
Malaprah ba	751203	82976	10.16	564959	64817	11.14
Karnataka (Haveri)	251377	23772	9.48	129764	13364	11.27
Vanivilas	93851	9462	10.18	N.A	N.A	N.A
Dakshina Kannada	95101	8126	8.60	53737	5045	8.70
Hemavati	212367	20407	9.56	178225	7210	8.98
Shri Ram	152499	13705	8.89	97796	8815	7.04
Pandavap ura	136262	12360	9.15	105632	10205	9.28
Kampali	-	-	-	-	-	-
Average	5311764	546493	10.29	3332650	347848	10.44
Grand Total Average	-	-	-	3332650	347848	10.44

Source: Daily Pudhari Nov.,1995

It is observed that the state Government collect Rs. 1.75 lakhs as a revenue for every lakh tonne of sugarcane crushed in the state.

The revenue collected by the State Government of Karnataka for the year 1993-94 is given in Table No.2.10

Table No.2.10
REVENUE COLLECTION

(a)	Purchase Tax	87.75
(b)	Turnover Tax	06.00
(c)	Ad Excise duty on Sugar	33.66
(d)	Sale Tax on Molasses	08.75
(e)	Sale Tax on Pressmud	01.00
(f)	Sale Tax on Bagasse	02.00
(g)	Sale Tax on Spirit	35.77

Source: Daily Pudhari November, 1995

Table No.2.10 shows the performance of tax structure for sugar industry in Karnataka. The state government collects revenue worth of Rs. 90 lakh from the purchase tax on sugarcane. The taxes on molasses and excise duties on sugar are also higher. In spite of this huge revenue to the state there are number of other minor revenue collections. But due to the Government's reluctance in looking favourably towards this core industry is diverting resources to other states.

In Karnataka the existing sugar factories under co-operative sector are more in number. Per day crushing capacity under co-operative, private as well as public sector and joint sector is shown in table no. 2.11

Table No. 2.11
Crushing Capacity

Area	No of sugar factories	Total sugar crushing capacity	Up to 1250 Tcd	From 1250 to 2500 Tcd	3500 Tcd	4000 Tcd	5000 TCD
Co-operative	17	3450	10	3	3	-	1
Public	2	7500	-	1	-	-	1
Joint	2	3750	1	1	-	-	-
Private	9	26250	1	5	-	1	2
	30	71950	12	10	3	1	4

Source: Directorate of Sugar Bangalore

The crushing capacity of sugar factories under co-operative sector is larger. It is 34450 million tonnes every day. The crushing capacity under private sector is worth of 26250 million tonnes. Since, the co-operative sugar factories are more in number obviously it will crush higher quantity of sugarcane. Even though there are only 9 sugar factories in private sector the crushing capacity is more as compared to the co-operatives. It is because of fact that, the factories with low crushing capacity(up to 1250 only) are more in number in co-operative sector (i.e. 10) whereas in private sector 2 sugar factories are having crushing capacity up to 5000 TCD & only one factory has low crushing capacity of 1250 TCD. Two sugar factories under joint sector and two factories in private sector are also performing good.

The sugarcane crushed & the sugar produced in four divisions of the state could be seen in table No.2.12 below

Table No. 2.12

**Sugarcane Crushed & Sugar Produced During 94-95 by Sugar
Factories(Division)**

Sr. No	District	No of working sugar factories	cane crushed	sugar produced
1	Bangalore	—	—	—
2	Bangalore(R)	—	—	—
3	Chitradurga	3	770	758
4	Kolar	1	221	211
5	Shimoga	2	606	580
6	Tumkur	—	—	—
	Bangalore Division	6	1597	1549
7	Belgaum	7	4349	4744
8	Bijapur	2	1178	1396
9	Dharwad	1	215	176
10	Uttar Kannada	—	—	—
	Belgaum Division	10	5742	6336
11	Bellary	2	475	442
12	Bidder	1	297	277
13	Gulbarga	1	12	110
14	Raichur	1	240	228
	Gulbarga Division	—	1132	1057

Sr.No	District	No of working sugar factories	cane crushed	sugar produced
15	Chikmagalur	—	—	—
16	Dakshina Kannada	1	143	120
17	Hassan	1	239	213
18	Kodagu	—	—	—
19	Mandya	3	1349	1183
20	Mysore	3	972	908
	Mysore Division	8	2703	2424
	State	29	11174	11366

Source: Directorate of Economics & Statistics, Bangalore

Table No. 2.12 reflects the fact that, among the four division the Belgaum division is reflecting its better position in cane crushing and in the production of sugar at the same time.

The Mysore division has also made major contribution in respect of cane crushing and sugar production. The share of Gulbarga division is negligible. The contribution is made by the Belgaum as well as Mysore division and their dominance is due to the share of important districts like, Belgaum, Bijapur, Mandya, Mysore etc. The sugarcane is largely grown in these districts and a number of sugar factories located in the division is large. The crushing days sometime extended up to 7 to 8 months in these zones.

The state of Karnataka has built up a tradition of its own by establishing certain unique sugar factories in the state. The sugar factories are largely located in north, west, as well as eastern and southern part of

the state. Very few districts like Bangalore, Tumkur, Kodagu, Chikkmangalore, North Kannada and Gulbarga where sugar factories are not established because the weather conditions, soil, rainfall and the irrigational facilities are not suitable for the cultivation of sugarcane in many of these districts.

Table No.2.13 illustrates the districtwise location of sugar factories in Karnataka State.

Tabel No. 2.13
Districtwise Sugar Factories in Karnataka

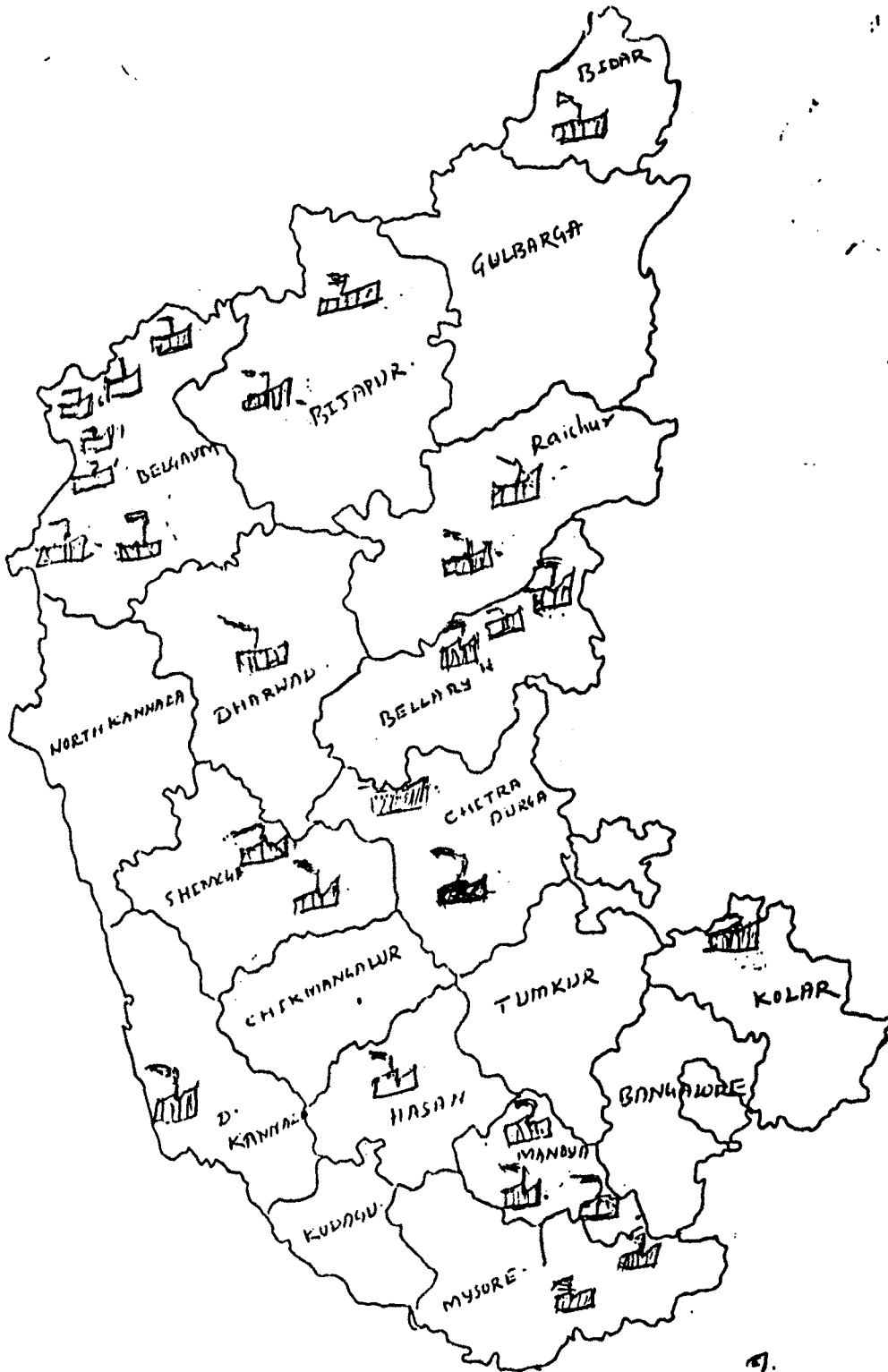
District	Co-operative sector	Private/Public sector	Total No.of sugar factories
Belgaum	6	1	7
Bellary)	1	2	3
Bidar	1	-	1
Bijapur	1	1	2
Chitradurga	2	1	3
Dharwad	1	-	1
Hassan	1	-	1
Kolar	1	-	1
Mandya	1	2	3
Mysore	2	1	3
Raichur	-	2	2
Simoga	-	2	2
South Kannada	1	-	1
Total	18	12	30

Source: Computed on the basis of data from the office of Directorate of Economics & Statistics Bangalore.

13203

A

LOCATION OF SUGAR FACTORIES



 - Sugar Factories

Table No.2.13 shows districtwise location of sugar factories in the state. The factories run under co-operative sector are dominating in the state. Among all other districts, Belgaum district is known as the sugar 'Bowl of Karnataka' where seven factories are established. Recently 8 more factories have received the licenses but yet not erected. The sugar factories in this district have ample potentialities. Among all the districts Belgaum district stands first in sugarcane production. It is situated in tropical belt with reasonably good irrigation facilities temperature, humidity and soil conditions,suitable for the cultivation of sugarcane.

The Mandya is one more district having good access of sugar factories. Sugarcane is an important crop grown in this district.

The districts like Bellary, Chitradurga are having only 3 sugar factories each, while in Mysore and Raichure districts there are only two factories located in each, district. Bidar, Bijapur, Dharwad, Hassan, Kolar and South Karnataka districts have only one sugar factory each •

Recently there is a sharp increase in the area of sugarcane cultivation in the state. But the existing sugar factories have not much crushing capacity. Therefore, the resources are directed to other uses. The sugarcane is being supplied to other state. Owing to this problem the Govt. policy to expand the existing factories or to establish new factories becomes inevitable. Since 1988-89, 24 new sugar factories have received licenses for the establishment of new sugar factories. Table No. 2.14 shows the year of grant of licenses and the sector under which licenses are granted.

Table No. 2.14

New Sugar Factories Who Have Granted Licenses

Sector	Year of grant of licenses	No of licenses granted
Co-operative	1988-89	3
	March 94	4
	April 96	1
Public	April 96	1
Private	March 94	1
	April 96	14
	Total	24

Source: Directorate of sugar Bangalore.

Large Number of sugar factories have been permitted in the private sector which is because of the new economic policy of the central Govt. giving longer scope for the private sector. Simultaneously the Govt. is not satisfied with the a poor performance of some co-operative sugar factories in the state.

The crushing capacity of each of the sugar factory is 2500 TCD. Besides 25 more proposals recommended by the state Govt. are pending with the central government for releasing the sanction.

Among these new sugar factories, only one co-operative sugar factory namely Bhagyalaxmi S.S.K. Ltd., Khanapur which has taken up its construction and erection of plant and machinery. It is expected that the factory will begin to crush in 1996-97 season. Following new sugar factories have received the licenses on the respective dates

Krishna (Athani(2/11/88),
 Naranja Bidar(20/03/89)
 Mahatma Gandhi(23/03/94)
 Bhimashankar Indi (23/03/94)
 Markandeya kakati(23/03/94)
 Jamakhandi sugar (31/03/94).

These new sugar factories have collected their share amount from the cane grower members. Krishna Athani, Naranja Bidar have got Govt. share & purchased their factory sites also. The work is stopped due to the nonavailability of loans.

The expansion of existing sugar factories will be the next step so as to improve the performance of sugar factories in the state. In this connection ,the Govt. is succeeded to get permission. The Govt. of India has issued 14 letters of intent to the state Govt. of Karnataka for expansion of the capacity of existing sugar factories. It will be very helpful to create an additional crushing capacity of nearly 22000 MTS per day in the state. The expansion activities are highlight in table No. 2.15 below

Table No. 2.15
 Expansion of Production Capacities.

Sr No	Name of the Factory	Expansion capacity TCD	Date of permission by Govt. of India	Remarks
1	Malaprabha Sahakari Sakkare Karkhane	3500 to 5000	L1 112 (1990) dt 23-2-90	Action has been taken to call tender

	Ltd M.K.Hubli			
2	Pandavapur	1500 to 3500	Li 530(1988) dt 12-9-88	do
3	Godawari Bijapur	5000 to 6440	—	Action has been taken
4	Ghatapraba	1250 to 3500	—	Permission is granted for 2500 tcd and for 3500 tcd the permission is expected
5	Halasiddhanath Nipani	1250 to 2500	—	The application seeking permission is in front of Govt.of India.
6	Dakshina Kannada Brahmavar	1250 to 2500	—	do
7	Hemavati	1250 to 2500	—	do
8	Karnatak Haveri	1250 to 2500	-	do
9	M.P.M	2500 to 5000	—	do
10	Davanagere sugars Davangiri	1250 to 2500	—	do
11	Shiraguppa Sugar gouribiddanur	1250 to 2500	—	do
12	Shiraguppa Sugar Deshanur	1500 to 2500	—	do
13	Ugar Sugar Ugar Khurd	5000 to 7500	—	do
14	Tungabhadra Shimoga	2500 to 5000	—	do

Source : Directorate of sugar Bangalore.

After completion of the expansion work of three sugar factories, the crushing capacity will increase by 4940 TCD. Simultaneously after receiving permission to 11 more sugar mills whose permission is pending, the crushing capacity will go further more by 18250 TCD. The productivity of sugar industry mainly depends on the capacity utilisation which is reflected in the duration of season of sugar production. The capacity utilisation fluctuate widely over the year & regions due to the fluctuations in the supply of sugarcane.

Table No. 2.16 shows Karnataka's installed annual sugar production capacity and utilisation of capacity during 1990-91 to 1994-95.

The analysis of capacity utilisation in terms of percentage shows that in 1981-82 it was 117.6 it declines to 69 in 1985-86, some time, ^{it} was 122.4 during the end of 1980's which declined in 1993-94 to 99.31 but again improved in 1994-95. These fluctuations and underutilisation is caused by the variation in the durations of crushing seasons, diversion of cane for other uses etc. In the regions like Davangere and Shimoga, the cultivators plant sugarcane almost in a single season of harvest simultaneously to obtain good ratoon. The delay in payments are made by the sugar factories due to Govt. levy policy which has discouraged the growers to supply cane to the factories and to increase the area and production of quality cane.

Table No. 2.16

The Existing Licensed and Installed Capacity and Percentage Utilisation

Year	Sector	Licensed capacity TCD	Installed capacity	Percentage utilisation
1991-92	Co-op	45500	30250	96%
	Public	7500	7500	73%
	Joint	3750	3750	70%
	Private	26250	23750	89%
1992-93	Co-op	45500	30250	78.6%
	Public	7500	7500	72%
	Joint	3750	3750	52%
	Private	26250	26250	69%
1993-94	Co-op	45500	31750	74%
	Public	7500	7500	67%
	Joint	3750	3750	32%
	Private	26250	26250	78%
1994-95	Co-op	55500	34500	116%
	Public	7500	7500	69%
	Joint	3750	3750	61%
	Private	28750	26250	111.54%
1995-96	Co-op	66500	34500	127%
	Public	12500	7500	86.20%
	Joint	5000	3750	76.40%
	Private	73500	26250	109.35%

Source: Official records, Directorate of Sugar Bangalore

The average recovery of sugar from cane in the state ranges between 10 to 10.50 percent. During 1991-92 season its was 10.54, it rose to 10.62 in the next year i.e. 1992-93. But in 1993-94, the average recovery come down to 10.47 and further to 10.40 in 1994-95. It declined further to 9.97 in 1995-96. This is because of the fact that, the state is not experiencing good rains all over past 2 to 3 years.

Lack of availability of water in the peak period of the growth of crop reduces the sucrose content in cane to some extent. Further during the last 2 years there is a excess cane supply to the sugar factories following less diversion to gur and Khandasari. On account of extension of crushing operations by the sugar factories to facilitate extra cane crush, the sugar, recovery has suffered causing overall decline. Following are some of the problems of sugar industry in Karnataka.

i).Lack of By-product Processing:

There are a very few sugar factories in Karnataka processing the by-products of sugar factories. This has created a heavy loss of the resources. The by-products like bagasse can be used for paper industry, partcal boards and power generation(alternative to scarce wood). The other important by-products i.e. molasses which is a basic raw-material for various chemical industries e.g. ethyl, alcohol, acetic acids, athlledehyde, monochloroform automotive fuel etc.

A more resplendent feature of the entire industry is that sugar can be produced as the by-products in the proccession of sugarcane. If one has to survive in this liberal economy, he has to look forward keeping in mind the

above fact, and it can be possible to pay remunerative prices to cane growers. To achieve this, the minimum economical capacity should be 5000 TCD. The present increase in cost of machinery and higher rate of interest with no lucrative incentive schemes has resulted the growth of this industry to a stand still.

ii. The Problem of Levy Price and Formation of Zones:

The present revised central levy price on sugar has affected economics of sugar factories in Karnataka. This has to overcome immediately by forming three zones. Which will help in gaining of Rs. 40 to 45 per qtl. in levy price. Besides there are some restrictions on even free sale of sugar produced by sugar factories. The levy rates are determined on the basis of recovery of each sugar factories in a particular location of zones. The zones with high recovery gets higher levy rates for their sugar. In Kolhapur district the levy price of sugar is Rs.804 per qtl. whereas it is Rs. 779 per qtl. in Belgaum district. Belguam and Kolhapur are very close to each other even when there is a difference of Rs. 25 per qtls. Earlier the difference was Rs. 52 per qtl. The loss accruing due to this levy rate of sugar. Karnataka is loosing nearly Rs. 40 crores. Thus formation of zones will help to gain Rs. 40 crores to cane growers in Karnataka.

iii. Purchase Tax Structure :

The present structure of purchase tax in Karnataka state is high as compared to other states. Taxes are collected at the rate of 10 percent of the money value of cane rather than volume of sugarcane. In Maharashtra purchase tax is levied on the tonnage basis which is 12 percent. Whereas in Karnataka the purchase tax is levied on the money value of sugarcane

quantity which is 10 percent. There is difference of Rs. 70 per tonne of sugarcane which is harnessed from the pockets of sugarcane growers in Karnataka. This procedure of tax collection leads a conflict between the Government and the industry. Yet an unsolved litigation is pending with High Court of Karnataka. Thus this process deserves a review and taxes be linked to tonnage. .

iv. Sales Tax Structure :

The rate of sales tax on molasses is 25 as compared to 14 in Maharashtra. Moreover, majority of the molasses has been sold to private alcohol producers. No factories in Karnataka except few are interested in molasses processing. Ultimately it deserve to bring the rates at par with neighboring states. Most of the sugar factories in Karnataka have not yet started their own distilleries. All molasses is sold to the private alcohol producers. As compared to other states, the earning from molasses by the factories is also very low. Most of the benefits is being derived by the private users of the molasses. This tax system is diverting most of the profit to the private sector which otherwise can be retained with, through the Government intervention.

v. Role of Managing Director :

In the state like Maharashtra, the panel of Managing Director is prepared on the priority basis from the experts and scholars in the area of professional management. This promotes a favourable relations between the factory management and Managing Director which creates an harmony in the decision making process.

In Karnataka the Government nominates officers, in most cases from any departments from any category of officers. In most cases representative with all powers comes in as a Managing Director of sugar factory. This practice of deputing officers without having even basic knowledge of this industry hamper the growth of sugar industries in the State. Therefore, it necessitates the factory management to keep in good contact with the Managing Director. Managing Director runs only the sugar factory, he don't keep in touch with the sugarcane growers. Similarly, ruling government and ruling factory management should belong to some political parties. If not a controversy between two powers may arise. For example, this was the case with Hira sugar factory, Sankershwer recently.

vi. State Federation and Sisma.

(South Indian Sugar Industries Association)

The State Federation which is established by the cooperative sugar factories and the South Indian Sugar Industries Association(SISMA) established by private sugar factories are the two bodies which represent the states biggest agro-based industries. The timely problems brought to the notice of the authorities which should be considered on priority basis and should be solved at right time in order to expand and promote this important industry. Neither the state government nor the government ministry is looking towards th serious problems of this industry.

vii. Central Schemes:

For the development of sugar industries the Central Government occasionally declares various policy measures to improve the quality of sugarcane and improve the sugar recovery. But most frequently, the

factories are unable to take the benefit of central schemes either because of lack of knowledge or because of the reluctance of the sugar factories in such schemes. Even the government has neglected to take the benefits of such schemes. Ultimately, there is no problem of making special efforts to get the scheme sanctioned from central from central authorities.

As there is still plenty of scope in expanding and installing new sugar factories, the limitation of financial assistance for co-operative sector should be lifted i.e necessary amendment be made in order to take assistance from international agencies.

viii. Co-Generation :

Presently, there is a severe power shortage in the Karnataka. Under such conditions it is possible to generate electricity from bagasse. If such electricity is generated in the sugar factories lot of energy will be saved.

The old factories in the state have 20 Kg. H.P. boiler pressure and in the new factories have some boilers of the capacity of 80 kg H.P. based on new technology. Using the same proportion of bagasse in a turbine system, it is easy to generate electricity. No factories are interested in it. As result the government has announced financial assistance of Rs. 25 lakhs per M.Watt power generation as an incentive.

iX. Expansion Activities:

Some incentive schemes for the expansions of sugar factories should have to be given. So that the problem of surplus cane supply can be solved permanently and there may not be problem of sugarcane diversion.

x. Low Duration of Crushing:

It is found from a study conducted in North Karnataka Sugar Mills, that the duration of crushing is very low among many sugar factories and fluctuations in crushing duration was higher. During the last few seasons the renowned sugar mills, viz. Doodhganga Krishna, Ugar Sugar, Ghataprabha and crushed uniformly for six months only.

xi. Capacity Utilisation :

Many sugar factories are not utilising their maximum productive capacities. Seven out of the 18 sugar mills of North Karnataka, were utilising the 100% capacities. They are Raibag, Bhadra, Halasidhanath, Ghataprabha, Doodhganga Krishna, Davangere and Malaprabha. Only such a few leading factories have a good performance in almost all respects. Hence necessary steps should be taken in order to develop all other sugar factories.

xii. Sugar Losses:

During the last few seasons, from 1989-90 to 1992 sugar losses in various sugar and by-products were observed in number of units. Losses in undetermined portions had been highly fluctuating in many sugar units of Karnataka.

xiii. Government Measure:

On the occasion of abundant supply of sugarcane in the state, Government of Karnataka has unveiled a package of incentives to the cane growers and sugar factories. This includes the financial assistance of Rs. 19.5 crores to mitigate this distresses of sugar factories. The sugarcane

production was estimated to be at 210 lakh tonnes during the season 1994-95 against the crushing capacity of 120 lakh tonnes. Apart from the 6.75 lakh tonnes of sugar stock worth of Rs. 7000 crores will be created.

Transport subsidy at the rate of 50 paise a K.M. per tonnes subject to maximum of 250 K.M. in declared to be paid to transport from the cane surplus areas to the cane deficit sugar factories and restrictions of licensing of Khandasari units and cane crushers for jaggary is declared to be removed to facilitate easier licensing system and convention of sugarcane.

The Government has also switched over from advalorem to tonnage basis for levy of purchase tax and also rationalised the purchase tax and enhanced the rebate out of the purchase tax payable to the farmers from Rs.12 to Rs. 15 per tonne.

Export quota of molasses has been fixed to 25 percent of the overall production of molasses which was 20 percent. Sugar factories are exempted from the payment of electricity tax of eight paise per unit provided a captive power has been generated by them. It has been also announced that financial help worth of Rs. 25 lakh is being given for generating 1 M. Watt electricity. Besides Rs. 4 crores has been released to strengthen the weak sugar factories.

The state had recommended the center to clear 20 new sugar factories and allow expansion of 11 existing ones.

These measures, though not fulfill all the needs of the cane growers and the factory unit, it will definitely tends to strengthen the health of the industry in the state.

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