CHAPTER-VII
SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

7.1 INTRODUCTION:

In the liberalised and globalised business environment, it is inevitable for the sugar factories to minimise cost of production as much as possible through professionalised cost planning, cost control and cost management for their very survival. The cost management is a modern approach to recording, ascertaining, planning and controlling of cost through the techniques like ABC, TQM, BPR, BM, TC, etc.

The poor performance of the co-operative sugar factories has been the result of traditional and un-professionalised management approach to cost planning and cost control. Lack of professionalised cost management has resulted into high cost of production and low profits or loss. The existence of the co-operative sugar factories is indispensable in the interest of the rural masses. The sugar co-operatives are to be survived and progressed in the industrial economy of the country. The cost ascertainment according to cost accounting principles, constant cost analysis, cost planning and cost control with modern approach are the only solutions for the survival of sugar factories. In this context the need was felt by the researcher to probe into the cost management in the co-operative sugar factories.

The present study is a micro-level study. It is carried out with three co-operative sugar factories working in different parts of the Bidar district. It is mainly focused on analysis of cost of production of sugar and evaluation of cost management practices prevalent in the co-operative sugar factories in the district.
7.2 MAJOR FINDINGS OF THE STUDY

The major findings of the study are as follows-

1. From the study it was found that, the highest average percentage of cane cost to manufacturing cost among the co-operative sugar factories was recorded by BSSK Ltd. and the lowest was by MGSSK Ltd. In comparison of the average percentages among the co-operative sugar factories, MGSSK was most productive. The coefficient of variation of BSSK Ltd. was 4.27%, NSSK Ltd. was 4.16% and MGSSK Ltd. was 9.52%. It indicates that, the NSSK Ltd. is most consistent in controlling and managing the cane cost.

2. It was observed that the highest average percentage of cane cost to total cost among the co-operative sugar factories was recorded by NSSK Ltd. and the lowest was by MGSSK Ltd. In comparison of the average percentages among the co-operative sugar factories, MGSSK was most productive to control and manage the cane cost. The coefficient of variation of BSSK Ltd. was 5.20%, NSSK Ltd. was 4.06% and MGSSK Ltd. was 12.81%. It indicates that, the NSSK Ltd. is most consistent in controlling and managing the cane cost.

3. It was noticed that, among the three sugar factories, NSSK Ltd. was most consistent in producing sugar as it has recorded a lowest coefficient of variation i.e. 21.18% during the period of study. BSSK Ltd. has witnessed 29.65% coefficient of variation, which indicates a poor consistency in sugar production as compared to NSSK Ltd. On the other hand MGSSK Ltd. has recorded the poorest consistency in sugar production during the period of the study. The coefficient of variation recorded by the company was 35.83%.
4. It was found that, the average cane cost per quintal recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were amounted to Rs. 1929.60, Rs. 2019.31 and Rs. 1866.42 respectively. The coefficient of variation recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were 34.36%, 29.79% and 33.51% respectively. It indicates that, NSSK Ltd. was most consistent in maintaining cane cost per quintal.

5. It was found that, the average percentage of manufacturing cost to total cost recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were 91.75%, 97.80% and 91.82% respectively. It indicates that, BSSK Ltd. was most efficient in managing its average manufacturing cost followed by MGSSK and NSSK Ltd.

6. It was found that, the average manufacturing cost per quintal recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were amounted to Rs. 2343.74, Rs. 2457.69 and Rs. 2322.41 respectively. The coefficient of variation recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were 33.01%, 27.90% and 27.46% respectively. It indicates that, MGSSK Ltd. was most consistent in maintaining manufacturing cost per quintal throughout the study period.

7. It was found that, the average total cost per quintal recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were amounted to Rs. 2558.55, Rs. 2516.19 and Rs. 2521.80 respectively. The coefficient of variation recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were 33.22%, 28.26% and 26.11% respectively. It indicates that, MGSSK Ltd. was most consistent in maintaining its total cost per quintal throughout the study period.

8. It was observed that, the highest average percentage of conversion cost to manufacturing cost among the co-operative sugar factories
was recorded by MGSSK Ltd. and the lowest was by BSSK Ltd. In comparison of the average percentages among the co-operative sugar factories, BSSK Ltd. was most productive to control and manage the conversion cost against manufacturing cost. The coefficient of variation of BSSK Ltd. was 19.54%, NSSK Ltd. was 18.59% and MGSSK Ltd. was 36.25%. It indicates that, the NSSK Ltd. was most consistent in controlling and managing the conversion cost throughout the study period.

9. It was found that, the average conversion cost per quintal recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were amounted to Rs. 414.14, Rs. 438.38 and Rs. 455.99 respectively. It indicates that, BSSK Ltd. was most efficient in managing its conversion cost per quintal throughout the study period.

10. It was noticed that, the average percentage of labour cost to conversion cost recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were 47.73%, 27.27% and 13.51% respectively. It indicates that, MGSSK Ltd. was most efficient in managing its labour cost followed by NSSK and BSSK Ltd.

11. It was noticed that, the average percentage of administration cost to total cost recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were 8.25%, 2.20% and 8.18% respectively. It indicates that, NSSK Ltd. was most efficient in managing its administration cost followed by MGSSK and BSSK Ltd.

12. It was found that, the average administration cost per quintal recorded by BSSK Ltd., NSSK Ltd. and MGSSK Ltd. were amounted to Rs. 214.81, Rs. 58.50 and Rs. 199.39 respectively. It
indicates that, NSSK Ltd. was most efficient in managing its administration cost per quintal throughout the study period.

13. It was found that, the calculated significance value of manufacturing cost was greater than 0.05 (i.e. 5% level of significance). Therefore, the null hypothesis has been accepted and it was concluded that, there is no significant difference between the manufacturing cost among the sugar factories.

14. It was found that, the calculated significance value of conversion cost was greater than 0.05 (i.e. 5% level of significance). Therefore, the null hypothesis has been accepted and it was concluded that, there is no significant difference between the conversion cost among the sugar factories.

15. It was found that, the calculated significance value of administration cost was less than 0.05 (i.e. 5% level of significance). Therefore, the null hypothesis has been rejected and it was concluded that, there is a significant difference between the administration cost among the sugar factories.

16. It was noticed that, the calculated significance value of total cost was greater than 0.05 (i.e. 5% level of significance). Therefore, the null hypothesis has been accepted and it was concluded that, there is no significant difference between the total cost among the sugar factories.

17. It was noticed that, the calculated significance value of sugar production was greater than 0.05 (i.e. 5% level of significance). Therefore, the null hypothesis has been accepted and it was
concluded that, there is no significant difference between the sugar production among the sugar factories.

18. It was noticed that, sugar factories under the study have been maintaining records under financial accounting system.

19. It was noticed that, sugar factories under the study have been using budgetary control techniques for cost minimization. They used to prepare capital and revenue budgets only for making provision for future requirements.

20. It was noticed that, sugar factories under the study were least or low conscious about causes and effects of cost.

21. It was found that, sugar factories under the study have been using steps involved in purchasing cycle. It means that the purchasing procedure used by the sugar factories happens to be the common procedure. This has enabled the purchasing department to carry out its functions most scientifically.

22. It was found that, sugar factories under the study have applied JIT for purchase of sugar cane but failed to apply purchase of other materials due to fear of shortage of material and unreliable source of supplier.

23. It was found that, three units have been classifying and codifying material, which facilitated smooth and quick movement of material to the production department.

24. It was found that, sugar factories under the study have not been recruiting employees on scientific basis and factories have providing
training to the workers. The interference of directors is found in case of all three factories with respect to selection of employees.

25. It was observed that, sugar factories under the study have been using multiple measures in the order of soft to hard for controlling labour absenteeism. In the first step, the absentees are warned for three times and then, their increment is held up if not corrected their attitude. Finally disciplinary action is imposed as per labour laws and Factory Act 1948.

26. It was found that, the overtime in sugar factories under the study have been occurred due to labour absenteeism and general pressure of work. This indicates that the factories are suffering from financial loss by paying higher wages because of absenteeism.

27. It was noticed that, sugar factories under the study have not been measuring the labour turnover. It shows that the factories have least interested in maintaining the stability in labour force.

28. It was found that, sugar factories under the study had no practice of measuring labour efficiency. This shows the carelessness of the sugar factories in finding and promoting efficiency of labour force.

29. It was found that, sugar factories under the study have not been budgeting overheads according to cost accounting principles. This speaks that the sugar factories have not been so much careful regarding overhead cost management.

30. It was noticed that, sugar factories under the study have not been allocating and apportioning the overhead cost to production and service departments according to cost accounting rules.
31. It was found that, the capacity utilisation is 75.85% to 118.50% in sugar factories under the study. It indicates that factories are utilizing their installed capacity to the maximum extent.

32. It was noticed that sugar factories under the study are not using modern electronic weighing machine for weighing sugarcane and sucrose content.

33. It was found that farmers are not using much drip irrigation for cultivation of sugarcane which is going to influence on weight and sugar recovery.

34. It was observed that sugar factories under the study have not developed any sugarcane seeds.

35. It was noticed that, all the sugar factories are using budgetary analysis. It is observed that the factories are conscious of costs at least to some extent.

36. It was found that, sugar factories are neither having their own R&D department nor incurring any cost on R&D to modernise their manufacturing process.

37. It was observed that sugar factories under the study have been using both mechanical and manual devices for time keeping.

38. It was noticed that sugar factories under the study have not properly utilized the by-products they sold as it is without further processing for value addition.

39. It was analyzed that sugar factories under the study have been paying wages under the time wage system. It means that the factories have not been considering the efficiency in paying wages.
7.3 SUGGESTIONS:

On the basis of findings of the study, the following suggestions are offered for the betterment of sugar factories.

1. The co-operative sugar factories ascertain the cost of production, in a crude manner by drawing data from financial records which has no or least practical value. It is suggested that, there should be a separate cost accounting department staffed with cost accountant and cost assistants to record and furnish exact cost data and assist management in managing the cost most efficiently.

2. Due to the higher cost of production, the factories have failed to attain competitive edge in the international market. It is, therefore, suggested that the factories should target their cost to the internal as well as external market conditions by applying advanced cost management techniques like Life Cycle Costing, Target Costing, Activity Based Costing and Total Quality Management.

3. A large number of operations involved in the manufacturing and administrative functions of sugar factories are to be performed efficiently and economically to minimise costs and maximise profits. Therefore, it is suggested that standards should be set for each cost element, operation, department and responsibility should be fixed on personnel concerned to manage costs in conformity with standards.

4. Budgeting is one of the major techniques of cost planning and control. Budgeting on scientific lines is quite essential for the sugar factories to plan and control the costs. The suggestion is, therefore, offered that the sugar factories should prepare budgets in a most scientific way and implement the same in true sense practically.
5. Cost reduction is not at all possible if there is no cost culture and cost consciousness among the staff at all levels of organisation. Therefore, it is suggested that sugar factories should create a healthy cost culture in the organisation and develop cost consciousness among the staff by organizing symposiums, workshops and orientation courses on cost aspects.

6. Sugarcane is most predominant element in the cost of production and affords a wide scope for cost control. At present the cane average recovery rate is around 10 per cent. There is a scope for the increase in recovery rate. Therefore, in order to reduce the sugarcane cost per quintal of sugar, it is suggested that the sugar factories should improve sugarcane recovery rate by developing new rich sugar content cane seeds and inducing the farmers to go for cultivation of such cane offering incentives.

7. There is a need of introducing JIT(Just In Time Purchasing) philosophy for purchasing chemicals and other process material in order to reduce cost of storage, material loss and capital investment. With this approach, one can remarkably decrease the wastages and losses in production process.

8. Conversion cost is another major element of total cost next to cane cost. The present study has revealed that the plant efficiency ratio has not been measured. Therefore, it was advised that the plant efficiency ratio should be improved by minimising the loss of available machine hours and capacity utilisation should be increased to the maximum possible extent for the purpose of reducing conversion cost.
9. Traditional methods used for physical control over material stored in the stores department were found ineffective and therefore, it is advised to apply scientific techniques such as EOQ model, stock level setting, ABC analysis, perpetual inventory system, material turnover ratio and continuous stock taking.

10. It is suggested that, the sugar factories should apply TQM technique for the purpose of sugar quality and quality costs in scientific way.

11. It is suggested to maintain store ledger for applying the costing principles for pricing the issue of chemicals and process materials for accurate charging of material cost to production and valuation of closing stock of material.

12. It is recommended that factories should plan their manpower requirement and recruit the requisite number of employees on scientific basis without anybody's interference. The right person should be appointed at right place.

13. The factories have not had the practice of measuring and controlling the labour absenteeism. It is suggested that labour absenteeism should be properly recorded, measured and reported to higher authorities for its control.

14. The careful handling of idle time is the most required thing for the sugar factories. Therefore, it is suggested to introduce time booking system to measure and control the idle time.

15. The careful handling of labour turnover is also one of the most required things for the sugar factories. Therefore, it is suggested that
measure labour turnover every year and take suitable steps to keep it at minimal level.

16. It is suggested that automatic electronic weighing machine i.e. Automatic Direct Cane Sampling & Analysis (Cane Sampler) developed by Vasantdada Sugar Institute (VSI) Pune should be introduced for accurate measuring quality of sugarcane and sucrose content.

17. It is suggested that factories should promote micro irrigation or drip irrigation in sugarcane cultivation in this PMKSY (Pradhan Mantri Krishi Sinchai Yojana) slogan is "Per Drop More Crop". Farmer should be educated in this regard because Central Government kept subsidy for drip irrigation.

18. It is suggested to have a R&D department to innovate improved technology and methods of production for the purpose of saving in time and cost. If it is beyond the reach of individual factories being costly affair, a group of factories in the district can jointly establish a cooperative R&D Centre.

19. It is suggested that sugar factories need to further process the by-product for value addition and factories will get more revenue in order to decrease the cost of sugar manufacturing.

20. The co-operative sugar factories should improve their cost management practices by preparing more appropriate and analytical cost statements as per the standard norms set by the Institute of Cost and Works Accountants of India (ICWAI). The factories should get their cost statements audited by qualified cost accountant.
21. Uncertain policies and regulations of the government, which change frequently, have reduced the competitive strength of co-operative sugar factories. There is a need of steady and long-term sugar policy in the context of liberalised market environment.

22. Need to implement norms of ICUMSA (International Commission for Uniform Method of Sugar Analysis) in sugar production for achieving international standard for exporting the sugar.

23. Government should promote export of sugar and control the import of sugar by increasing the cess from present 50 per cent to any possible extent to control import.

24. Government need to discontinue the dual pricing policy on sugar cane SAP (State Advise Price) and FRP (Fair and Remunerative Price).

25. Government should take initiation for easy availability of cheap credit to sugar factories to improve the financial position.

26. It is suggested that sugar factories are permitted to produce ethanol as like Brazil model. In Brazil 60% of sugarcane is used to generate ethanol and 40% is used for sugar manufacturing.

27. It is suggested that farmers should be given proper training for adopting modern technology in sugar cultivation.

28. Sugar factories should establish community hall, hospital for workers and farmers.

29. Sugar sales of the co-operative sugar factories are entirely controlled by the Government. Therefore, co-operative sugar factories are
suffering higher inventory (sugar) cost which runs into crores. This has caused a severe damage to the financial health of the factories by increasing cost of storage, burden of interest. It is, therefore, suggested that the government should either allow factories to sell sugar in open market or set up an agency ‘Sugar Sales Corporation’ for the sale of sugar of the factories.

30. A lot of revenue of the sugar factories is diverted to the government in the form of cane purchase tax, cess, excise duty, turnover tax, etc., which has increased the cost of production of the factories. Therefore, it is recommended that the government should reconsider the issue of collecting various taxes from the factories in the direction of either reducing tax rates or declaring totally tax holiday.

31. The government has to set certain rules for major cost elements like cane cost, conversion cost, chemical cost, productive labour cost, cost of utilities and administrative cost either in terms of percentage or per quintal sugar produced and insist the sugar factories to keep their costs within these norms so that factories should establish proper control over their cost of production.

32. The government should make maintaining of cost accounting records and cost audit compulsory for the co-operative sugar factories so that they can maintain cost records properly and manage cost in a most efficient manner.
7.4 CONCLUSION:

The present study was attempted to through light upon all the aspects of the cost management in Co-operative sugar factories of Bidar District. The major aspects of cost component such as material, labour and overhead cost management practices have been covered.

The study is concluded with a note that, performance of co-operative sugar factories in Bidar district is very poor when compared to other sugar factories. This is due to the absence of effective control over the cost incurred during the production and low recovery of sugar from the sugarcane crushed. In order to have a better control over the cost new techniques like activity based costing, target costing, life cycle costing, total quality management, bench marking, business process reengineering, etc. are to be followed. Recovery of sugar can be improved by using modern machines. Hence, it will improve the productivity and increase the profitability. Sugarcane prices should be fixed on the basis of sugar recovery. Attention is to be given on manufacturing quality of sugar as per international standards.
7.5 SCOPE FOR FURTHER RESEARCH:

Cost management is a wide area of research that no single study can cover its different dimensions. There is a ample of opportunity to undertake further research on;

1. Since the present study is restricted to Bidar Co-operative sugar factories, it could be extended to the state level and/or to the national level also.
2. A comparative study on cost management practices of private sugar factories and public sugar factories could be carried out.
3. A comparative study of cost management practices by sugar companies and other manufacturing companies can be carried out.
4. A comparative study on method of accounting in Indian sugar companies and foreign sugar companies can be carried out.