

C H A P T E R - IIIGROWTH OF SUGARCANE SUPPLY AND SUGAR PRODUCTION1984 - 1994INTRODUCTION :

A review of the development of the major trends in the working of the co-operative sugar factory under study reveals that the total quantity of sugarcane crushed has increased during the period under study. This is mainly due to due factors (a) Growth in area of operation and addition of new villages to the area of operation and (b) Increase in sugarcane production and growth of installed crushing capacity of the co-operative sugar factory. From this it follows that as more sugarcane is crushed, more sugar output will be produced and hence the sale policy of sugar by the factory assumes crucial importance as it is the main source of income receipt generation so valuable for increased 'value added' in the process of agro-based industrial activity. This ensures that the cane producer farmers are paid rewarding prices for their cane supply to the factory.

The following chapter highlights these major aspects.

The main aspects are :

- a) How much of growth in cane supply has taken place during the period under study and,

- b) How the cane supply is made by farmers and,
- c) How growth in operational area has increased.

All the above have led to increased sugar production which therefore gives importance to the sugar sales policy of the factory within the overall policy followed in the country.

3.1 SUPPLY OF SUGARCANE :

For the scientific growth of the sugar industry there is a need of Research and Development Centre. In Maharashtra in Poona district there has been organised a scientific Research Centre in the name of Vasantdada Research and Development Centre, which influences the cane growers to develop and grow more production. Central Government has also so many schemes, which help in the expansion of the factory and guide in the best use of by-products of the factory to develop the area under cane, etc. Shri Datta Shetkari Sahakari Sakhar Karkhana Ltd., Shirol has also gained from these schemes.

In the year 1989-90, the crushing capacity of Shree Datta Shetkari Sahakari Sakhar Karkhana Ltd., was increased upto 5,000 M.T. For 100% utilisation of crushing

capacity it is necessary to get 8 lakhs M.T. of sugarcane but up-till now factory did not receive the sufficient quantity of cane to crush. The major portion of sugarcane supply is from the members and non-members under operational area of the factory. They have contributed to the extent of 90% to 95% of total supply. Factory has also crushed sugarcane from Karnataka State. The crushing capacity of factories of Karnataka State is low and that is why the farmers give their sugarcane to crush in Maharashtra State.

TABLE NO. 3.1DETAILS OF SUGARCANE SUPPLY

Years	Supply of sugarcane by members under operational area	Supply of sugarcane by non-members under operational area	Others
1983-84	2,50,618 (70.26)	86,583 (24.28)	19,462 (5.46)
1984-85	2,47,930 (72.73)	85,978 (25.23)	6,949 (2.04)
1985-86	2,39,119 (64.75)	1,01,229 (27.41)	28,916 (7.84)
1986-87	3,00,238 (64.00)	1,34,042 (28.57)	34,821 (7.43)
1987-88	3,26,018 (68.76)	1,28,375 (27.07)	19,728 (4.17)
1988-89	3,56,140 (91.42)	3,645 (0.93)	29,770 (7.65)
1989-90	2,72,815 (51.39)	1,96,402 (37.00)	61,596 (11.61)
1990-91	5,72,420 (80.26)	62,616 (8.78)	73,467 (10.96)
1991-92	5,82,927 (74.61)	1,78,849 (22.89)	19,568 (2.50)
1992-93	5,57,746 (81.06)	1,23,174 (17.90)	7,105 (1.04)
1993-94	4,70,842 (83.73)	83,686 (14.88)	7,791 (1.39)

SOURCE : Annual Reports of the factory from 1983-84 to 1993-94.

- N. B. : 1) Other factors indicates sugarcane from out of operational area, sugarcane crushed of other factories and sugarcane from out of Maharashtra State.
- 2) Figures in the brackets indicates the percentage of supply with the total sugarcane crushed.

From the Table No. 3.1, it seems that during the season of 1983-84 factory had crushed 3,56,663 M.T. of sugarcane. In the year 1984-85 due to decrease in the production of sugarcane, factory did not receive adequate sugarcane from out of Maharashtra State and from operational area under the factory within Maharashtra. But during the season 1985-86 factory crushed 3,69,264 M.T. of sugarcane which was an increase by 28,407 M. T. compared to last year. In the subsequent year of 1986-87 factory expanded it's crushing capacity from 2,000 M.T. to 2,500 M.T. During this season factory crushed 4,69,101 M.T. of sugarcane which was higher than last three seasons. In the year 1987-87 factory crushed 4,74,121 M.T. sugarcane which was higher by 5,020 M.T. as compared to last year. In 1988-89 due to less availability

of sugarcane from operational area of the factory from Maharashtra State and also less availability of sugarcane from non-members under operational area, factory crushed 3,89,555 M.T. of sugarcane which was less than last two seasons. During the year 1989-90, the crushing capacity expanded from 2,500 to 5,000 M.T. In this season factory crushed 5,30,818 M.T. sugarcane, comparing to last year, it was more. In the year 1990-91 factory crushed 7,13,135 M.T. sugarcane. And in the year 1991-92, 68,209 M.T. more sugarcane was crushed compared to last year. 1992-93 and 1993-94 due to adverse sugar policy of government, technical faults in the machinery and the changing pattern of the crop cultivation their was decrease in the sugarcane production. Hence, factory received less sugarcane to crush which decreased by 93,319 tonnes in 1992-93 as compared to 1991-92 and in 1993-94, 1,25,706 M.T. was less than 1992-93.

Out of the total supply of the sugarcane to the factory the major portion of sugarcane has been supplied by the members under operational area of the factory and secondary by the non-members under operational area of the factory. During the year 1983-84 to 1993-94 the members and non-members under operational of factory have provided 92% to 99% sugarcane to the factory except the year 1989-90 and 1990-91. In these years 1989-90, they had provided 88.39% and in 1990-91, they had provided 89.04%.

By observing the above figures, it seems that out of the total sugarcane supply, factory has received less sugarcane from out of operational area, out of Maharashtra state and from other factories. The percentage of the above was about 1% to 8%. In the year 1989-90 and 1990-91, there was some increase in the percentage, it was about 11.61% in 1989-90 and 10.96% in 1990-91.

The above table thus reveals that -

- a) The installed crushing capacity of the co-operative sugar factory under study has increased during the period under study.
- b) Alongwith growth of crushing capacity, it is also found that supply of sugarcane to the factory more so by member farmers has increased and forms the largest percentage of total proportion.
- c) Cane supply from other factory's area of operation and from outside State especially Karnataka has risen.

3.2 OPERATIONAL AREA :

Following Table No. 3.2 shows the distribution of operational area through district-wise and taluka-wise since 1983-84 to 1993-94.

TABLE NO. 3.2

DETAILS OF THE OPERATIONAL AREA OF THE FACTORY

Area	1983-84	1991-92	1992-93	1993-94
<u>MAHARASHTRA STATE :</u>				
A) <u>KOLHAPUR DISTRICT :</u>				
<u>TALUKAS :</u>				
1) Shirol	48	48	50	50
2) Hatkanangale	32	32	32	32
3) Karveer	2	2	2	2
4) Kagal	3	3	3	3
TOTAL OF ABOVE :	85	85	87	87
<u>KARNATAKA STATE :</u>				
B) <u>BELGAUM DISTRICT :</u>				
<u>TALUKAS :</u>				
1) Chikodi	13	13	7	7
2) Athani	-	-	21	21
TOTAL OF ABOVE :	13	13	28	28
GRAND TOTAL :	98	98	115	115

SOURCE : Annual Reports of the factory from 1983-84 to 1993-94.

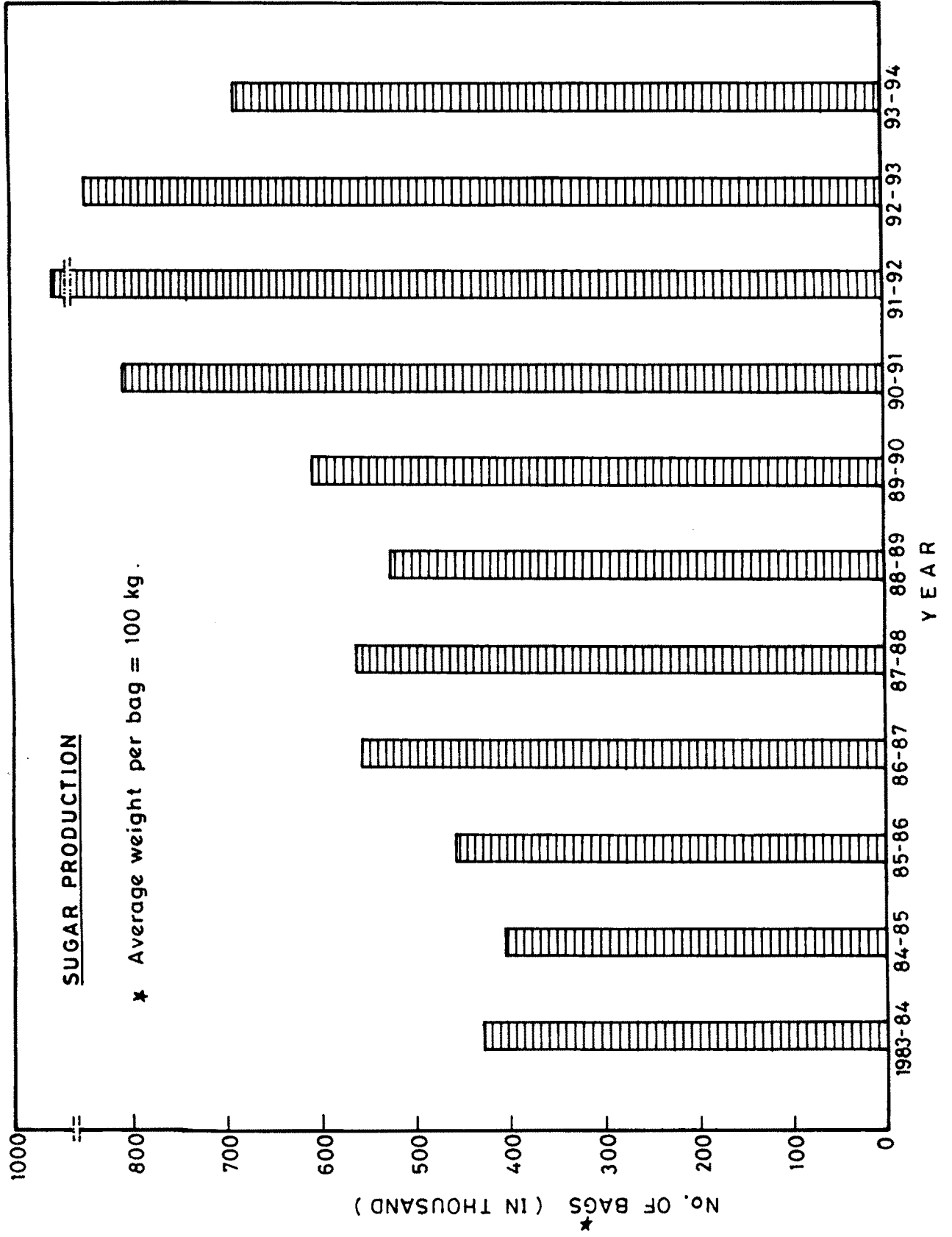
From 1983-84 the operational area of the factory comprised of 85 villages from Shirol, Hatkanangale, Karveer and Kagal talukas of Kolhapur district (Maharashtra State) and 13 villages from Chikodi taluka from Belgaum district (Karnataka State). The operational area has remained the same upto the year 1990-91. Thereafter from 1992-93, two new villages from Shirol taluka and for the first time 21 new villages from Athani taluka of Belgaum district (Karnataka State) were increased and 6 villages from Chikodi taluka were decreased in the operational area. In 1993-94, out of 115 villages, 50 villages from Shirol taluka have been exclusively allotted to the same factory and remaining villages are common with other neighbouring factories.

TABLE NO. 3.3DETAILS OF WORKING OF THE CO-OPERATIVE SUGAR FACTORY

Season Year	Crushing Capacity	Total days of the season	Total cane crushed M.T. in Lakhs	Total sugar produced (in bags)	Recovery (Percentage)
1983-84	2,000	149	3.56	4,30,612	12.05
1984-85	2,000	150	3.40	4,15,950	12.17
1985-86	2,000	153	3.69	4,56,580	12.35
1986-87	2,500	187	4.69	5,60,865	11.94
1987-88	2,500	186	4.74	5,75,975	12.13
1988-89	2,500	168	4.29	5,25,155	12.21
1989-90	5,000	229	5.30	6,08,155	11.42
1990-91	5,000	143	7.13	8,09,620	11.34
1991-92	5,000	177	7.81	9,66,285	12.21
1992-93	5,000	151	6.88	8,41,265	12.18
1993-94	5,000	123	5.62	6,80,800	12.05

SOURCE : Annual Reports of the factory from the year
1983-84 to 1993-94.

GRAPH NO. 3.1



3.3 DETAILS OF THE WORKING OF SHREE DATTA SHETKARI
SAHAKARI SAKHAR KARKHANA LTD., DATTANAGAR, SHIROL :

The above Table No. 3.3 gives the main features of the working of a co-operative sugar factory. The main aspects namely details of crushing capacity, recovery, sugar produced during the period under study are depicted.

The co-operative sugar factory went into production in the year 1972 having crushing capacity of 1,250 M.T. per day. The crushing capacity was expanded in the year 1978 from 1,250 M.T. to 2,000 M.T. per day. This study is undertaken for the period of 1983-84 upto the period of 1993-94.

In the year 1983-84 the total season was about 149 days and in this period factory had crushed 3.57 lakhs M.T. of sugarcane. 120.10% capacity was utilised, the average recovery of sugar was 12.05%. Totally 4,30,612 bags of sugar were produced.

The total season of the year 1984-85 and 1985-86 was about 150 and 153 days, and about 114.51% and 121.16% capacity was utilised. In these years 3.42 lakhs M. T. and 3.69 lakhs M.T. sugarcane crushed and recovery from the same in these year was 12.17% and 12.35% respectively and 4,15,950 and 4,56,580 bags were produced in these years.

In the period 1986-87 to 1988-89 the crushing capacity of the factory had expanded from 2,000 M.T. to 2,500 M.T. per day. Due to expansion of crushing capacity the total working days increased. In these years factory worked for about 187 days and in the year 1986-87, 186 days in the year 1987-88 and 168 days in the year 1988-89. In these three years season 4.69 lakhs M.T., 4.74 lakhs M. T. and 4.29 lakhs M.T. sugarcane was crushed in the factory. In the year 1986-87, 110.20% capacity was utilised the percentage of recovery was 11.94 and totally 5,60,875 bags of sugar was produced. In the year 1987-88 and 1988-89 the average recovery of sugar

was 12.13% and 12.21% and the total bags of sugar produced was 5,75,975 and 5,25,155 respectively.

Due to old machinery and repeated technical faults in it the total crushing capacity was not fully utilised in the season of 1989-90. In this season within 229 days factory had crushed 5.31 lakhs M.T. of sugarcane having a recovery of 11.42%. Totally factory had produced 6,08,155 bags of sugar. In this season the crushing capacity had increased from 2,500 M.T. to 5,000 M.T. Modernisation and expansion programme was held in this season. The total period of modernisation and expansion was totally expected to be for three years, but it actually materialised within a short period of one year only, and from the date 29th March, 1990 the expanded crushing capacity test was started.

In the year 1990-91 totally within 183 days factory has crushed 7.13 lakhs M.T. of sugarcane having average recovery of 11.34%. Totally 8,09,620 bags of sugar was produced, but unfortunately at the starting of the season there was a technical fault in high pressure boiling plant. So within this period old machinery of the factory was used which had a low crushing capacity. Thereafter about a period of one month the new machinery started into operation. All

these factors totally effected the efficiency of the factory and it resulted in low average of recovery.

The total season of the year 1991-92 was about 177 days. In the season 7.81 lakhs M.T. sugarcane was crushed and 9,66,285 bags were produced. The average recovery was 12.21% which shows increase by 87% than the last year.

In the season due to adverse economic sugar policy of the government and the increase in the cost of sugarcane production their was a decrease in the area of sugarcane. So their was decrease in the supply of sugarcane to the factory and also there was technical faults in the machinery, so the machinery of the factory was not fully utilised so the total production of sugar has decreased by 93.31 lakhs M.T. The total season of the year was about 151 days and in this period factory had crushed 6.88 lakhs M.T. sugarcane and it had produced 8,41,265 bags of sugar at average recovery of 12.18%.

In the year 1993-94 the total production of the sugar in the country was about 97.00 lakhs M.T. comparing to last years. First time the production was low below 100 lakhs M.T. in the factory the total crushing season was about 123 days.

In this season 5.62 lakhs M.T. sugarcane was crushed and totally 6,80,800 bags of sugar was produced having average recovery of 12.05%.

The above analysis of the working of the sugar factory reveals that -

- a) As area of operation has increased in cane supply to the sugar factory has registered a growth during the period under study.

- b) Cane supplied by farmer members is the single largest contributor and therefore as the total quantity of sugar produced by the factory increases - then the sugar sales policy and the resultant income yield due to sugar sales are bound to play an important role in the overall income receipts of the factory. This is because sugar factories in India produce sugar as the main product and other products are by-products. Hence in the process of 'value-added' the income realised from sugar sales plays a vital role. Here the overall policy of the government, the price of sugar in levy sales and free market sales plays importance. These aspects are studied in the next chapter.