Chapter - II

RESEARCH METHODOLOGY
AND SAMPLE DESIGN
Review of literature and methodology.

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. This part gives the brief description of the studies conducted by various individuals, committees and organisations.

Important reviews

Mr. Satish Kumar Modi (1985) observed that the Indian Textile Industry was be devilled by out-dated technology rising new material costs, and shortage of funds for expansion/ modernization. In addition to this large scale smuggling of these items which had assumed alarming proportions had proved to be detriment to the indigenous industry and the government exchequer.

Suganthi, in her “Analysis of working capital management - a comparative study of Lakshmi Mills and Premier Mills” in Coimbatore district, states that in case of working capital management, it is a continuous task of managing the composition of current assets and financing them. Therefore, the management of working capital becomes a challenging and dynamic job, particularly in the corporate sector. She is of the opinion that in a country like India, working capital management has a greater significance in view of several constraints. In the field of cash management the options open to an Indian company to invest its surplus cash are far too limited compared to a company in U.K. or U.S.A. Moreover, the prevailing condition of our economy necessitates a company to buy and store the essential raw materials to achieve uninterrupted production, which adds up the cost of production. Besides, the management of receivables poses problems in the Indian context, where credit transactions play a crucial role. Thus, the present condition requires that companies’ practice greater financial discipline. At this juncture, the working capital management assumes added significance for companies in India.

Prakash in his study of “Impact of Financial Factors on productivity in public enterprises” (public corporations and government companies) appertaining to the centre (Government of India) during the period 1975-80, came to the following conclusions:
Among all the factors studied, he has found that the impact of financial factors, such as over optimum fixed investment (typified by extremely low capacity utilization in some public enterprises) on productivity, has been quite adverse. To some extent, underutilization of operating has resulted from lack of synchronization within the public sector itself.

Over-investment in inventories has been a major constraint with many public enterprises endeavouring to attain responsibly high standards of capital productivity. There appears to be considerable scope for improving the productivity of capital input by curbing the tendency towards over-stocking in the public sector. Better management of receivables, too, might lead to an estimated increase of some 10% in the operating profits of certain public enterprises. The carrying cost of excess stock (raw materials of semi-finished stuff or finished goods) may easily turn out to be 30% in the form of interest, storage etc., besides the hazards of obsolescence and quality deterioration. Finally, the researcher has stated that this leads to mismanaged productivity growth.

Sharma in his study examined the practice prevailing in the management of working capital in the textile industry of private corporate sector in Rajasthan, covering a five year period from 1979-80 to 1983-84. He came to the following conclusions:

a. Most of the mills covered under this study have failed to plan their working capital requirements, which have frequently led them to either excess or inadequacy of working capital.

b. Only in the recent past these mills have started giving due consideration for working capital management. Scientific estimates of various components of working capital are done instead of depending on intuition and rule of thumb.

c. In most of the mills covered, the debtors were more than 6 months old and some of them were considered to be doubtful.

d. The textile mills should reduce investment in inventories by effectively controlling variation in lead time and carefully planning the ordering schedules.
e. Investment in stores and spares in most of the mills studied is higher.

f. Most of the mills covered have a higher share of bank credit in their total working capital, requirements and lower share of internal long term source, showing a growing dependence on commercial banks for their working capital finance.

Nag S.P. (1970)\(^5\) has observed that for an economy characterized by chronic shortage of capital, the significance of the fact that greater utilization of a plant's capacity would lead to a higher rate of profit and a lower capital output ratio, provided its operating cost per unit of output rises if at all less than proportionately. He also has the opinion that mill owners: labour and the government are the main persons responsible for the underutilization of looms and other machines in the textile industry.

Mehta Suresh (1984)\(^6\) in his study states that the restructuring of the textile industry is possible only if the government fiscal policies on excise, import duties, taxation, financing and interest rates are modified. The study also suggests that the restructuring of the industry should depend on the fact with which the government is able to balance differing interests of various sectors of the industry, whether they are from the organized sector, or otherwise, privately owned or nationalized or cooperative units.

Gradie A.R. (1985)\(^7\) in his study has observed that the modernization gap is large due to poor profitability of the mills which in turn is a part of a vicious circle of poor profits less expenditure on machines.

He suggests through his study that detailed discussions and dialogues will have to take place within and between the management and labour for crystallizing the action plans such as achieving an adequate level of profitability for survival and growth of the industry.

Kalayanaraman P. (1985)\(^8\) has stated the National Textile Corporation (NTC) which has been in the red ever since its inception has managed to reduce the losses by Rs. 5.79 crores in April-June 1985. This was possible due to reduction in cotton prices, better management, and product development reduction of over manning and improved work culture.
Tarachandani L.N. (1986) emphasizes that the policy of transferring production of controlled cloth to the handloom sector would provide jobs to an additional one million persons in the handloom sector. He also suggests that the excise duty reduction should provide relief to the mill sector in a great way.

The association also pointed out that the productive capacity between the mills would vary due to the level of modernization, efficiency of labour, incentives provided by the management and amount of salary paid to the workers.

Shashi Kala evaluated working capital management, to compare the various aspects of working capital management in the public sector units with their counterparts in the private sector. Her aim was critically analyse the management of different components of working capital viz., inventory, receivable and cash, to study the relative importance of different sources of financing working capital and its utilization, so as to comment on the liquidity position of the select units and assess its contribution to profitability. Further she wanted to assess the problems of working capital from the viewpoint of management, to suggest feasible ways and means to overcome the problems in the management of working capital, that contribute to improvement of profitability of the mills.

As was conducted by World Bank in 1975, to analyse the position of the Indian textile industry, the study observes that even on the most profitable business units the plough back rates were very low, compared to other countries. It further states that a large part of the profit was diverted to other industries instead of to the plough back. The position of the Indian Textile Mills, in the words of World Banks was correctly pointed out as “Industrial slum-squalid, poorly lit, congested, with new and modern equipment often being integrated with the old. So, the productivity, not surprisingly, remains unchanged.

In 1984, under the chairmanship of the Secretary Department of Textiles, Government of India appointed a high powered committee to look into the sickness position of the Textile Industry. The committee in its report stated that though the units were economically viable, the majority of the units had become sick due to: (i) mismanagement (ii) lack of professional management (iii) loss of confidence by the financial institutions. Further the study reported that in many of the years under
review (1965 and 1979), the industry earned more than 10 per cent only in one year, and in the rest of the years, the returns gained between 1.14 per cent and 3.53 per cent. The study also revealed that out of the analysis of the financial statement of 200 units, for the years between 1978 and 1984, the average annual operating profits were about 5.1 per cent only on three occasions and in the rest of the years it was less than 1 per cent.

Sri C.P. Chandrasekhar (1984)\textsuperscript{13} in his study 'The Investment Pattern of the Textiles Industry in India' observed that the investment at constant price had increased by 9 per cent annually till 1967, but the same had a steady decline after 1967 and during 1970s the rate had turned negative. This declining rate of growth, even the negative aspects, was reflected in the slow rate of technical change in the industry. He further, pointed out that the index number of the agricultural product prices had raised by 124 per cent in 1976-77 against 100 per cent in 1965-66, whereas the industrial prices were advanced even more i.e. 130.2 per cent. But this increase was not matched by an equivalent increase in the income of the low income groups, which constitutes a vast majority of the country's population. This is reflected in the skewed pattern of textile consumption i.e. about 30 percent of the population could afford only about 1 metre of cloth per annum. 40 percent for nine metres and the remaining 29 metres per annum.

The Commerce Research Bureau,\textsuperscript{14} in its study conducted in 1986 has analysed the various reasons for the sickness of the Indian Textile Industry. They stated that due to the power shortage resulting in under-utilization of plant capacity was the main reason for the sickness of the industry in addition to the demand recession.

The Ahmadabad Textile Industry's Research Association (1985)\textsuperscript{15} has observed that income is the single most important determinant of textile consumption expenditure. International trade in textile is becoming increasingly competitive and India holds competitive advantages in yarn and cloth manufacture. The study suggests a greater attention to machinery maintenance and a commitment to extract the best out of installed technology by way of quality and productivity.
The Southern India Mills Association (1978)\(^{16}\) has pointed out that the productive capacity in the decentralized sector led to the diminution of demand for mill made cloth, large scale smuggling of manmade fibers and yarn. Irrational excise tax structure on cotton and hand-made textiles large scale piracy of mill names are some of the problems of the textile industry.

The South Indian Textile Research Association (1986)\(^{17}\) in its study pointed out that exports in the textile sector have increased to a record level of Rs.2,599.34 crores. This, according to the study, is an all-time high in textile exports with earnings exceeding the target by Rs. 342.34 crores. The study also found that the cost of production of yarn in the count range 10 to 20s would be lower in the small scale sector by about 5 per cent compared to organized sector. The study also has found out that the cotton fabrics would be costlier by about 25 per cent as compared to the mill made fabrics due to very low productivity.

**Statement of the problem**

Cotton textile industry in India has been facing many odds and the survival of the industry is in danger. Due to the continued uneconomic working, the industry's financial viability has been deplorably shattered. Many mills in the industry have already reached a stage of financial prostration with complete exhaustion of reserves and surplus and their liquidity position has become most precarious. Many mills, particularly in and around Mumbai, have already closed their shutters and some are ready to follow. Due to low profitability, the industry has failed to retain more profits, and consequently been forced to depend on external sources, which in turn is leading to imbalanced capital structure. The failure of the industry in the maintenance of liquidity is the direct result of imbalanced capital structure, and inadequate liquidity in turn is leading to low profitability. Since the industry has been incurring losses the payment of dividend, interest and the repayment of principal amounts is becoming a big problem. Thus, the cotton textile industry is caught in the vicious circle. To discharge the complicated duties, the financial manager must know how to solve the above said problems that affect the profitability of the mill, how working capital is to be managed and how profits are to be increased. These and other related questions about financial management arise in cotton textile mills also. The said questions call for a scientific examination in select cotton textile mills.
Need for the present study

Finance is the life-blood of any industrial system which lubricates, develops accelerates the mobility and growth, without which business organization becomes nothing. Mobilisation (acquisition), utilization and distribution of finance play a crucial function and its performance influences the organization to prosper. Financial Management is directly concerned with the line of business, size of firm, type of equipment used, extent of debt, liquidity etc. which in turn determine the size of the profitability. Therefore, financial management assumes a greater significance in any industry.

In India, human and natural resources are available in plenty but the capital resources are highly restricted. A thorough understanding of financial management is necessary to utilize the limited mobilized capital resources efficiently and effectively. It is difficult to evolve norms for sound and efficient management practices in various organisations 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 financial performance of select cotton textile mills in Andhra Pradesh of India.

Scope and coverage

The present study is confined to six listed cotton textile mills only in Andhra Pradesh in India. They are:

5. SreeAkkamamba Textiles Ltd., Tanuku, Andhra Pradesh.
Objectives of the study

The specific objectives of the study are:

1. To study the origin, progress and prosperity of cotton textile industry in India and Andhra Pradesh.
2. To analyse the fixed assets management in select cotton textile mills.
3. To examine the inventory management in select cotton mills.
4. To study the cash management in select cotton mills.
5. To evaluate the profitability in select cotton mills.

Methodology and sample design

As on 31-03-2011, there were 14 listed cotton mills in Telangana region, 5 mills in Andhra region and 4 mills in Rayalaseema region and thus a total of 23 listed cotton mills in Andhra Pradesh. A random sample of 6 mills was drawn (25 percent) adopting stratified random sampling with proportional allocation technique. The stratification was made region-wise (Telangana, Andhra and Rayalaseema).

Table: 2.1

Sample design of cotton mills in Andhra Pradesh

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Region</th>
<th>Total listed Cotton Mills</th>
<th>Sample Cotton Mills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telangana</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Andhra</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Rayalaseema</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23</td>
<td>6</td>
</tr>
</tbody>
</table>

Source of data

The study is based on both primary and secondary data. The primary data covering all financial aspects of the sample cotton mills are collected through the help of a structured questionnaire specially designed for this study.
The secondary data are collected from the South Indian Textiles Research Associates, South Indian Mills Association, Bombay Institute of Textile Research Association, the RBI Bulletins, the Annual Survey of Industries, Annual reports of the sample cotton mills, Books, Journals, magazines, newspapers and internet.

**Period of study**

The study period covers ten years of select cotton mills in Andhra Pradesh i.e. from 2001-02 to 2010-11.

**Tools and techniques used**

In the analysis of the financial data various financial tools and techniques like, percentages, averages, ratios and funds flow statements are adopted where necessary in order to evaluate the financial performance in the select cotton mills. Graphs and Diagrams are presented to illuminate the facts and figures.

**Operational definitions of Concepts**

1. **Fixed Assets Management**

   Fixed assets management means direction with regard to investment of funds in fixed assets and the source of funds to procure the fixed assets. A fixed asset is one which is not meant for resale but is intended for use in the business.

2. **Inventory Management**

   Inventories constitute the most significant part in the industries. The purpose of this chapter is to discuss the techniques of managing inventories and to emphasise the role of financial manager in inventory management. The manufacturing industries hold inventories in the form of raw materials, Work-in-Process, finished goods and stores and spares.

3. **Cash Management**

   The management of cash is more important, because it is difficult to predict cash, particularly cash flows accurately. There is no perfect coincidence between inflows and outflows of cash. The ideal cash management system will depend on the
firm's products, organization structure, competition, culture and options available. The management should maintain a sound cash position towards the firm profitability.

4. Profitability

In this study profitability evaluation means profit planning and control, profitability and the pattern of distribution of disposable surplus.

Chapter design

The thesis consists of nine chapters.

First chapter

Introduction: - Origin, growth and development of cotton industries in India and in Andhra Pradesh.

Second chapter

Research methodology and sample design:- Statement of the problem, Need for the study, Objectives of the study, Source of data, Period of study and Tools of analysis are discussed.

In the Third chapter Profile of the sample cotton mills are discussed.

In the Fourth chapter “Financial Management an overview” is discussed.

Fifth chapter deals with the fixed assets management. In this chapter investment on fixed assets, source of long-term funds, utilization of fixed assets, purchasing policy and depreciation policy adopted are discussed.

Inventory Management Techniques, the areas of inventory such as raw materials inventory, work-in-process inventory, finished goods inventory, spares and stores inventory and inventory control procedures are discussed in the Sixth chapter.

Seventh chapter deals with the Cash Management, cash and bank balances, Current ratio, quick ratio and net cash flow coverage ratio.
Evaluation of profitability in relation to capital employed, sales, shareholders' investment, components of operating costs and their effect on cost of production and dividend policy are discussed in the Eighth chapter.

Ninth chapter reveals summary of findings and suggestions.
REFERENCES


12. Ibid., p. 71.

13. Ibid., p. 82.

