

CHAPTER - V

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The main findings and conclusions arrived at as a result of this study on Managerial and Financial aspects of the Bhogawati Sahakari Sakhar Karkhan Ltd. has been stated in the relevant chapter. It is proposed here to present a consolidated picture of the managerial and financial aspects through a connected review of all important findings and conclusions.

Before taking up the actual study, the researcher has briefly examined the history of the growth and development of the sugar industry of India in the co-operative sector with special reference to Maharashtra state. The study has revealed that sugar industry is one of the largest agro-based industries in the country. It is also a premier industry and among the best organised industry of India.

The co-operating wing of this industry holds a place of pride in the co-operative movement, especially in the field of large - sized processing unit. It has proved itself an instrument of rural reconstruction and development. Apart from adding to the economic progress of sugarcane grower - members, sugar co-operative have taken up a number of other special welfare activities for the benefit of the rural community at large, such as spreading of education, extending medical aid, providing entertainment and elementary technical

knowhow, establishment of dairies, creating housing facilities etc. In fact the co-operative sugar industry has turned the agriculturist class into entrepreneurs and has developed leadership in that community.

The Sugar Co-operatives account for 57% share in total national sugar production. They provide employment opportunities to a very large number of skilled, semi-skilled and un-skilled workers. As such the co-operative sector of sugar industry is instrumental in bringing about the development of rural areas, mobilisation of rural savings, increasing the national income, creating employment opportunities and earning foreign exchange. The co-operative sugar industries are indeed models in the field of co-operative processing for rural agro industrial development.

In view of this, the Central and State Governments have deliberately helped in setting up more and more co-operative sugar factories through out the country. At present there are in all 196 co-operative sugar factories in India, out of them 85 are located in Maharashtra. As the recent information given in Parliament on 23rd May, 1990, the central Government has issued licenses to 81 new co-operative sugar factories.

As mentioned earlier to examine the Managerial and Financial performance is the major object of the present study.

To increase the span of profit there are two

alternatives. First is to increase the prices of sugar in the market and second is to minimise the cost of sugar production. From these two alternatives, the first one is beyond the control of sugar industry as the sugar prices are controlled by the Government. The study shows that the sugar industry should follow the second path, i.e. minimising the cost of sugar production.

In the preceding section the collected data was analysed and interpreted at various stages. Now to get the comprehensive picture, findings are summarised in this section.

For the present study we have considered a case study of Bhogawati Sahakari Sakhar Karkhana Ltd. Tulshidasnagar, Tal - Barsi, Dist - Solapur.

The main problem faced by the Bhogawati Sahakari Sakhar Karkhana Ltd. during the period of study i.e. 1984 -85 to 1989-90 was irregular supply shortage of sugar-cane. For the unit of 1,250 tonnes crushing capacity, on an average 1,87,500 tonnes sugarcane is necessary. In the year 1989-90 the factory had to crush 2,78,128 tonnes sugarcane, while the factory could get only 1,32,149 tonnes, 1,55,678 tonnes, 1,87,755 tonnes and 1,18,480 tonnes of sugar cane in the year 1984-85, 1985-86, 1986-87 and 1988-89 respectively.

Secondly the sugarcane available is not of high recovery. Average recovery of Bhogawati factory for the

period of study was 9.61 while it was 11.06 for the same period for the co-operative sugar factories at Maharashtra level. In addition to this the crushing capacity of the factory was very un-economic i.e. 1,250 M.T.per day,during the period of study.

Following are some observations of the study regarding Bhogawati sahakari sakhar karkhana ltd. Tulshidasnagar.

1) There are six co-operative sugar factories working in Solapur district. All these are the (except Bhogawati factory) implementing the sugarcane development programme intensively.It is observed that ,those who do not have implemented the sugarcane development programme,they have been facing the problem of sugarcane supply almost every year.

The management of Bhogawati factory has not given any serious thought to sugarcane development programme.That's why this factory has been facing the problem of sugarcane supply almost every year except the year 1989-90.Owing to the shortage of sugarcane supply there was a under utilisation of the plant capacity which ultimately resulted in higher cost of sugar production.

2) It is observed that in this factory authority flows from the Chairman of the Board to the chief executives downward to the ultimate employees.

3) It is found that authority and responsibility are

not closely related. Also, the duties and responsibilities of different categories of personnel are not well defined and hence they often overlap and create management bottlenecks.

4) It is also observed that in the management of Bhogawati factory, the principle of unity of command is often violated. There is a communication gap at every stage and level. Local political leaders often interfere with the work of executive cadre.

5) The researcher feels that due to various defects in the organisational structure of Bhogawati factory, it has suffered losses during the study period.

6) It is observed that the percentage of cost of sugarcane varies from 35.60 per cent to 60.27 per cent during the period of study. The cost of sugarcane was an average 52.40 per cent of total cost of sugar production. There is a fluctuating trend in the percentage of cost of sugarcane.

7) The harvesting and transportation cost was in the range of 6.66 per cent to 19.30 per cent. It was on an average 14.60 per cent of net cost of sugar production. There is also a fluctuating trend in the percentage of harvesting and transportation cost.

8) The over-all raw material cost to total cost varies in 42.26 per cent and 79.57 per cent over a period of time.

9) Average per bag cost of sugarcane was RS 249.20 ranging between Rs 196.23 /- to Rs 308.11 /-

10) The average per bag harvesting and transportation cost was Rs 66.18 in the range of Rs 57.61 to Rs 78.65

11) Average raw material cost per bag for the period of study was Rs 315.39, which has shown a constant increase from 1984-85 to 1986-87 i.e. Rs 278.05 to 365.72. But in the last two years i.e. 1988-89 and 1989-90 there is declining trend.

12) The productive wages constitute another major cost element next to sugarcane and harvesting and transportation cost. The direct wage was in the range of 6.77 percent to 20.97 percent of the total cost of sugar production. It was on an average 10.38 percent of net cost of sugar production.

13) Per bag direct wages was on an average Rs 62.18 /- ranging between Rs 23.40 /- in (1989-90) to Rs 181.48 /- in (1986-87). Over a period of time, it is only in the year 1986-87 the direct wage is higher than the average.

14) The depreciation cost is also major cost component in the total cost of sugar production. The depreciation cost was on an average 11.75 percent of total cost of sugar production. The percentage of Depreciation cost to net cost of sugar production varies in 3.64 % and 27.30 % over a period of time.

15) Average depreciation cost per bag was Rs 74.10 /-

It was minimum Rs 11.87 /- in 1989-90 and maximum Rs 236.25/- in 1986-87. It is **only** in the year 1988-87 the depreciation cost is higher than the average.

16) Manufacturing expenses is also a major cost component in the total cost of sugar production. The percentage of manufacturing expenses to net cost of sugar production varies from 8.20 percent to 11.78 percent during the period of study. It was on an average 9.88 percent of total cost of sugar production.

17) Per bag average manufacturing expenses was Rs 49.89/-. It was Rs 49.66 /- in 1984-85 and shown constant decrease upto Rs 31.42 /- in 1989-90 with exception of the year 1986-87.

18) Average total cost of production of per bag of sugar was Rs 505.60 /-. The cost of sugarcane per bag cost of production shown constant upward trend from Rs 421.76 /- in 1984-85 to Rs 865.43 /- in 1986-87. But in last two years i.e. 1988-89 and 1989-90 there is a declining trend. It was minimum Rs 326.08 /- in 1989-90. These figures are calculated including cost of sugarcane.

19) Average crushing for the period of study was 1,40,638 M.T. per season. The highest sugarcane crushing was registered in the year 1989-90 i.e. 2,78,128 M.P. and the lowest sugarcane crushing was registered in the year 1986-87 i.e. 18,755 M.T. Since there was no crushing sugar in the

1987-88 due to paucity of funds.

20) There is increasing trend in the price of sugarcane paid to the growers. The lowest price was Rs.182 /- per tonne paid in the year 1984-85, where as the highest price was Rs.276.50 /- paid in 1989-90.

21) The Bhogawati factory registered the maximum loss in 1986-87. The percentage of net loss to net sales was 79.43%. During the same year there was under utilisation of the plant capacity. It is observed that the factory has registered the net losses continuously during the early four years (see table No.4.16 and 4.17). The percentage of net losses to net sales were in the range 15.22 % to 79.43 % The net losses are found to be increasing with the decline in sucrose recovery. Of course low sucrose recovery is not the only contributory factor for the unfavourable financial results, but higher recovery definitely, either increases profits or helps to minimise losses.

22) During the last year i.e. 1989-90 the factory has registered the profit balance. During the same year the percentage of net profit was 12.78 %

23) The Bhogawati factory has registered the cost of goods sold ratio in the range of 63.43 % to 131.02 % during the study period. The reasonable goods sold ratio for co-operative sugar factory is 70% to 80% During the year 1985-86 and 1986-87 the cost of goods sold is higher than net sales

of the factory. That's why during the same year there was gross loss.

24) It is observed that the gross profit margin of this factory was in the range of -31.02% to +36.57%. The gross profit margin of the factory is always low over a period of time. Because cost of goods sold covers the major portion in the total cost of production.

25) The standard norms of general and administrative expense ratio for co-operative sugar factory is 3 to 5 percent. But it is observed that the general and administrative expenses ratio were in the range of 7.32% to 32.44% of net sales, during the study period. The administrative efficiency can be measured with the help of change in general and administrative expenses ratio which was showing at a faster rate from 8.91% in 1984-85 to 32.44% in 1988-89. This shows that the management of this factory has not increased its total sale performance and utilisation capacity. Very surprisingly in the year of 1989-90 the general and administration ratio fell down to 7.32 % because of factory's good performance in sales and capacity utilisation.

26) The reasonable non-operating expenses (interest and bank charges) ratio for co-operative sugar factory is 2 to 5 percent. But it found that the non-operating expenses ratio were in the range of 9.37% to 45.51% of net sales. It shows the 1) heavy dependence on borrowed capital and 2) Under utilisation of plant capacity.

27) It is observed that the factory has not undertaken any developmental programmes for the utilisation of bagasse and mollasses.

28) It is observed that in the year 1988-89 and 1989-90 no provision for reserve fund was made by the factory

SUGGESTIONS

After having studied the management and working of Bhogawati co-operative sugar factory let us now turn to the closing part of the study i.e. suggestions.

1) The first and foremost requirement of the factory is need of independent sugarcane development programme.

The average recovery of the factory is less than the Maharashtra co-operatives average recovery. Recovery percentage is the key factor of development of any sugar factory. As stated before an increase of 1% in the recovery results in additional income of Rs 100/- per tonne of sugarcane crushed.

Higher percentage of recovery is depend on the following factors :-

- 1) Sugarcane should be fully matured.
- 2) High yielding variety seed should be used.
- 3) The time gap between cutting and crushing sugarcane should be as small as 12 hours.
- 4) Crushing season should not start before 15 th of October and should not continue after 15 th of April.
- 5) Ample availability of irrigation facility.

For higher percentage of recovery the factory should concentrate on the above factors. As regard to the maturity of the sugarcane ,it should not be immatured at the same time over matured. Over maturity of sugarcane results in higher

percentage of molasses.

The present capacity of the factory is 1250 M.T. per day. The length of season is 180 days. If some 30 days left for repairs and maintenance of the machinery, actual working days remain 150. With the crushing capacity of 1250 M.T. per day the factory requires 37,500 tonnes of sugarcane per month. Average yield of sugarcane per hector in the area of operation is 47 tonnes. It means for one month the factory requires sugarcane from 780 hectors of land.

With this information the factory should prepare a plan of sugarcane cultivation every year in such a way that factory will get matured and fresh sugarcane monthwise in coming season.

For example, for adequate and matured sugarcane in the month of October next year, the factory should manage to sow sugarcane in 780 hectors of land in the month of September of the current year in the area of operation. Again 780 hectors in October, 780 hectors in November and so on. So that in the next year factory will get matured and fresh cane every month. In the absence of such plan in some month sugarcane will be available more than necessary and in some month factory will have to cut immatured cane.

In case of improved variety of seed, the factory should cultivate pilot seed plot in its own land and should supply the seed to the growers. For minimising the time gap between

cutting and crushing of sugarcane the area of operation of the factory should be on an average in the radius of 20 Kms. from the factory site.

For the irrigation the factory should take initiative for lift irrigation and to build up K.T. wears (Kolhapuri Bandhara).

If the above plan is systematically prepared and successfully executed in the area of operation the yield of sugarcane will considerably increase at the same time the percentage of recovery will also increase.

2) The percentage of harvesting and transportation cost was very high during the period of study, except in the year 1986-87. For achieving the economy the management of factory must pay the attention to cultivate required sugarcane in the vicinity of the factory as mentioned above, which will result in increase in recovery and decrease in harvesting and transportation cost. Waiting period of the vehicle on the caneyard should also be minimised.

3) It is observed that when there was a shortage of sugarcane, there was an increase in productive wages, depreciation cost and manufacturing expenses. For minimising these expenses, factory again should concentrate on adequate supply of sugarcane every year by implementing sugarcane development programmes.

4) General and Administrative Expenses to Net Sales :-
The study reveals that this ratio was in the range of 7.82 percent to 32.44 percent of net sales of the factory ,over a period of time.The reasonable general and administrative expenses ratio should be in the range of 3 percent to 5 percent for co-operative sugar factory. But this type of ratio of this factory is always higher. The factory should not appoint the excess man power which leads to increase the general and administrative expenses and ultimately the cost of sugar.

Therefore,it can be suggested that Government should form a separate committee to decide a standard staffing pattern for each factory on the basis of crushing capacity of the unit.

5) Standardization in non-operating expenses :-
(interest and bank charges)

It is observed that the non-operating expenses i.e. interest and bank charges is the most causal factor for incurring heavy losses in this factory. The burden of interest and bank charges will not exceed in any case 2 or 3 percent of net sales every year.

For reducing the non-operating expenses factory should try to minimise the proportion of borrowed funds and stress should be given for increasing its owned funds also.

6) Need of independent costing department :- At

present, Financial accounting system is the only formal method of recording of income and expenditure. No scientific method is adopted to workout the exact cost of sugar production of different cost centres. Hence there is no mental awareness about cost and cost control. It is very important for the management to know controllable and uncontrollable costs and different methods of controlling the costs. The present study has shown that there is no such logical relationship among direct wages, duration of crushing season, manufacturing expenses, general and administrative expenses and interest and bank charges. The study indicate that in the present situation the management is unable to identify the various cost centres and how far they affect individually in the total cost of sugar production. Therefore it can be suggested that, the factory should have its independent costing department to identity the exact costs of production at different processes, very systematically and scientifically.

7) Plant capacity :- Initially the crushing capacity of the factory is 1,250 M.T. per day. But according to the present norms of viability the minimum crushing capacity of any sugar factory must be 2,500 M.T. per day. Therefore, for achieving the economy and efficiency in the cost of sugar production, the factory should increase its present crushing capacity.

8) Utilisation of by products :- Once the sugar

industry take place it gives opportunity to co-operative sugar factories to start manufacturing by products. But the Bhogawati factory has not start any by-product plants. Therefore for additional income the factory should start the following plants.

- i) Distillery plant.
- ii) Paper factory based on bagasse
- iii) Biogas plant with the help of bagasse and waste water.
- iv) Oxalic Acid plant.
- v) Sugar esters - which is food preservative in Banana, mango and which is edible.
- vi) Acetone, butanol and Acetic acid can be obtained from distillery plant.

These by products schemes will help to increase the profit or minimise the losses of sugar factory. Ultimately help to increase the rural employment.

9) Training and orientation to management personnel -

The very success of the co-operative sugar factory depends upon the competence and calibre of the officers, who are working at managerial as well as technical level. The study indicates that concern factory has registered net losses in 4 years over a period of time. It shows that there is a need to have a competent and efficient staff at managerial level. There is a need of training and development programme for these people. The successful working of the factory can only achieved if there is a systematic and continuous programme of

training and development.

10) The study pleads for the professionalisation of co-operative management in order to strengthen the democratic framework of co-operative sugar factory and also to solve various management problems.

Sugarcane growers who are real owners of the factory should be given proper education in co-operative philosophy and co-operative law. These co-operative leaders should also be given proper and regular orientation in planning, strategies and techniques. The management team should be provided requisite techno-managerial skill through proper training. They should also be given an opportunity to visit and study other co-operative sugar mills of the state as well as those outside the state. Leadership development programme and seminars should be arranged by the state Government, state co-operative sugar Factories Federation or any other agency.

APPENDIX-I

SOURCES OF FUNDS

Particulars	1984-85	1985-86	1986-87	1987-88	1988-89
) Owned Funds :					
A) Share Capital	2,76,07,900	2,80,97,500	2,82,92,900	--	2,89,28,800
B) Internal Generated Funds	4,92,68,600	5,49,56,000	5,94,84,900	--	6,38,35,200
) Borrowed Funds :					
A) Long Term Loan :					
a) State Govt. of Maha.	4,23,55,400	4,23,55,400	4,23,55,400	--	5,15,89,400
b) Industrial Development Bank of India	15,82,500	7,95,600	5,95,600	--	7,95,600
c) Maha. State Co-op. Bank	8,50,000	5,38,000	5,38,000	--	--
d) I.F.C.I.	5,28,500	--	--	--	--
e) I.C.I.C.I.	7,52,000	7,52,000	7,52,000	--	7,52,000
B) Short Term Loan :					
a) Maha. State Co-op. Bank	1,30,01,900	1,74,91,900	81,15,600	--	4,19,44,800
b) Others (I.D.B.I.)	--	34,64,700	22,57,100	--	10,73,500
C) Deposits	74,68,700	1,01,13,800	1,03,05,400	--	1,14,90,100
TOTAL :	14,34,15,500	15,85,64,900	15,28,96,900	--	20,04,09,400