CHAPTER - II

THE SOCIO-ECONOMIC PROFILE OF THE HALSUGAR

The purpose of this chapter is to acquaint ourselves with the socio-economic setting of this factory, which will help us in understanding the setting of sugar factory in Karnataka in general and HALSUGAR in particular. Here an attempt is also made to obtain the socio-economic profile of the share holders. This provides the background materials to the study proper.

AGRO-CLIMATIC CONDITIONS :

The setting of the sugar factory is mainly based on the availability of favourable climatic conditions like abundant rainfall, blacksoil which alone hold moisture for a long time and is required for the sugar cane crop. This determine the availability of sugar cane in an adequate quantity with-in the vicinity of a compact area. Sugar cane is a tropical crop and needs hot and humid climate. Fortunately this area lies under the tropical belt and its hot climate and humid atmosphere are favourable for the growth of sugar cane.[1]

Karnataka has six sugar cane growing regions. Among them Belgaum and Mandya regions contribute major share in the production,

of cane and sugar in the state.[2] Belgaum region account for more than 70 % of the total acreage under sugar cane in Karnataka. Co, 740. Co, 8011, Co, 671, Co, 8506, Co, 7219, Co, 7704 and Co, 8014 are main sugar cane varieties of this area.[3] Sugar cane is grown in transitional belt as it is rainfed in the Belgaum District, Covering Belgaum, Khanapur and parts of Bailhongal Talukas. A glimpse of area in Belgaum District under sugar cane and other crops, including production is indicated in Table No. 2.1 below.

TABLE NO. 2.1 Showing

Commercial crops grown in the area.

(Area in 000 Hectors and production in 000 MTS 1990-91.)

Crops	Area	Production
Sugar Cane	268	22405
Tobacco	47	30
Cotton	616	640
Coconut	233	12017
Gardamom	27	2
Pepper	3	7
Arecanut	63	92

Source : Census of India - 1991.

Table No. 2.1 reveals that sugar cane production is more than any other commercial crops. But area under sugar cane is second when compared to cotton among 7 important commerical crops in Belgaum District.

Of the existing 28 sugar factories in Karnataka as on March 1993, eight factories are Located in Belgaum District. Out of them 7 factories are in Co-operative sector and one in the Private Sector which is completely owned by one rich person. All the 10 Talukas of Belgaum District are traditionaly well known for the cultivation of sugar cane in Karnataka.

Though the socio-economic and political conditions plays a vital role in establishment of any industry/factory, the basic factors that determine the Location of an industry are infrastucture facilities. Before the establishment of this factory in Belgaum District preliminary investigation was carried out by the Government of Karnataka as per prevailing rules concerning issuing licence with respect to the availability of sugarcane and future prospects for the development of cane area, permanent sources of local skilled and semi-skilled labour, adequate transport provision, existence of basic infrastructural facilities, etc., in the area concerned. Only by fulfilling these preliminary conditions in the region, State Government had initiated and

encouraged the local cane growers to start their own sugar cane factory at Nipani. Important factors which are responsible for the establishment of sugar factory at Nipani in Belgaum District are as under.

IRRIGATION FACILITY :

The setting of factory is also based on irrigation facility. Sugarcane needs water and it can not be raised with rain only. Sugar cane is a highly water intensive crop. One acre sugar cane needs 45 to 55 acre inch water for blacksoil per year. The redsoil needs 90to 100 acre inch per year, so it depends upon the soil. Sugar cane yield will increase by about 30 to 40 percent if water is abundent i.e. 3 to 4 acre inch per one feeding. Sugar cane needs year round supply of water. Even the Indian Sugar Cane Committee had recommended in 1920 that sugar cane should be grown on the canal tract in order to take the maximum benefit of canal water. After the grant of fiscal protection to sugar factory in 1932 both cane areas and number of sugar mills have increased considerably. The construction of river projects, lift irrigation schemes, digging of bore wells and open wells facilitated rapid expansion of the acreage under sugar cane in this region. The establishment of sugar co-operatives opened up ample opportunities at Belgaum District and brought about vast area under sugar cane cultivation. The sources of irrigation under this factory is indicated in Table No. 2.2

Table No. 2.2 showing

Sources of irrigation of this factory as an 31.3.1993.

Sources of Water	Dams	Rivers	Lift Irrigation	Bore Wells	Wells
Total	2	3	3	249	989

Source : Personal observation and data supplied by the Talaties.

The analysis of the data as given in Table No. 2.2 reveals that area where this factory is situated, irrigation facility is favourable to cane growers. The rivers like Krishna, Vedaganga and Doodhaganga provide ample water. Dams like Kalammawadi and Hidkal Dam and Bhojwadi, Akkol and Kallol lift irrigation schemes and Numerous wells bore wells are the major irrigation sources for this factory.

ADEQUATE TRANSPORT FACILITY :

Transport provision also needed for the setting of factory for the movement of raw materials and output easily. The HALSUGAR in the district is well connected with road facilities. This factory is not facing any transport problem in the district. The Road linkage of this factory is indicated in Table No. 2.3

Table No. 2.3 showing

Road linkage of the Factory

Name of the Roads	National Highway	District Main Roads	Taluka Main Roads	Village Roads or Rough Roads
No. of Roads	1	5	9	200

Source : Minor officials of the factory.

HALSUGAR Factory is located between Nipani and Kolhapur on the side of National Highway No. 4 a little away from Nipani at a distance of 2 Kms. The five important district main roads are linked with the factory area as well as it links 9 main roads of Taluka and about 200 village roads are helping transport of raw materials and sugar cane to this factory.

It may be noted that prior to the establishment of this fctory sufficient care was paid for fixing the area of operation based on certain criteria like sugar cane area, better scope for future development of sugar cane, probable yield of sugarcane per hectare, scope for further expansion of crushing capacity of the factory, suitable site for the unit etc.

AVAILABILITY OF LABOUR :

Labourers are one of the prime consideration for the establishment of the sugar factory. To harvest and transport of sugarcane, about 2000 labourers are essential for 1250 T.C.D. Daily crushing capacity. The following table points out the workforce position in Belgaum District.

Table No. 2.4 showing

Workers in Belgaum District.

Workers	Total Population	Main Workers	Marginal Workers	Total Workers	Workers Percentage to total Population
Persons	35,21,409	13,11,228	1,72,282	14,83,510	42.12%
Males	17,97,241	9,62,698	10,731	9,73,429	27.64%
Females	17,24,168	3,48,530	1,61,551	5,10,081	14.48%

Source : Census of India 1991, p. 4.

The analysis of the data given in Table No. 2.4 reveals that the workers in the Belgaum District are in sufficient number. The Table indicates that male workers are double that is 27.64 % , while only 14.48 % of workers belong to female categary. Most of the

workers are from factory area and very small numbers of workers are outsiders who work for this factory. But for harvesting and transporting, about 800 workers come from dry area of Maharashtra. If the workers of Mahrashtra do not come, the Belgaum District itself satisfy the labour needs of the factory. However, labourers from Maharashtra when compared to Karnataka are skilled in their work like cutting of canes and transportations and hence they are encouraged.

SIZE OF THE SUGAR PLANT :

Size of the sugar plant is one of the important factors that influences the operational performance of a sugar factory. A sugar cane processing plant in a co-operative enterprize has to be of certain minimum size (1250 T.C.D.) and properly equipped with the necessary technical staff and workers both skilled and semiskilled. The HALSUGAR has minimum size i.e. 1250 T.C.D. Daily crushing capacity. This can be known from Table No. 2.5

Table No. 2.5 showing

Capacity of Sugar factory and canecurshed in the seasons in Quintals.

Seasons	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Daily Crushing Capacity	12500	12500	12500	12500	12500	12500
Sugar cane provided by members	9,53,444.84	1,14,424.81	26,234.24	5,48,433.69	10,87,768.30	10,82,480.55
Sugar cane provided by non-members.	64,691.07	55,54,741.04	5,93,673.07	10,05,938.35	86,53,369.79	8,27,341.81
Cane from outside the area.	11,78,768.35	9,55,145.10	12,64,024.94	10,15,733.17	4,71,110.10	3,40,292.15
Factory's cane		1708				
	19,15,804.28	16,25,061.13	21,20,022.25	27,70,105.21	24,24,248.13	23,50,114.51

Source : Records of the factory.

Table No.2.5 rveveals that the factory has not made expansion of its crushing capacity. In 1987-88 capacity is of 1250 T.C.D. which is continued. The factory produced its own cane in 1988-89 season only but after, it did not produce because the land was used for building and other purposes. The factory crushed more cane in the year 1990-91 campared to other years because mechanical trouble was very less in that year. It also shows that factory has optimum size of plant.

As to make the whole co-operative unit technically efficient and viable-when compared to such units in public or private sectors, the decision to set up a plant of particular size is necessarily influenced by the grower members in a co-operative sugar factory. With the passage of time it was realised that a co-operative sugar factory must be an organization of at least 1,000 sugar cane growers producing cane from about 4 to 5 thousand acres of land within a radius of 10 miles and promising supply of sugar cane to the factory with 1,000 T.C.D. to the tune of at least 150,000 tonnes of crushing in every season.[4]

There are mainly five factors which determine the size of a plant. The are :-

Technical,

Managerial,

Financial,

Marketing, and

Risk and fluctu-ations (unforseen conditions).

According to Lokanathan, an optimum plant refers to " Limits of expansion of an industry will be reached at that level of output where taking all costs in to account the lowest cost per unit of out put may be obtained. This practice can be reached only after gradual experimentation.[5] The determination of an optimum size of a sugar factory is pertinent in the case of both the expansion of existing capacity and the setting up of new units.[6]

The GunduRao committee stated that the economic capacity is not static and added a capacity of 1,500 tonnes would be fairly economic capacity under the conditions prevailing at peresent in India. While this 1,500 T.C.D. should be the minimum target for expanding the existing units, new units should have a starting capacity of 1,500 of 2,000 T.C.D. with a provision for expansion up to 3,000 to 4,000 T.C.D. The Sen Commission (1965) however was of the opinion that a unit of 1,250 T.C.D. capable of expansion up to 2,000 T.C.D. was an economic unit. The study group appointed by Government of India suggested that, the minimum size of the sugar plant should be at least 2,500 T.C.D. even in backward areas.[7]

It is only recently that sugar technologists and sugar manufacturers have come to the idea that 1,250 T.C.D. sugar plant is no longer necessary. The optimum sizeplant and that larger plants of about 2,500 T.C.D. capacity may be more efficient. It should be

also noted that larger the area of operation of a sugar factory the greater are the likely difficulties in respect of drawing up harvesting and transport schedules by the factory con-cerned.

Another factor that influences in the setting up of a large plant is the concerned of land resources among the cane cultivators. It is noted that larger the number of cane suppliers to a sugar factory higher would be the managerial costs and lesser control over the cane quality and supervision. Thus, it would be a factor to discourage the growth of a very large sugar factory in areas where cane cultivators operate in small places. In brief, each one of these factors influence the size of a plant of an industrial concern.

LIBERAL GOVERNMENT POLICY :

The Government of Karnataka is also playing a very important part in the setting up of the factory. To establish the factory, the prior approval of the State Government is needed. The favourable policy of Central Government and State Government regarding the price of sugarcane and sugar plays an important incentive for the rapid growth of sugar factories in this area. The contribution of State Government by way of providing incentives like loan and grant,and facilities like cheap power supply, power for fixing price of sugarcane

to the factory management helped the growth of sugar co-operative in this area. Forexample Table No. 2.6 points out the release of funds by the State Government of Karnataka as share capital to this factory.

Table No. 2.6 showing

State Government share capital contribution to the factory for the period 1982-89.

Sr. No.	Date of Sanction	Amount released Rs. in Lakhs	Date of release
1)	14.12.1982	47.40	18.12.1982.
2)	12.01.1984	25.00	27.01.1984.
3)	31.03.1984	100.00	25.06.1984.
		58.00	30.11.1984.
		2.70	11.02.1985.
		18.00	26.06.1986.
4)	30.03.1985	8.90	17.02.1986.
5)	03.02.1986	62.82	30.05.1986.
6)	07.05.1986	53.00	30.09.1987.
	Total :-	375.82	

Source : Annual Reports from 1983 to 1992. (Halsugar)

The Table No. 2.6 reveals that, since 1987 the Government of Karnataka has not given share capital because factory started crushing in 1986-87 season. In 1984 the government released more share capital to the factory i.e. 183 lakhs out of a total of 375.82 lakhs. The factory also draws loans from industrial development Bank of India Bombay Table No. 2.7 shows loan obtained by the factory from I.D.B.I. Bombay.

Table No. 2.7 showing

The release of funds by the Industrial Development Bank of India, Bombay.

Sr. No.	Date of Sanction	Amount released Rs. in Lakhs.	Date of Release
1)	1.3.1983.	112.00	11.04.1984.
2)	1.3.1983.	200.00	13.11.1984.
3)	1.3.1983.	38.00	25.10.1985.
4)	1.3.1983.	50.00	01.08.1986.
	Total :-	400.00	

Source : Annual Reports from 1983 to 1993 (Halsugar)

Table No. 2.7 reveals that I.D.B.I. Bombay released funds in the year 1984 which is more i.e. Rs. 312 Lakhs out of a total of Rs. 400 Lakhs. The funds of I.D.B.I. Bombay was used for the establishment of the factory particularly constructing asbestos sheet building. The release of funds by the State Government as share capital and funds by the I.D.B.I. Bombay as loan contribution helped to establish this factory.

LOCAL LEADERSHIP :

Local leadership is the main important factor for the establishment of any factory. The role played by the local leaders like Late Shri. Baburao Balwant Patil, Budihalkar. Shri M. H. Patil, S. R. Kothiwale, A.S. Kurbetti and District Commissioner Mr. Anirudha Desai in initating and encourgaing the farmers for starting the co-operative sugar factory in their own area can not be neglected.[8]

The Board of Directors of this Factory belong to two different Political parties. However, in the early stage, Board of Directors belonged to Congress party were able to get licence, loan and other facilities from the Government to establish the factory. Table No. 2.8 indicates party affiliations of the Board of Directors.

Table No. 2.8 showing

Party Affiliations of the Board of Directors.

Directors	Congress I	Janata Dal	Non Partisan	Total
Sitting Directors	7	5	1	13
Ex-Directors	14	4	5	23
Total :-	21	9	6	36

Table No. 2.8 reveals that 21 Directors are affiliated to Congress I and 9 belonged to Janata Dal remaining 6 Directors are non-partisan in character. The first Board of Directors belonged to Congress I under the Chairmanship of Shri. Baburao Balwant patil which helped them to establish HALSUGAR. Because Congress I party was ruling party at that time in Karnataka State and also at the national level. Shri. Baburao Balwant Patil was considered as right hand of B. Shankaranand the then health Minister, Government of India, who whole heartedly helped in establishing this factory. It should be noted that his son is a shareholder of this factory.

Local participation plays an important role in establishment of sugar factory. The Board of Directors held position in co-operatives socieities as well as in local political bodies. The same is found in Table No. 2.9

Table No. 2.9 showing

Number of Board of Directors who held position in Local Political Bodies as well as in Co-operative societies.

No. of positions occupied in co-operative societies as well as political local bodies.

	Co-Operative Society	Village Panchayat	Panchayat Samiti	Zilla Parishad	Municipality	State Legislature	Total
Sitting Directors	5	2	2	-	-	1	9
Ex-Directors	8	4	2	-	1	0	15
Grand Total:	13	6	4	-	1	1	24

Table No. 2.9 indicates the political positions held by the Directors. Among them only one is a state level leader. But others have some experience in political field. This obviously gives more strength to them in carrying out the affairs of this factory. Local leaders participation assumed the cornerstone in the establishment and expansion of sugar factorty.

Late Shri. Baburao Balavantrao Patil Budihalkar was the chief Promoter and Founder Chairman of the factory. He had collected major portion of share capital from the members within a short period for which Director of Sugar, Bangalore, has complimented for his work. During his period and due to his efforts the letter of intent has been given by the Government of India.[9] The site selection has also been made during his period.

Shri. Baburao Balwantrao Patil Budihalkar has worked in the following co-opeative institutions at District and National levels which also gave him more popularity as a leader.

1. Member, Governing council National Co-operative Union of India, New Delhi.
2. National Federation of Urban Banks and credit societies, New Delhi as vice president.
3. Hindustan Latex Ltd. Trivendrum Director (Government of India undertaking)
4. President-spot check committee South Central Railway secunderabad.
5. Founder president, Maharashtra State Urban Co-operative Banks, Federation Bombay.
6. President Srhi. Veershaiv Co-operative Bank Ltd., Kolhapur.

This clearly indicates that Shri B.B. Patil has so much experience in these institutions, which helped in establishing this factory at Nipani.

THE SOCIO-ECONOMIC CONDITIONS OF LEADERS :

The Socio Economic conditions of the Local leaders as well as cane growers play a prominent role in the functioning of the sugar factory. Quality of leadership of the factory depends upon caste, education and occupation status of the leaders and also cane growers. The Socio economic conditions of the leaders and cane growers of the area are as under.

Table No. 2.10 showing

Caste of Board of Directors of the factory.

Caste	Ling-ayat	Mara-tha	Jain	Brah-min	Muslim	Chri-stion	Back ward class	Total
Sitting Directors	7	2	1	2	-	-	1	13
Ex-Directors	10	3	3	-	3	2	2	23
Total :-	17	5	4	2	3	2	3	36

Caste was considered as a dominant factor in moulding the social and political life of the villagers. Caste system plays a vital role in structuring the leadership in the rural society. Even today, the rural social structure in India is based on caste structure and caste identification. Some previous studies on rural leadership in India have also shown that caste still as important factor which determines rural leadership.[11] And such leadership plays a predominent role in moulding social and political life of rural people.

The data found in Table No. 2.10 reveals that the directors are drawn relatively from the higher castes of the area as they have high social status and this high social status also helped the leaders to establish HALSUGAR at Nipani.

Table No. 2.11 shows about the level of education of the Board of Directors of this factory.

Table No. 2.11 showing

Education of the Board of Directors

Education	Primary	Secondary	Collegiate	Total
Sitting Directors	3	3	7	13
Ex-Directors	10	3	10	23
Total	13	6	17	36

So far as educational attainments are concerned , The data found in Table No. 2.11 reveals that all are educated and none is illiterate. Because of their education, they have status in society as well as some knowledge regarding co-operative movement. So it is expected that this factry should function efficiently. Now let us turn our attention to occupation pattern of Board of Directors. Table No. 2.12 shows regarding occupation pattern of Board of Directors.

Table No. 2.12 showing

Occupation pattern of the Board of Directors.

Occupation	Agriculture	Business	Service	Total
Sitting Directors	9	3	1	13
Ex-Directors	13	4	6	23
Total	22	7	7	36

Table No. 2.12 reveals about occupation of sitting and ex-directors of the factory. Occupational composition of the directors shows that most of them are agriculturists and a very few are in business and service. The agriculturists dominate over the business

and service based directors. As HALSUGAR is established by the sugar cane growing farmers, it is natural that most of the directors are also agriculturists. The caste, education and occupation pattern of the Boards of Directors reveals that most of them are having sufficient education and occupationally agriculturists and belonged to higher castes. The Board of Directors are also economically strong because they have lands. The same is indicated in Table No. 2.13 (A).

Table No. 2.13 (A) showing

Total land holding of Board of Directors.

Land holding	Up to 5 acres	5 to 10 acres	10 to 20 acres	20 to 30 acres	Above 30 acres	Total
Sitting Directors	2	2	1	3	5	13
Ex-Directors	7	8	4	3	1	23
Total :	9	10	5	6	6	36

The Table No. 2.13 (A) reveals that out of 36 only 9 Directors are small farmeres and 15 Directors marginal landholders and 12 Directors are big land holders. This indicates that most of the Directors are ecnomically sound. To prove the point further, let us consider the sugar cane land holding pattern of Board of Directors.

Table No. 2.13 (B) indicates about sugar cane cultivation area of Board of Directors.

Table No. 2.13 (B) showing

Sugar cane cultivation area of Board of Directors.

Sugar cane land holding	1 to 5 acres	5 to 10 acres	Above 10 acres	Nil	Total
Sitting Directors	8	2	2	1	13
Ex - Directors	13	3	2	5	23
Total	21	5	4	6	36

Table No. 2.13 (B) reveals that all Directors except six are cane growers which help them to cultivate land without difficulty and also what type of seeds and fertilizers required and how to cut and transport. This helps to anticipate various difficulties and to solve problems like cane cutting and transporting it to the factory.

SOCIO-ECONOMIC CONDITIONS OF SAMPLE CANE GROWERS/SHARESHOLDER:

Cane growers also socially and economically strong which can be seen through following Table.

Table No. 2.14 showing Caste of sample of shareholders.

Table No. 2.14 showing

Caste of Sample share holders.

Caste	Lingayat	Marathas	Muslim	Jain	Brahmin	Backward	Total
Share Holders	43	15	3	27	1	11	100

Table No. 2.14 reveals that majority of share holders belong to higher castes like Lingayat, Maratha and Jain. It also reveals that Backword classes are also improving their economic situation as 11 belonged to backword classes.

Table No. 2.15 indicates regarding level of education of the sample share holders.

Table No. 2.15 showing

Education of the Sample Shareholders.

Education	Uneducated	Primary	Secondary	Collegiate	Total
Sample Share Holders	18	36	33	13	100

So far as educational attainments are concerned the Table No. 2.15 reveals that 82 % of the share holders are educated and 18% of the shareholderss are uneducated. Moreover a total 46 have

secondary and collegiate education. This shows that educationally share holders are quite sound. To find out their economic status, let us find out their occupation and land holding pattern.

Table No. 2.16 showing

Occupation pattern of sample share holders.

Occupation	Agriculture	Business men	Job holders	Others	Total
No. of Share Holders	74	2	12	12	100

The Table No. 2.16 reveals that 74 % of the share holders are Agriculturists and only 2 % share holders businessmen and remaining 24 % are job holders and having other occupations. Majority of the shareholders are Agriculturists and they have their own land. This makes them naturally to take active interest in the functioning of the factory. To find out whether share holders are also economically strong, we have to know their land holdings and sugarcane cultivation area. The same is indicated in Table No. 2.17 (A) and in Table No. 2.17 (B) respectively.

Table No. 2.17 (A) showing

Total land holding of sample shareholders

Land holding	1 to 5 acres	5 to 10 acres	10 to 15 acres	above 15 acres	Total
No. of Share Holders	63	26	1	10	100

Table No. 2.17 (A) indicates that out of 100 sample shareholders 63 are small farmers and 26 shareholders are medium level farmers and 11 are rich farmers.

Table No. 2.17 (B) showing

Sugar cane cultivation area.

Sugar cane land holding	Nil	Up to 1 acre	1 to 4 acres	4 to 10 acres	Above 10 acres	Total
No. of Share holders	17	42	28	11	2	100

Table No. 2.17 (B) reveals that those having 1-4 acres of sugar cane land get Rs. 25,000 to Rs. 1 lakhs per annum. Only 17 % of the share holders are not growing cane because of lack of irrigation facility. 42 % of the cane growers are poor and 28 % cane growers are medium and 13 % cane growers are rich farmers. This indicates that more than 40 out of 100 cane growers are 'more' or 'less' economically self sufficient.

THE FIRST BOARD OF DIRECTOR :

In the initial stage, the State Government appointed a Board of Directors headed by Shri Baburao Balavant Patil Budihalkar. After three years, with the change in party leadership at the State Government level, the transfer of administrative power of the factory from original Board of Directors to District Commissioner took place. This has happened because the period of original Board of Directors who are nominated by the Government came to an end. Till the election of New Board of Director powers were vested in the District Commissioner. But again the change in the State Government leadership in 1989. Then the original (first) Board of Directors were reinstated. In May 1992 a new Board of Directors came in to existence through election.

The first Board of Directors are socialy and economicaly strong and they enjoyed high social status in their particular area. They also had good relations with State and Central Ministry and with the cane growers. This led to the smooth functioning of the factory at the earlier stage.

The organization of this factory is essentially based on cane grow-ers and thier shareholding has been linked to their acreage under sugarcane within a definite area which is known as the area of

operation. The area of operation of each sugar co-oprative in Belgaum district has been generally indicated by a certain number of villages. The number of villages covered by each unit and the average radius of the area of operation taking the factory site as a centre. The same is indicated in the Table No. 2.18.

Table No. 2.18 showing

Operational area of sugar factory in Bdlgaum district.

Name of the Factory	Area of Operation (Talukas)	No. of villages covered	Average redius (area of coverage)
HALSUGAR	Chikodi Taluka.	118	60 Km.
HIRA SUGAR	Hukkeri, Chikodi, Belgaum, Gokak of Karnatak State. Ajra, Gadhinglaj of Maharashtra State.	270	35 Km.
MALPRABHA	Bailhongal, Khanapur, Belgaum Soundatti, Dharwad and Haliyal	585	48 Km.
RAYA SUGAR	Raibag and Chikodi	49	40 Km.
GHATAPRABA	Gokak, Soundatti, Ramdurg and Chikodi.	104	32 Km.
DUDHGANGA	Chikodi Athani, and Raibag Talukas.	111	40 Km.
TOTAL	10 Talukas of Belgaum District 2 Talukas of Dharwad District 2 Talukas of Kolhapur District	1237	42.5Km.

Source: Records of the Factories.

Table No. 2.18 reveals that operational area of sugar factory in Belgaum District. It shows that distance of each factory from another factory is about 25 to 60 Km.

It may be noted that the average radius of a factory is about 20 Km. to 25 Km. depending upon the cane yield per hecteare which is considered as a ideal area for a sugar mill. Reserve Bank of India recommended that the distance between two sugar mills should be 60 Kms. implying a radius of 30 Km. from each mill. Likewise the Sugar Factory Enquiry commission Government of India (1974) suggested a distance of 50 recommended a distance of 40 Kms.

The Table No. 2.18 gives a clear picture about the number of villages, average radius of operation and area covered by each co-operative sugar factory in Belgaum District. It could be noted that the area of operation of these sugar co-operatives is within the prescribed limits.

Today, in this area, the sugar cane cultivation area is increasing rapidly because of availability of irrigation facility from Kalammawadi Dam. However, there is frequent fluctuations in cane area in this district due to the reasons like failure of mansoons, shortage of water facility from the dam, drought situations and fluctuation in the prices of other crops from time to time which taken together affect the interest of cane growers. For the expansion of cane area further efforts are needed particularly in providing irrigation facilities.

Even today sugar cane production of this area is more i.e. 6 lakh tonnes. Hence, sugarcane growers of this area send sugar cane to factories in Maharashtra like Panchaganga, Datta, Kagal, Hupari, Bidari, Bhogawati and Harali. Factories from Maharashtra area also obtain sugar cane from Belgaum District.

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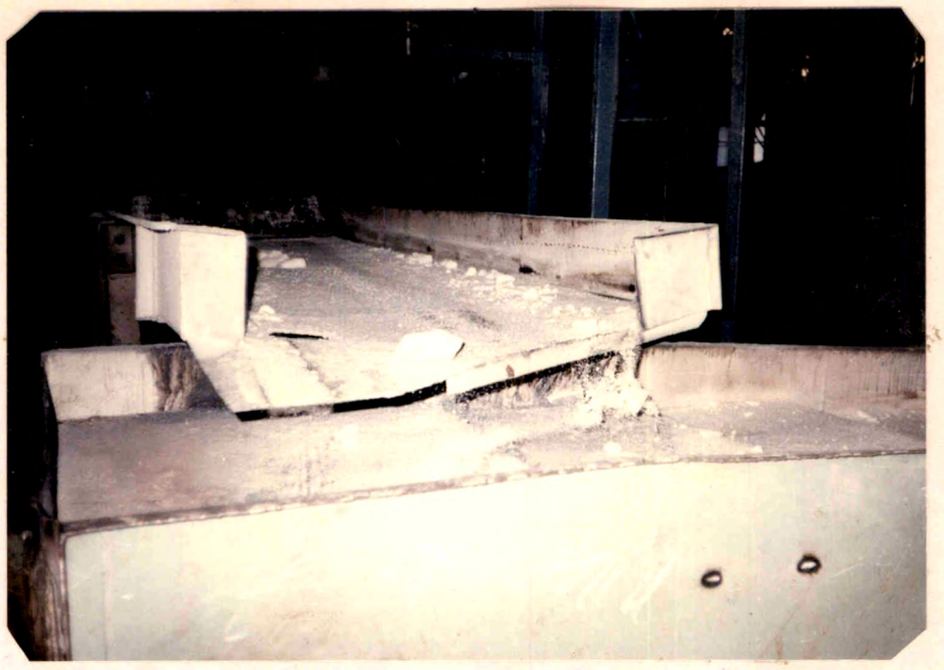

SUGAR HOUSE.

FILLING OF SUGAR.

WEIGHING AND STICHING OF SUGAR BAGS.

SUGAR TRANSPORTATION TO GODAWAN.