CHAPTER II
DESIGN OF THE STUDY

STATEMENT OF THE PROBLEM

Sugar has been known in India from ancient times for about 2000 years and a mention of sugarcane is found in the Atharvana Veda in 5000 B.C. The sugar industry in India is the second largest industry next to textiles. Efforts to establish a modern sugar industry date back to the establishment of the sugar cane breeding institute at Coimbatore in 1912.

The sugar industry has a greater significance in agriculture and industrial spheres besides being a contributory factor to the rural people in several dimensions in India. Sugar industry is one of the largest industries with a weightage of 3.5 per cent of the general index of industrial production and about 10 per cent in the consumer non-durable goods index.

The number of sugar factories in India is increased from 29 in 1930 to 392 in 1992. There are 224 factories in co-operative sector, 98 in private sector and 70 in the public sector in 1992. The industry caters to more than 3.79 million sugarcane growers who receive about Rs. 22,000 crores annually for the supply of cane. The annual contribution to the Central and State exchequer of the industry is estimated at over Rs. 600
crores. It provides direct employment to over 5.35 lakh workers in addition to generating sizeable employment in ancillary industries.

Sugar industry requires low investment, when compared with other large industrial units. In 1983, the project cost on an average was Rs. 9 crores per factory of 1,250 TCD (Tonnes of cane crushed per day). At present it is estimated at Rs. 50 crores per factory of 2,500 TCD.

The sugar industry, inspite of its lower investment, is facing a crisis due to several factors like raw material shortages, low capacity utilisation and poor financial management practices. Financial management which has a greater role in toning up the overall management of an enterprise has not been professionalised in sugar industry. As a result the sugar industry is facing the problems of low profitability and low rate of return on capital invested. This results in its inability to raise sufficient funds to meet its immediate obligations as well as to fulfill the purpose of the expansion and modernisation of the industry. The net effect of all these deficiencies is the decrease in the value of share in the market.

How is sugar industry in Andhra Pradesh managed from the viewpoint of financial management in terms of capital utilisation in general and capital structure, fixed capital, working capital and profitability in particular?
To answer this question an empirical investigation is made in select sugar factories in Andhra Pradesh covering three sectors viz., co-operative, private and public.

NEED FOR THE STUDY

Indian sugar industry is affected by a variety of problems such as inadequate utilisation of capacity, lack of finance for rehabilitation and modernisation, insufficient working capital, shortage of raw materials, high production cost and low profitability. During the last few decades several sugar factories were closed in India.

This can be attributed to lack of proper financial management. In view of the liberalisation policy adopted by the Government of India, efficient financial management is indispensable for the modernisation and expansion of sugar industry to meet the world competition. There are many studies on sugar industry. Nevertheless, a comprehensive empirical study covering all the three sectors of Andhra Pradesh by an independent researcher will also serve the purpose of providing feedback to the organisations on their performance. Keeping this idea in view, the present study is designed.
The literature on financial management and sugar industry can be reviewed from different sources covering the studies conducted by the committees and commissions and studies conducted by individuals.

1. Studies by Committees and Commissions

In the past several commissions and committees were set up 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 when government referred to it the case for granting protection to the industry. 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 requested 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, inter alia, 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 the 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 reducing 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. Gopalakrishnan 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 problems of the old and uneconomic units in the sugar industry. The Sugar Enquiry Commission (known as the Sen Commission) was set up 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 set up in 1970 to study the working of the sugar industry in the context of the demand for nationalisation 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 organisation of the sugar industry in different parts of the country, in order to improve its working and performance and suggest measures for solving the problem of sick sugar mills, in the context of the demand for nationalisation 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, khandsari 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.

2. Individual Studies

There are some studies related to theoretical and conceptual issues of financial management.

The works that belong to this category were authored by Agarwal and Mangal\(^1\), Baker and Malott\(^2\), Cohen and Robbins\(^3\), Field\(^4\), Gitman\(^5\), Gerstenberg\(^6\), Guthamann and


Further, the studies on the financial management covering Beraneck\textsuperscript{17}, Fees\textsuperscript{18}, Howard\textsuperscript{19}, Mehta\textsuperscript{20}, Michael\textsuperscript{21},


Ramamoorthy\textsuperscript{22}, Roy Chowdhury\textsuperscript{23}, Smith\textsuperscript{24} and Stancill\textsuperscript{25} fall under this category. In addition to these, many of the publications are found dealing with the management of individual ingredients of the working capital, namely Inventory, Cash, Receivables and Marketable Securities. The writings on Inventory management are Armer\textsuperscript{26} Buchan and Koenigsberg\textsuperscript{27}, Dobler and Lee\textsuperscript{28}, Gopalakrishnan and Sandilya\textsuperscript{29}, Plosal and Evert Welch\textsuperscript{30}, Prichard and Eagel\textsuperscript{31},

\begin{enumerate}
\item Plosal, G.W. and Evert Welch, W., \textit{The Role of Top Management in the Control of Inventory}, Reston : Reston Publishing Co., Inc., 1979.
\end{enumerate}
Starr and Miller\textsuperscript{32}, Willets\textsuperscript{33} and Whitin\textsuperscript{34}. The articles on inventory management include the contributions of Bakshi\textsuperscript{35}, Chelapathi Rao\textsuperscript{36}, Fernandes\textsuperscript{37}, Madan\textsuperscript{38}, Rao and Gupta\textsuperscript{39}, Rao\textsuperscript{40}, Rao and Rao\textsuperscript{41}, Ramaswamy\textsuperscript{42}, Rastogi\textsuperscript{43},


\textsuperscript{41} Subba Rao, V.V. and Subba Rao C., "Optimising raw material mix" \textit{Productivity}, Vol. XXVII, No. 1, April-June, 1986, p. 75-80.


An important work on working capital management relating to Indian industry was compiled and published in the year 1966 under the title "Structure of Working Capital" by the National Council of Applied Economic Research (NCAER). In this study an attempt was made to analyse the composition of working capital with special reference to three types of industries namely Fertilizers, Cement and sugar. The main objective of this study was to examine as to what extent these three industries had utilized working capital components. The study revealed that there had been excessive working capital funds locked up in most of these industries. This study finally concluded that the need of the hour was to establish good accounting and costing.


systems, including new techniques of inventory management in each company of the above industries.

Agarwal in his study analysed the working capital management practices in the private sector industries in India.

Chadda in his work made an attempt to study the Inventory Management Practices of Indian Companies. Through his study he suggested the application of modern inventory control techniques like operations research.

Panda in his work made an attempt to study the working capital problems with particular reference to small scale units of manufacturing. The study is confined to the units in Orissa State and covered the problems of adequacy, the choice, sources and problems of raising working capital.

Mishra's study, covering the period from 1960-61 to 1967-76 was related to Case Studies of Working Capital


Management in six Central Public Enterprises in India. In his study four problem areas of working capital confronting public enterprises were identified. They cover Inventory, Cash, Receivables and Working Finance. He pointed out the need for efficient and effective use of working funds.

Rajeswara Rao in his work has covered the managerial aspects of inventories, cash and receivables and advances of some central public enterprises in India.

Khandelwal's investigation is based on empirical research done by late Prof. V.S. Agarwal of Jodhpur University on "Working Capital Management in Small Scale Industries". The study revealed that the selected enterprises were found to have recorded slower and declining rates of transmutation of working capital.

Lal in his study on "Inventory Models and the Problems of Price Fluctuation" covered the Inventory problems of the Modi Steels.


Singh, Sinha and Singh\textsuperscript{56} have analyzed how best the fertilizer industry has utilised working funds. The study reveals that a major portion of working capital was tied-up in inventories and receivables.

Swamy\textsuperscript{57} has covered various aspects of materials management in the enterprises, while studying on "Material Management in Public Undertakings".

Jain\textsuperscript{58} 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 in 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. Bardia\textsuperscript{59} in his work on "Working Capital


Management of Iron and Steel Industry in India" analysed the Iron and Steel Industry Practices in Working capital management and examined management performance in this segment of financial management. He explained that Inventory occupied a major share in the current assets in the Iron and Steel Industry. The analysis of sundry debtors shows that its absolute figure continuously moved to rise. Besides this, he pointed out that the proportion of debtors considered doubtful was much higher in the Iron and Steel Industry and he commented that this is due to inefficient management of receivables and a slackness in collection efforts. He also examined that in the Iron and Steel Industry the liquidity position is poor. Finally he concluded that the levels of inventories must be reduced to a reasonable extent and also a strict control over inventories has to be introduced so as to improve the liquidity and profitability. Further he suggested that the industry should centralize the administration of cash funds and establish a standard optimum cash balances.

Uma Sharma60 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 emphasised that the

industry should maintain proper cash balances and concluded that the Air Corporation should stress on proper financial management in their corporations.

Khan in his study "Working Capital Analysis" analysed the performance of the tyre industry in India. He concluded that solvency and liquidity was not satisfactory in more companies under study. And he suggested that solvency position should be improved by increasing the current assets.

Mohan Reddy in his study "Management of Working Capital" examined various issues of working capital management practices in respect of selected large scale manufacturing public limited companies in Andhra Pradesh.

Goel and Nagar, Ramachandra Rao and Ramakrishnan, have published some articles in the area of Bills Receivables and Cash Management.

Discussions on the cash management are included in the works of highly influential authors like Baumol, Beehler, and Bierman. On the financing and other aspects of working capital articles available are those made by authors like Agarwal and Jain, Ananthakrishnan, Chopra, Chakraborty, Desai and Darji, George.


Similarly, the individual research studies that are found to have been made about the sugar industry were mostly with reference to the States of Uttar Pradesh, Bihar and Maharashtra. Individual research studies about the Indian Sugar Industry were made by N.A. Shah in 1941 and by J.N. Mongia. Research work is reported to have been made by L.D. Deodhar, G.S. Kamat, B.H. Patil and R.B. Anekar on


different aspects of sugar industry in Maharashtra.
A.M. Khan\textsuperscript{84}, S.P. Joshi\textsuperscript{85}, H.S. Sharma\textsuperscript{86}, Viswanath\textsuperscript{87}, G.M. Saxena\textsuperscript{88} and A.K. Das\textsuperscript{89} are found to have studied some aspects of sugar industry in Uttar Pradesh. Similarly, research work has been done by R. Sahay\textsuperscript{90} and D.P. Singh\textsuperscript{91} on sugar industry in Bihar.

Meade and Chen\textsuperscript{92} have covered only technical aspects on sugarcane and sugar in their book "Cane Sugar Handbook".

"Modernisation of Indian Sugar Industry" was a seminar volume and edited by Gehlawat's. This volume deals with the areas of modernisation aspects and technical aspects of the sugar industry.

Sinha in his book "Sugar industry in India" deals with the aspects like historical background, agricultural economics, problems of marketing and transport of cane, technical performance of the industry, utilization of sugar industry by-products and labour relations.

In Sastry's book "The Story of Sugar" the aspects like sugar, cane sugar industry and cane cultivation, cane culture in other countries, manufacture of sugar, production of other sweetening agents from cane, economics of sugar industry etc are covered.

Oommen deals with the aspects like process controls, modern milling of sugar cane steam utilisation and hints for good management and other technical studies, in his book "Cane Sugar Factory Operations and Management".

A seminar volume titled "Management of Sugar Industry"\textsuperscript{97} published by Management Development Institute covered the areas like sugarcane development and problems of sugar industry.

Chakravarthy\textsuperscript{98} in his key note address presented the history of sugarcane in India and stressed the need for modernisation of sugar manufacturing process.

Jagannatham\textsuperscript{99} examined in his paper about the regulation of cane supply to the factory, harvesting and transportation of cane from field. He emphasizes the need of cane crushed within 24 hours after harvesting for better recovery and also stated different methods of transportation of cane.

Jagannatha Rao\textsuperscript{100} has examined the performance of sugar industry in the Andhra Pradesh and causes for the below average performance of certain factories in the state.

\textsuperscript{97} Management of Sugar Industry, New Delhi: Management Development Institute, 1975.


\textsuperscript{99} Jagannatham, A. "Regulation of Cane Supplies Including Harvesting and Transport", General Manager (CD) (Retired) Madhunagar Unit, NSF Ltd., Hyderabad (unpublished article).

Mahadevan\textsuperscript{101} in his book analysed the capacity utilisation and financial wealth of a sugar factory by using BEP analysis, and cost-benefit analysis.

Rangaswami\textsuperscript{102} 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 Governments. He also examined the issues like inadequate financial investment for older factories to take-up modernisation and inadequate supply of cane, resulting in less number of crushing days in a year.

Srinivasan\textsuperscript{103} tried to analyse the cost of sugar production with reference to cost of cane and profitability in his work.


OBJECTIVES OF THE STUDY

The specific objectives of the study are:

i) To examine the origin and growth of sugar industry in India in general and Andhra Pradesh in particular;

ii) To examine the capital structure in the select sugar factories of Co-operative, Private and Public sectors in Andhra Pradesh;

iii) To study the management of fixed assets in select sugar factories;

iv) To study the management of working capital in select sugar factories; and

v) To analyse the profitability of select factories in relation to return on capital and sales.

OPERATIONAL DEFINITIONS OF CONCEPTS

Capital structure is the composition of long term sources of funds such as paid up equity capital, retained earnings, preference share capital, debentures, long term loans and their relative proportion to the total fixed capital.

Fixed Assets Management is related to investment of funds in fixed assets and the sources to mobilise the funds to acquire the fixed assets. A fixed asset is one which is not meant for resale but is a means through which goods are manufactured and services rendered.

Working Capital Management is the procurement of current assets and the methods adopted to raise the funds to finance the current assets. A current asset is
one which can be converted into cash within a short period.

**Profitability** is the ability of the company in making a surplus in relation to capital employed.

**METHODOLOGY**

Survey method is adopted for this study. Both secondary and primary sources of data are used. The secondary published sources include Indian Finance Year Book, Agriculture and Industrial Survey, Directorate of Economics and Statistics, Reports of Fiscal Commission, Reports of the Sugar Industry Enquiry Commission, Indian Sugar Year Book, National Federation of Co-operative Sugar Factories, Reports on Currency and Finance, Bulletins of Reserve Bank of India, Volumes of Annual Survey of Industries, and Reports and Documents of the State and Central Governments. The primary data is collected from sample sugar factories through a schedule constructed for this purpose.

**SAMPLING**

The present study is confined to the financial management in select sugar factories in Andhra Pradesh, covering the period from 1980-81 to 1991-92. The number of sugar factories in Andhra Pradesh at the end of 1980-81 was listed out in each of the Co-operative, Private and Public sectors. As a result there are 18 units in co-
operative sector, seven units in private sector and one unit (eight units brought into one unit for administrative reasons) in public sector. From the list three units of each from co-operative and private sectors are chosen by applying random sampling technique. In the case of public sector, the Nizam Sugar Factory (NSF) which comprises of 8 units is purposively selected for the study, as there is no alternative in this sector (see table 2.1).

**TABLE 2.1**

**SAMPLE FRAME**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sectors</th>
<th>Number of factories</th>
<th>Sample factories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Co-operative</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Private</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Public (Nizam Sugar factory comprises of 8 units)</td>
<td>8(1)</td>
<td>1(8)</td>
</tr>
</tbody>
</table>

**Total** 33 7

**Note**: The number of factories as on 31st March, 1981.

**Source**: Office of the Commissioner and Director of Sugar, Government of Andhra Pradesh, Hyderabad.
TOOL FOR DATA COLLECTION

A schedule was constructed to collect the primary data from seven sample sugar factories belonging to three sectors in Andhra Pradesh. The data collected from the factories cover general identification, investment in fixed assets, investment in current assets, profitability and general problems faced by the factories.

TOOLS FOR ANALYSIS

The following tools and techniques are used in analysing the financial statements of select sugar factories.

I. Financial Ratios

The ratios used to analyse the data relating to capital structure, fixed assets, working capital and profitability in the select factories are:

1. \[
\frac{\text{Long term funds}}{\text{Total assets}} \times 100
\]

2. \[
\frac{\text{Fixed assets}}{\text{Total assets}} \times 100
\]

3. \[
\frac{\text{Current assets}}{\text{Total assets}} \times 100
\]

4. \[
\frac{\text{Long term debt}}{\text{Shareholders' equity}}
\]
Total debt
(Long term debt + Short term loans and advances)

Shareholders' equity

Earnings before Interest and Taxes (EBIT)

Interest charges

Fixed assets (Net)

Net worth

Fixed assets (Net)

Long term funds (Net worth + Borrowed funds)

Net Sales

Fixed assets (Net)

Gross Block

Installed capacity x 100

Operating Profit

Net Sales x 100

Depreciation

Gross Block x 100

Depreciation

Sales x 100

Net Sales

Year-end inventory
15. Inventories
   \[ \frac{\text{Total current assets}}{\times 100} \]

16. Current assets
   \[ \frac{\text{Current liabilities}}{\text{Quick assets}} \]
   \[ \frac{\text{Quick current assets}}{\text{Quick current liabilities}} \]

19. \[ \frac{\text{Net profit} + \text{Non-cash expenses}}{\times 100} \]
   \[ \frac{\text{Current liabilities}}{\text{Net profit before interest and taxes (PBIT)}} \]

20. \[ \frac{\text{Net sales}}{\text{Capital employed}} \times \frac{\text{PBIT}}{\text{Net Sales}} \]
    OR
    \[ \text{PBIT} = \frac{\text{Return on capital employed}}{\text{Capital employed}} \]

21. \[ \frac{\text{Gross profit}}{\text{Net Sales}} \times 100 \]

22. \[ \frac{\text{Operating profit}}{\text{Net sales}} \times 100 \]

23. \[ \frac{\text{Net profit}}{\text{Net sales}} \times 100 \]
Each of the above ratios is explained in detail in the appropriate contexts of the chapters concerned.

II. Weighted Average Cost of Capital Method is employed to compute the weighted average cost of different sources of funds. The other details of the technique are furnished in Chapter V.

III. Horizontal Trend Analysis is used to study the direction of trend over a period of time through the observation of behaviour of ratios and also by computation of index numbers.

IV. Funds Flow Analysis is applied to calculate the changes in working capital and also to probe into the causes for such changes in the factories under study.

V. Vertical Analysis of Data Through Common Size Percentages involves the expression of individual items of profit and loss account and balance sheet as a percentage to a common base viz., total sales, total assets and total liabilities which are taken as equivalent to hundred. This percentages studied over a period of time indicate qualitative assessment of different variables of financial statements. These statements show the changes in proportion than in the changes in absolute figures.

Besides the aforesaid financial tools, a few other statistical tools such as percentages, averages, regression
coefficients, analysis of variance (ANOVA), linear growth rates, compound growth rates and student 't' tests are worked out in the appropriate places in order to evaluate the financial performance in the select factories.

FIELD WORK

The reference period for the study is 1981-82 to 1991-92. The field investigation was conducted during the period from January, 1994 to September, 1994 by using the schedule constructed. During the field investigation, the researcher had consulted not only the financial managers and chief accountants but also the managing directors, other officials concerned and also non-officials for eliciting relevant information.

SCOPE AND LIMITATIONS OF THE STUDY

The present study covering the period from 1980-81 to 1991-92 is confined to the procurement and utilisation of funds in select sugar factories in co-operative, private and public sectors in Andhra Pradesh. It excludes from its scope the other functional areas of production, marketing and human resource and general management. The availability and uniformity of the latest data in all the three sectors have guided the selection of the period of study. For example in the case of co-operative sector the audit of the accounts will be completed three years or more after the completion of financial year. As such the study period was
fixed between 1980-81 and 1991-92 and could not be extended over 1991-92. Further the year 1987-89 covering 18 months is treated as one year in view of the insistence made by the Central Government for the sake of bringing about a change of uniformity in the financial year from April to March instead of October-September. In public sector, all the 8 units, though independently operating could not be studied separately as is done in other factories in co-operative and private sectors due to non-availability of data for independent units in Nizam. The financial analysis is confined to year-wise and could not be extended to month-wise due to insufficiency of the data. The availability of the time and financial resources of the researcher are also the limiting factors.

PLAN OF THE WORK

This study is organised as follows:

The first chapter reviews the origin and growth of the sugar industry in India in general and Andhra Pradesh in particular.

The second chapter discusses the design of the study.

The third chapter covers an overview of the conceptual framework and applications of financial management.
Profile of the select sugar factories is presented in the fourth chapter.

The pattern of capital structure and cost of capital of select sugar factories is covered in the fifth chapter.

The analysis of fixed assets management of the sample factories is presented in the sixth chapter.

The seventh chapter is designed by the structure of working capital management in select sugar factories.

The profitability of the select factories is incorporated in the eighth chapter.

The summary of findings and suggestions is presented in the last chapter.