CHAPTER-II

REVIEW OF LITERATURE AND METHODOLOGY

2.1. INTRODUCTION

2.2. REVIEW OF LITERATURE

2.2.1. Studies by Committees and Commissions

2.2.2. Individual Studies

2.3. NEED FOR THE PRESENT STUDY

2.4. STATEMENT OF THE PROBLEM

2.5. OBJECTIVES OF THE STUDY

2.6. HYPOTHESES

2.7. SCOPE AND COVERAGE

2.8. DATA BASE

2.9. TOOLS AND TECHNIQUES OF ANALYSIS

2.10. CHAPTER DESIGN
2.1 INTRODUCTION

A review of literature helps the researcher to have first hand knowledge about the parallel work done by others. This enables one to fix the title, objectives and methodology. As the present study is concerned with the financial performance of select sugar mills in Chittoor District of Andhra Pradesh, an attempt has been made here to discuss in brief the earlier studies on Financial Management, so as to gain a greater insight in to the subject. As a matter of fact, conceptual discussion of evaluation of Financial Management began to take place decades ago. Since then, many renowned writers, and eminent scholars have examined it from different points of view to enrich the subject. To provide the necessary background for the present study, some conceptual and research studies on the subject are reviewed. The lacuna there in is identified.

2.2 REVIEW OF LITERATURE

2.2.1 STUDIES BY COMMITTEES AND COMMISSIONS

In the past several commissions and Committees were setup to study one or more aspects of the sugar industry by the government of India and some state governments.

For the first time, the problems of the Indian sugar industry were examined by the Tariff Board in 1931. In 1937, the Tariff Board was asked to enquire into the quantum of protection to be given to the sugar industry during the period from 1st April, 1938 to 31st March, 1946. In 1947, the Tariff Board was required to make a summary investigation into the claim of the sugar industry for further protection.

Further enquiry was conducted in 1948, as a result of which the Tariff Board recommended, interalia, the continuance of the then existing protection for a further period of two years ending 31st March, 1951. In July 1949, the government of India asked Tariff Board to conduct a fuller enquiry into the sugar industry's claim for protection after 31st March, 1950. Before the protection granted to the sugar industry was withdrawn, the government of India, appointed in July 1949, a technical sugarcane Committee under the chairmanship of T. Vijayaraghavacharya to enquire into the cost of production of sugarcane, to review the progress of cane research and development and to suggest ways and means for achieving quicker results in increasing the yield of sugarcane per acre and the sugar content of cane with a view to reduce the cost of sugar.
In 1950, a sugar enquiry Committee (Ganga Nath Committee) was appointed by the Government of India to enquire into such aspects of the sugar crisis of 1949 which were not fully covered by the Tariff Board enquiry of 1949. An expert Committee was appointed under the chairmanship of B.V. Narayana Swamy Naidu to prepare schedules for determining the cost of manufacture of sugar. Another Expert Committee was constituted in 1955 under the chairmanship of P.A. Gopala Krishnan which suggested certain amendments to the cost schedules, prepared by the Expert Committee of 1951 and recommended that the amended all - India schedule might be used until such time as regional schedules were ready. The Tariff commission was asked by the government of India in 1958 for the first time to enquire into the cost structure of and fair price payable to the sugar industry. In October 1960 the tariff commission was again required to go into the question of revision of the price linking formula for sharing sugar price between sugar factories and cane growers. In June 1963, the government of India appointed a Committee on Rehabilitation and Modernisation of sugar factories in India under the chairmanship of S.N Gundu Rao to examine. The sugar Enquiry commission (known as the Sen commission) was setup in 1964 and it submitted its report in 1965. Its terms of reference were : (a) the determination of the price, and the system of distribution of sugar; and (b) the policy regarding licensing of new sugar factories and the expansion of existing sugar factories.

In 1968, the government requested the tariff commission to conduct a fresh examination of the cost structure for sugar industry and the preparation of new cost schedules to determine the fair price payable to the industry. The commission submitted its report in 1969. For the third time the tariff commission was requested in 1972 to make a fresh study of the problem and its report was submitted in 1973.

The sugar industry enquiry commission (known as Bhargava Commission) was setup in 1970 to study the working of the sugar industry in the context of the demand for nationalization of sugar undertakings in certain areas. Its terms of reference were (1) to study the working of the sugar industry in all its aspects, with particular reference to its performance during the last ten years and the conditions of the plant and machinery in different sugar mills; (2) to identify the inadequacies in the performance of the sugar industry and the causes thereof; (3) to study in detail the
causes for the existence of a large number of sick sugar mills; (4) to study the progress and the working of sugar mills in the Co-operative sector; (5) to make suggestions in the light of such studies, for a rational and efficient organization of the sugar industry in different parts of the country, in order to improve its working and performance and suggest measures for the solving the problem of sick sugar mills, in the context of the demand for nationalization of the sugar industry; (6) to study the relationship between sugarcane suppliers and the owners of the sugar mills, with particular reference to the supply of cane and the payment of cane price and to make suggestions for improvement in the present laws and practices in this regard; (7) to study the problem of large fluctuations in sugarcane production and its processing into gur, Khandasari and sugar and to make suggestions for securing stable conditions with a view to achieving a balanced development in these fields; and (8) in the light of the foregoing studies, to suggest a blue print for the development of the sugar and allied industries over a period of next ten to fifteen years. The terms of reference were very wide and comprehensive and covered, for the first time, all the important aspects of the sugar industry. The commission submitted its report in 1974.

In 1975, a Committee on economic viability of new sugar factories under the chairmanship of S.V. Sampath was set up to consider the relief which could be given to the newly licensed sugar factories in the context of a steep rise in the costs, particularly of plant and machinery during the last two years.

Except the sugar industry enquiry commission report 1974, all other studies were partial in nature pertaining to certain specified aspects of the sugar industry.

Reserve Bank of India (1961) conducted a study at the national level on the profits in relation to the assets of the companies in the sugar industry during the period 1955-59. This study revealed that the profitability of the companies increases with the size of assets.

The Government of India appointed a Committee to study the problems relating to inadequate supply of sugarcane to sugar factories in Maharashtra in 1975 under the Chairmanship of Shri S.V. Sampath. The Committee recommended measures for cane development, proper zoning for sugarcane area and some directives in granting licenses to new units.1
In 1980 the government of Maharashtra also appointed a Committee under the chairmanship of Shri Gulabram Patil, the Veteran Cooperator, to study the problems of sickness of cooperative sugar factories in Maharashtra. This Committee submitted its report in 1983 and made various recommendations to the government to overcome the problem of sickness in cooperative sugar factories in Maharashtra. The Committee had recommended that the state government should give financial help to sick sugar factories in the form of exemption in the cane purchase tax and to take effective steps for cane development. The Committee identified the sick cooperative sugar factories from Maharashtra and the reasons for the sickness and made the recommendations to solve the problems of these factories.  

The Committee which was appointed to make recommendations for the formulation of Zones for drawal of sugarcane by sugar factories in Maharashtra in 1981, submitted its report in 1983. Besides recommending specific zones for the factories in the state, the Committee recommended that sugar factories should undertake effective steps for sugarcane development to which state government should provide necessary backing.

2.2.2 INDIVIDUAL STUDIES

The sugar industry in India is the second largest agro-based processing industry in the country. There was a bumper production of 28.3 million tonnes of sugar in the year 2006-07. About 45 million sugarcane farmers and a large mass of agricultural laborers constituting 7.5% of the rural population are involved in the sugarcane cultivation, harvesting and ancillary activities. Besides, about 0.5 million skilled and semi-skilled workers, mostly from the rural areas, are engaged in the sugar industry. The sugar industry in India has been a focal point for socio-economic development in the rural areas by mobilizing rural resources, generating employment and higher income, and transport and communication facilities. However, to maintain its continuous growth in view of the globalization, the cooperative sugar industry in India has to face many challenges in the rural areas like productivity, cost-effectiveness, technical up-gradation, by-products, utilization like co-generation, distillery and ethanol production, professionalization of management and research and development activities, keeping a long-term perspective in mind. In these areas, sugar machinery manufacturers can play a vital role for the development of the Indian
sugar industry. Financial performance of many sugar factories is not satisfactory and it lead to incurring of heavy losses. The NPKRRCSML, Thalainagar was selected as the sample unit for studying the financial management practices in the cooperative sugar industry. This mill was ranked 3rd in terms of return on investment, 6th in terms of Interest Coverage Ratio and 7th in terms of Debt Equity Ratio among the 12 major cooperative sugar mills in Tamil Nadu.  

Performance of sugar mills in Uttar Pradesh by ownership, size and location: Performance assessment of the sugar industry and setting targets for the relatively inefficient mills to improve their efficiency and productivity is crucial, as the interests of various stakeholders are largely dependent on its performance. The paper, therefore attempts to assess the performance of the sugar mills of uttar Pradesh, the largest sugarcane producing state of India. Data envelopment analysis models have been applied on the input-output data of 36 sugar mills for the period 1996-97 to 2002-03. The paper finds that during the period, the average overall technical efficiency (OTE) in the sugar mills of the state has been 93%. This implies that an average mill can make radical reduction in all its inputs by 7% without detriment to its output levels. The OTE shows a cyclical pattern mainly due to fluctuations in the scale efficiently. The performance of the mills is found to vary significantly across sector, plant size, and region. The private sector mills achieve the highest efficiency scores, followed by the cooperative sector. It has also been observed that the mills with bigger plant size attain relatively higher efficiency score. Moreover, the mills located in the WR are found to perform better as compared to their counterparts of other regions. Labour and energy inputs are found highly underutilized in almost all the inefficient mills. Targets set for relatively inefficient mills suggest that on average, these mills can become as efficient as the mills in their reference set, if they could adjust their operation to the associated target point determined by the efficient mills that define their reference set.  

This paper examines the determinants of external finance and dividend behavior of sugar industry. The analysis is carried out in the light of flexible accelerator model which is known to provide satisfactory explanation of the investment activity. Reserve Bank of India’s data from 1965-66 to 1986-87, pertaining to large public limited non-governmental sugar companies are utilized for
this purpose. Two different models are estimated for external finance and dividend behavior for time series cross section and pooled time series cross section data. The analysis shows that inventory investment is the chief determinant of external financing activity and that dividend decisions are largely autonomous of investment and external financing decisions.6

Going global, survival of the business in the modern world is the driving force to do better than others. In order to survive, and continue to be in business, it is essential that an organization successfully manages its finance, which requires more attention and care. Ineffective management is one of the important factors causing industrial sickness. Many variables are available to indicate the business sickness. Therefore, it is important to monitor the financial position and health of company through its financial statements, which throws light on the operational efficiency and financial position of the company. The principal objective of this article is to ascertain the financial health of EID Parry sugars limited company and consistency of financial performance for ten years from 1998-99 to 2007-08. The research findings are that the company maintains good financial performance/health throughout the study period.7

Sugar industry in Uttar Pradesh and Maharashtra continues to dominate the rural economy and even the State's, socio-political scene. But in both the states number of sugar mills have been showing continuous losses year after year. Now the time has come to take a total review of the cost and financial aspects of these sugar mills. This book is an attempt to study cost trends, profitability and operational efficiency of the sugar mills of both the states. The study also attempts to compare the working of the sugar mills of different regions of Uttar Pradesh and Maharashtra i.e., particularly after the adoption of new economic policy of 1991. Various statistical devices are used for analyzing the data contained in financial statements for analyzing the data contained in financial statements for ascertaintment of the working results of sugar mills. It provides a guideline to the executives for the sound financial management of sugar factories. The book will certainly prove to be useful to the students, financial analysts and managements of sugar mills of India.8
The sugar industry grew very rapidly between 1947-48 and 1965-66, largely because of the technological advances. The following article examines how the technological advance has been reflected in the industry's productivity by considering separate input total-output ratios for the various raw materials, fuels, capital, and labour applied for production. The study indicates that, as a result of the introduction of new production techniques, there was appreciable improvement in the industry's manufacturing efficiency as reflected in the productivity of the major inputs.9

Agriculture is still the backbone of Indian economy as it contributes a considerable 30% share to the total national income and provides employment to 2/3rd of the population of the country. Sugar industry has a very important place in the agriculture sector. There are as many as 426 sugar mills in the country. The Indian sugar industry also deals with 45 million farmer families as the second largest Agro-processing industry. These sugar mills are not properly managed as far as their performance is concerned. The heavy losses, sickness and poor performance lead to undertaking an analysis of the financial performance of the sugar mills in India.10

The world sugar market has long been characterized by volatile prices and widespread intervention. Controls on domestic prices, demand, and supply have created an inefficient pattern of world production, consumption, and trade. Without government controls, production would shift from the countries with higher-cost, subsidized production (especially the European Community, Japan, and the United States) to the countries with lower costs (such as Australia, Brazil and Thailand). The resources saved could then be directed to other activities. Sugar policies in countries with high costs reduce world sugar process quite substantially in the long run and increase price variability significantly; production controls in countries with low costs increase world prices somewhat and also increase their variability. What would happen if all interventions ceased? Average world sugar prices would probably—but not definitely-rise. World prices would definitely vary less, and economic conditions would definitely permit exports. But the prospects for substantial reform of the sugar market are not promising, even though the GATT Uruguay Round continues. This article puts forward some modest proposals for changing the existing interventions to lessen economic distortions and reduce costs.11
Uma Sharma has undertaken a study and analysed the working capital position of the Air Corporations in India and suggested measures for the smooth functioning of the corporations. She suggested that the Air corporation industry should try to reduce investment in receivables as well as in inventories. She also emphasized that the industry should maintain proper cash balances and concluded that the Air Corporation should stress on proper financial management in their corporations.12

Jain in his work “Working Capital Management in the State Enterprises in Rajasthan” has suggested that the state public enterprises should try to match their working capital with the sales/services trends. He revealed that if there is a deficit of working funds, the enterprises should try to build adequate amount of working capital and in case of surplus, it should be invested in marketable securities or to be used for repayment of borrowings. The cash positions of working capital should be improved by reducing inventories and efficient collection of receivables.13

Khan in his study, “working capital analysis”, analysed the performance of the tyre industry in India. He concluded that solvency and liquidity are not satisfactory in many companies under study. And he suggested that solvency position should be improved by increasing the current assets.14

Rangaswami analysed the problems of cane growers and diversification of large percentage of sugarcane to the ‘Khandasari’ and ‘Gur’ manufacturing units due to unfair price fixed by the Central and State government. He also examined the issues like inadequate financial investment for older factories to take-up, modernization and inadequate supply of cane, resulting in less number of crushing days in a year.15

Ram Vichar Sinha analyzed the genesis, growth and performance of sugar industry in India forecasting the future development of sugar industry in India. Prof. Sinha placed the sugar production target at 114L tonnes during the year 1994-95. He predicated that the sugarcane production would go up from 188 million tones in 1986-87 to nearly 212 million tonnes in 1994-95 with a corresponding increase in yield per hectare from 61.5 tonnes to 64.4 tonnes during the same period.16
Chittaranjankumar attempted a performance appraisal of Bihar state sugar corporation Ltd. Since 1977 he identified non-availability of good quality cane in sufficient quantities, obsolete machinery and several financial constraints as main hindrances causing sickness in sugar industry in Bihar.\(^7\)

Management Development Institute published a seminar volume entitled “Management of Sugar Industry”. It covered the areas like sugarcane development and problems of sugar industry. The keynote address gave a brief description of the history of sugarcane in India and stressed the need for modernization of sugar manufacturing process.\(^8\)

The problems and prospects of sugar industry in Andhra Pradesh and causes for the below average performance of certain factories in the state are examined by Mahadevan. He analyzed the capacity utilization and financial wealth of a sugar factory by using BEP analysis and cost-benefit analysis.\(^9\)

Mrs. Vimala Raghawachari (1973) worked on “The State and the Indian Sugar Industry”. She has studied the role of the state in the development of sugar industry in India from 1956 to 1970. The study relates to the policy of the state with regard to licensing and location of the sugar factories, financing the sugar industry and controls of the state on sugar industry. The prospects of the sugar industry have been discussed by the author. The importance of co-operative sugar factories has also been studied.\(^10\)

V. Malayadri (1975) in his work on “Socioeconomic impact of Sugar Factories” has considered the impact of cooperative factories on the pattern of sugarcane cultivation. The effect of the sugar factory on irrigation facilities, mobilization of rural savings, employment of rural area, labour welfare and growth of rural area have also been studied by Shri Malayadri. The reasons for sickness and the poor performance of many of the factories have, however, not been studied.\(^11\)

SD Tupe (1980) in his study, “Impact of Sugar Factories on the rural Economy – A case study”, has studied in detail the impact of Sanjivani cooperative sugar factory in Ahmednagar district on agriculture, agriculturists, on the lives of agricultural labour, economic conditions of factory workers and spread effects of the
sugar factory and overall economic change in rural area. He concluded that sugarcane being the cash crop, area under sugarcane has increased, and likewise the change in the cropping pattern and methods of farming have changed. It is argued that the development of agriculture depends on major agro-based industries. The real income of the farmers has increased but the real income of the agricultural labourers has decreased. It is concluded by the author that sugar factory in rural area has worked as a growth centre.22

Badra Alam Iqbal (1985), in his article, has examined the sugar industry in crisis. He studied the major constraints in the way of growth and development, and suggests suitable measures for attaining, stability in sugar industry. He concluded with the remark that the sugar factories in India are financially very weak, due to lack of co-ordination between research and development.23

Balasubramanian (1985) in his article studied sickness in Sugar Industry and causes for sickness such as Government Policies regarding fixation of Cane price, inadequate availability of sugarcane mounting overheads on debt, service, obsolescence of technology and machinery, increased overhead costs increased cost on labour and poor management capacity.24

2.3 NEED FOR THE PRESENT STUDY

Finance is the life blood of any industrial system. It lubricates, develops and accelerates growth. Without finance no business organization can hope to survive. Mobilisation of finance, utilisation and distribution of finance are crucial functions of every organization to prosper. Financial management is directly concerned with the overall management of an enterprise and it involves taking policy decisions related to the line of business, size of the firm, varieties of equipments used, extent of debt, liquidity etc., which, in turn, determined the level of profitability. Therefore, financial management is crucial and significant for every industry.

In India, a plethora of human and natural resources are available in plenty but the financial resources are highly megre. A thorough understanding of financial management is necessary to utilize the available limited resources, and for
mobilization of resources efficiently and effectively. It is difficult to evolve norms for sound and efficient management practices in various organizations without any factual information. Hence, there is a need to study financial management practices in various industries in India. But the present study covers only the financial performance of select sugar mills (Sri Venkateswara Co-operative Sugar Factory limited and Sagar Sugars & Allied Products Limited) in Chittoor district of Andhra Pradesh.

2.4 STATEMENT OF THE PROBLEM

Sugar Industry faces many problems such as fluctuations in the production due to inadequate availability of sugarcane and power failure. The profitability of the sugar industry is comparatively very low because of high cost of production. In fact, some units are incurring losses continuously. The industry has failed to retain more profits and, consequently, been forced to depend more on external sources. That indicates imbalance in the capital structure of the sugar mills. It directly reflects on the maintenance of the liquidity position.

The following are the problems faced by the sugar industry in India.

1. Sugar mills crushing capacity is low, sugarcane is not utilised in time.
2. High yielding sugarcane seeds are not supplied to the farmers in time.
3. Utilisation of old technology and outdated machinery.
4. Lack of effective incentive system to the sugarcane growers.
5. Political interference in co-operative sector is more.
6. Inefficient administration, inefficiency in utilisation of machinery and labourers.
7. Lack of storage space for raw-materials.
8. Poor financial management practices.

Inspite of the above, Financial Management which has a greater role in toning up the overall management of an enterprise, has not been professionalized in sugar industry. As a result, sugar industry is facing the problems of low profitability and low rate of return on capital invested. That indicates its inability to raise sufficient
funds to meet its immediate obligations as well as to fulfill the purpose of modernization of the industry. Besides, operational ability at farm and factory level is to be observed very much for improving productivity and profitability. The present study has been a modest attempt in this direction.

2.5 OBJECTIVES OF THE STUDY

The present research is intended to study the financial performance of sugar mills in Chittoor district by using the statistical and financial tools and also to suggest suitable measures for their betterment. The following are the specific objectives of the present study.

1. To study the performance of Sugar Industry in India;
2. To analyse the working capital position of select sugar mills;
3. To study the efficiency of the management in terms of management of fixed assets in the select sugar mills;
4. To assess the capital structure of management in the select sugar mills; and
5. To analyse the efficiency and profitability of the select sugar mills through the profitability ratios.

2.6 HYPOTHESES

The following Hypothesis has been formulated and tested in the study.

i) There is no significant difference between the two sample sugar mills with respect to the structure of working capital.

ii) There is no significant difference between the two sample sugar mills with respect to the capital structure.

2.7 SCOPE AND COVERAGE

The present study is confined to two sugar mills in Chittoor district of Andhra Pradesh. The two sugar mills, namely, Sagar Sugars & Allied Products Limited located at Nelovay and Sri Venkateswara Co-operative Sugar Factory limited located at Gajulamandyam, have been selected for the detailed study.

The present study covers important aspects of financial management like Management of Working Capital, Capital Structure, Fixed Assets Management, Efficiency and Profitability. The study covers the period of 10 accounting years of operation of two sugar mills i.e., from 2001-02 to 2010-11.
2.8 DATABASE

The present study mainly depends upon secondary data collected from the annual reports of Sagar Sugars & Allied Products Limited and Sri Venkateswara Cooperative Sugar Factory limited. In order to understand various managements' policies relating to working capital management, fixed assets management, credit policies etc., informal discussions with managerial staff were also held. In addition to this various Journals and periodicals of finance and industry have also been referred to.

2.9 TOOLS AND TECHNIQUES OF ANALYSIS

The data drawn from the various sources have been analyzed with the help of financial and statistical tools like ratio analysis, averages, t-test, linear and compound growth rates, co-efficient of variation etc. Graphs and diagrams are presented to illuminate the facts and figures.

2.10 CHAPTER DESIGN

The present study has been organized into seven chapters.

• The first chapter deals with the performance of sugar Industry in India.

• The review of literature, objectives of the study, database, tools of analysis and scope and limitations of the study are presented in the second chapter.

• The third chapter analyses working capital management of the select sugar mills.

• The efficiency of the fixed assets in select sugar mills is assessed in the fourth chapter.

• The fifth chapter deals with analysis of financial and capital structure.

• The sixth chapter covers analysis of efficiency and profitability of select sugar mills.

• The last chapter summarizes the results of the study.
REFERENCES


18. Management Development Institute, Management of Sugar Industry, New Delhi, Management Development Institute, 1975.


