Chapter 2

Design of the Study

Co-operative Spinning Mills (CSMs)

As noted in Chapter 1, CSMs occupy a significant place in the decentralised textile sector, ensuring remunerative price to the primary producers and providing steady supply of yarn to weavers at reasonable price. However, it has been noticed that these CSMs have not achieved much in pursuit of their goals, since they have so far met only about 55 percent of the yarn requirements of the weavers.

Proper financial management is necessary for CSMs to ensure supply of yarn at reasonable price, secure stability and growth of employment, pay living wages to workers and earn adequate profit for further growth of CSMs. Though maximisation of profit need not be the objective of CSMs, their operations should be sufficient for reasonable return on investments for ploughing back for future development.

Review of literature

Very few studies have been made in the area of financial management of co-operative spinning mills.

A case study of spinning industry by Dr. C.S. Rayudu (1987) studied

i. sources of funds of CSMs,

ii. composition of their share capital,

iii. assessment of financial management,
iv. extent of dependence on Government and
v. their profitability.

Since the study covered as many as 65 CSMs out of 78 CSMs in the country as in 1979-1984, Dr. C.S. Rayudu could not make mill-wise analysis and he had made a general study of all the mills. His work brought out the unsatisfactory liquidity position of the mills and their dependence on borrowed capital. A mill-wise analysis on a smaller sample would be more useful. Also analytical ratios, largely used by the author may have to be replaced by modern tools of analysis like time value of money and operating cycle of the working capital.

Dr. N. Narayanasamy (1989) in his thesis “A study of the factors influencing the relationship between capital structure and cost of capital in selected larger co-operatives in Tamilnadu” dealt with the functioning of a sample of 22 large co-operatives in Tamilnadu, which included 12 CSMs. The study period was 10 years from 1978-79 to 1987-88. The author observed that the high leverage and consequent high cost of capital eroded profitability and the financial strength of the co-operatives. The author concluded that the share of debt should be reduced in capital structure.

Dr. M. Joseph (1992) in his thesis “Material Management in co-operative spinning mills in Tamilnadu - A study of current practices and problems and design of an improved systems material management” dealt with the practices of inventory management in 12 co-operative
spinning mills in Tamilnadu. According to the author, stocks of finished goods in 8 out of 12 CSMs increased substantially due to inability to sell and lack of scientific methods of inventory management.

Dr. P. Manickavasagam (1993) conducted a study, “Co-operative spinning mills in Tamilnadu - A critical study with special reference to production, pricing and marketing of yarn”.

The objective of his study were

i. to examine the production pattern and marketing of yarn,

ii. to analyse trend in cost and pricing of hank yarn and cone yarn and

iii. to study the business relations between CSMs and handloom co-operatives.

The study brought out mismatch between production requirements and consumption. The reasons for these inconsistencies were found to be administrative supremacy of the Government officials in the absence of elected management.

Dr. S. Mohan’s “Financial management of co-operative spinning mills C1997), is the latest piece of literature on CSMs, covering a period of 9 years from 1984 to 1992-93. The study aimed at

i. assessing the investments decision process and effectiveness of the management of fixed assets,

ii. analysing the capital structure of CSMs,

iii. examining the management of working capital and

iv. evaluating their profitability.
The study relied on analytical ratios like proprietary ratio, leverage ratio and liquidity ratio. However, profitability ratios did not include time value of money and analysis of management of working capital did not include operating cycle.


Meenakshisundaram (1991), in his thesis on “Khadi and Village Industries Institutions in Tamilnadu - A study of Financial Performance”, examined the financial performance of selected agencies of khadi and village industries in Tamilnadu. He recommended the introduction of production and planning, inventory control and collection drive for rejuvenating the management of working capital and improving them towards the benchmark level.

Manas Kumar Hazra (1992), in his work on “Financial Management in Public Sector - A Differential Study with reference to selected Central Government Companies”, studied the management of working capital and discussed that in profit-making companies along with increase in sales there was an increase in investments in working capital. In the loss-making companies, the trend was inverse with high degree of volatility in working capital requirement. It also suggested
that there was adequate scope for utilisation of working capital not only in the loss-making units but also in the profit-making companies.

Chinta Rao (1993), in his work on “Working Capital Management - A study of selected State Enterprises of Karnataka”, analysed working capital issues with special reference to size, adequacy and efficiency and it’s relationship to profitability. His major findings are as follows.

i. the ratio test revealed the significant extent of money locked up in inventories in the study units.

ii. lack of control in cash inflows and outflows.

iii. financial pattern revealed the dominance of short-term sources compared to long-term sources.

iv. recommended thorough revamping of inventory structure, levels of cash to be maintained and urged the need to discontinue the practice of diversion of short term funds for long term purposes.

Kannan Nair (1998), in his study on “Khadi and Village Industries (KVI) in Dindigul District - A study of Financial Performance”, has analysed the trends in production and sales fund flow pattern on profitability of four KVI institutions in Dindigul district. He suggested a marketing consortium in each district of Tamilnadu to improve marketability of KVI goods.

**Government reports**

The Committee on Cottage Industry in 1929 was the first committee that went into various problems of the handloom industry
under the chairmanship of D. Narayana Rao, the committee recommended the extension of co-operative marketing scheme as the best method to expand the demand for handloom and free the ordinary weavers from the capitalists controlling them in the then Madras Province\textsuperscript{11}.

A three-member fact-finding committee under the chairmanship of Thomas (1942) gave an authoritative report comprising comprehensive information about various aspects of handloom industry. The most important recommendation of the committee was that an All India Handloom Board should be established whose main function should be research, supply of raw materials and marketing\textsuperscript{12}.

The committee headed by Narayanaswamy Naidu (1947), recommended the following.

i. all the weavers should be compulsorily brought under co-operative fold.

ii. the claim of middleman in the yarn and cloth business should be eliminated.

iii. Weavers’ co-operative societies should function as multipurpose societies with a credit department\textsuperscript{13}.

The textile committee under Joshi (1958), submitted a report on the state of handloom in India and the major problems faced by handlooms in terms of yarn supply and marketing.
The power loom enquiry committee constituted by the Government of India under the chairmanship of Mehta (1964) recommended that the production of colour sarees should be exclusively reserved for handloom production.

In July 1998 the Government of India constituted a committee with 12 members headed by S.R. Sathyam, former Secretary of Ministry of Textiles, Government of India, to find out policy issues on different segments of textile industries for making them competitive in the wake of globalisation. Their most important suggestion was to convert handlooms gradually into power looms and the use of cone yarn for handloom weaving. This report is yet to be made public.

Sundarsingh in his book titled “The Handloom Industry in Madurai City” has conducted a detailed study on the organisation, functioning, uniqueness and problems of handloom industry in Madurai in respect of raw materials, market and financing, covering looms under co-operative sector, master-weavers, petty master-weavers and independent weavers and exporters.

Vepa in his book titled “Management of Small Scale Industries” had discussed in detail the role of handloom industries in India in terms of production, employment and export earnings. The book also mentioned various schemes of assistance extended by the Government of India in promoting handloom industry.
Ganapathy Iyer (1983) in his book titled “Indian Industrial Development and it’s Problem” has identified that the limitations of this industry are outdated techniques of production, lack of standards, poor distribution strategies, lack of design equipment in the dobbies and jacquards and quality supply of yarn and other inputs.

Ian Little, Dipak Mazumdar and John M. Page Jr. (1989), in their work titled “Small Manufacturing Enterprises - Comparative Analysis of India and other Economies” discussed in detail the economic effects of textile policy on handlooms and power looms. They report low social profitability in handlooms, low productivity rates and low cost of fixed capital and working capital requirements and the poor value addition of this sector. This book threw light on cost advantage of power looms over handlooms and mill made cloth.

Anjaneyalu (1990) in his book titled “Financial Management in the Handloom Co-operative Industry” has studied elaborately the issues relating to finances of handloom industrial activity in Guntur district covering inventories and financial structure of handloom co-operatives in the study area.

Gandhi, et al, (1992) in their book titled “Decentralised Sector of the Indian Textile Industry” have given a detailed account of the progress of handloom industry in India in the Five Year Plan periods, technology used in handloom production, handloom processing throughout India, existing channels of distribution for marketing and
have concluded that the handloom sector has witnessed many ups and downs in the post independence era.

Dash (1995) in his book titled “Handloom Industry in India” has analysed the existence of the handloom sector in certain pockets of Orissa state in spite of heavy modernisation and growth of large-scale textile mills. He has observed that dualism was present in the handloom sector. He has noted that the handloom sector was stratified and fragmented and that caste factor was dominating in Orissa in this trade.

Ratnam (1992), in his book titled “Internal Causes of Sickness in Spinning Mills”, has analysed that the causes for the low spindle utilisation in the CSMs disclosed that shortage of raw material and finance resulted in huge and recurring losses. Also he ascertained that no CSMs achieved the productivity at the standard of South India Textiles Research Association (SITRA) and only 25 percent of the mills reached even the industry average level.

**Research reports on handlooms**

Renganath and Veeraragavan (1985) analysed the sectoral costs of mill sector, power loom sector and handloom sector. They observed that the fabrics produced in handlooms are cosdier on the average by 20 percent than those of power looms due to higher conversion cost consequent to low labour productivity.

Veeraragavan (1989) conducted a study on “Market Survey of Handloom Products”. He observed that price was an important aspect
influencing the sale of handloom goods. New colours and fastness properties, dimensional stability, uniform texture and appearance were the major factors affecting handloom goods marketability.

All India Federation of Co-operative Spinning Mills (AIFCOSPIN), Bombay, in its Annual Report (1980), observed that most of the CSMs which defaulted in repayment of their loans suffered mainly due to managerial inadequacies.

AIFCOSPIN, Bombay, in its Yearbook (1991), has stated that in respect of financial structure, many CSMs are taxed heavily with the burden of interest charges owing to their undue dependence on debt/loan and especially on short-term loans.

The South Arcot CSM, Saram (1986), in its proposal for comprehensive rehabilitation scheme, pointed out that the financial failure in the case of some CSMs is also on account of the delay in completion of projects and cost overruns, because of improper evaluation of the investment projects.

Also it observed that the flow of fund is affected, because of the restriction in the sale of yarn during boom as well as recession.

Chung and Ellis (1993) examined the ability of financial ratios to predict takeovers in Hong Kong. Dichotomous tests on the selected financial ratios of the firm were performed to find out the combination of ratios with the best predictor power. They asserted that financial
ratios are extensively used by researchers for many purposes, besides predictions of corporate failure (Beaver, 1966, Tafflow, 1982), commercial credit rating (Apitado, Warner, 1974) and bond rating (Copland and Ingraw, 1982).  

Agarwal (1993) has studied the fund flow pattern in sugar, spinning and primary agriculture co-operatives and observed that all the study units largely relied on external funding and poor internal generations and discovered vast use of funds in fixed assets and poor increase in sales. He reported lack of uniformity in financial reporting.  

Nair (1994) had reviewed the handloom exports in 1993-94 and observed that handloom made ups recorded 33.6 percent growth over the previous year. Cotton exports to Asia and European countries have shown increasing trends, while there was a decline in exports to USA and the oceanic regions.  

Srinivasulu (1994) has studied the problems of handloom industry and weavers and discovered that fluctuating yarn prices have imperiled the weaving community. He observed that the root cause for such sharp price level laid in the New Textile Policy announced by the Government of India in 1985.  

Pillai et al (1994) conducted financial analysis of women’s industrial co-operative societies in Kerala and found that profitability ratios were negative and liquidity ratios were poor. In respect of
industrial match co-operatives, the inventory turnover ratio was found to be low.

Mohan (1990) has studied the liquidity ratios of co-operative spinning mills in Tamilnadu and found that the mills are suffering from inadequacy rather than excessiveness. Many mills diverted short term funds for long term uses.

Vijayakumar and Venkatachalam (1996) studied the demand of working capital requirements of private sugar industries in Tamilnadu investigating cash inventories, receivables, gross working capital and net working capital balances with the volume of sales. They evaluated the effect of capital cost on working capital holdings which had shown negative trend.

Agarwal (1998) had discussed the need for value added statement as the basis for performance appraisal and emphasised that value added statement is more appropriate than net profit concept. It gives absolute figures rather than relative index. It is widely used for managerial analysis.

Vijaykumar (1998) studied the determinants of corporate size, growth and profitability - an Indian experience and observed that growth has been significantly associated with profit. The variables analysed are net assets/size, return on net worth and growth rate using linear models.
Roy (Oct. 1999) tried to analyse the small scale weaving factories in Tamilnadu and their role in the economic growth. The entrepreneurs of power loom units hailed from handloom group. Handlooms and power looms were used to produce the same goods particularly the goods produced in power looms are the items reserved for handlooms! but this has been encroached successfully by the power looms. He identified that there are about 1,50,000 handlooms in non-competitive items such as high quality silk sarees and bed-spreads. Also, he suggested that the Government should aid them in the form of financial incentives for efficient production.

Rajeswari (2000) has attempted to evaluate the efficiency of liquidity management of Tamilnadu Cement Corporation (TANCEM). The author had stated the importance of liquidity, as insufficient liquidity will result in bad credit ratings and excessive liquidity result in idle assets. She concluded that the unit has maintained excessive inventories in the first two years and it affected the profitability. In the following years, the liquidity has shown a fluctuating trend indicating the poor management of liquidity in the unit.

Krishna (2000) emphasised the need for value addition statements in financial reporting. He has stated that value added accounting is an innovative tool and added a new dimension to the existing accounting systems. The value added accounting furnishes the details of wealth created by the firm during an accounting period. Value added accounting is sometimes called an alternative approach to income.
measurement which provides detailed information about business profitability rather than traditional profit/loss accounts\textsuperscript{41}.

Desai (2000) made an analysis about the significance of an appropriate fixed capital structure to avoid the risk of under-capitalisation or over capitalisation. Capital structure is a structure of funds raised to finance the fixed assets and current assets, which a company needs to maintain the business operations. He used Altman’s “Z” score to assess the low profitability and the findings are low ROI, imbalance financial plans and inefficient employment of funds\textsuperscript{42}.

Sahu (2000) made an empirical analysis of corporate profitability based on secondary data from financial companies in East India. Around eight profitability measures were used to arrive at a composite profitability index. He suggested that composite analysis is a potent tool for corporate planning\textsuperscript{43}.

Mohan (1987), in his unpublished M.Phil., dissertation “Working Capital Management of the Thanjavur District Co-operative Spinning Mills Lt., Manalmedu - A Case Study” observed that in the case of CSMs, excessive or inadequate investment in inventories and receivables, weak credit policy and diversion of funds from working capital to the long term needs lead to the improper working capital management\textsuperscript{44}. 

Statement of the Problem

Review of literature reveals certain gaps in the sphere of present study and brings out some valuable tools of analysis. Very few efforts have been addressed to the financial management of CSMs. Such studies are not comprehensive and certain inadequacies have been already noted. Authors like Dr. C.S. Rayudu and Dr. S. Mohan adopted traditional tools like ratios, ignoring more modern tools like “Net Present Value” and “Operating Cycle”. Dr. N. Narayasamy and Dr. M. Joseph covered only certain segments of financial management of CSMs like cost of capital and inventory management and they did not cover the whole gamut of financial management. On the other hand, the researcher could gather from the above review some valuable tools of analysis like time value of money, linear model and fund flow analysis. Therefore it is felt necessary to undertake a comprehensive study of the financial performance of CSMs in Tamilnadu, employing modern tools of analysis. Hence the present exercise.

Scope and Objectives of the study

Finance is the common denominator for the corporate objectives and major part of corporate plan must be expressed on financial terms. Therefore, a comprehensive study of financial management of CSMs using modern tools of analysis will be a valuable feedback for growth of CSMs. Though profit is not the main goal of CSMs, no industry can survive for long, incurring losses continuously. Therefore, CSMs should earn reasonable profit in order to grow continuously and serve cotton
growers and weavers. Profitability is influenced by various factors like production, sales, net value added by manufacture and various other causes\textsuperscript{46}. The present study will cover performance of CSMs in production, sales and value addition. Also it seeks to evaluate profitability, management of working capital and mobilisation and use of funds. The study also applies prediction model of Altman’s “Z” score for diagnosis of financial health of CSMs. Therefore a comprehensive study of the financial performance of selected CSMs employing modern tools of analysis is undertaken by the researcher.

**Specific objectives of the present study**

The present exercise embodying comprehensive review of financial performance of selected CSMs aims at

i. measuring variation in production, sales and value addition.

ii. estimating profitability of the operations and identifying factors influencing profitability.

iii. evaluating management of working capital.

iv. conducting fund flow analysis.

v. predicting the future of financial trends of the CSMs.

**Hypotheses**

Perusal of literature in management and economics and preliminary study of the textile industry in co-operative sector in Tamilnadu enabled the researcher to formulate the following hypotheses.

i. The co-operative spinning mills have been started mainly for producing yarn required by handloom weavers. Since handlooms
suffer from stagnation and decline, production, value addition and sales in the sample CSMs would have also fallen during the period under review.

ii. Because of the fall in production, value addition and sales, these CSMs would not be able to earn profit during the period under review.

iii. Because of the stagnation in demand for yarn, the CSMs would have long operating cycles of working capital, largely caused by long storage cycles and collection cycles.

iv. Due to poor profitability, these CSMs would not be able to generate resources from within and they would be completely dependent on external sources of funds like additional share capitals and loans.

v. Because of the continuous losses, these CSMs would be financially very weak and almost on the verge of bankruptcy.

Methodology

Sampling plan

Out of 18 co-operative spinning mills 14 CSMs were found to be functioning, with the remaining 4 CSMs lying in different stages of dormancy/closure. The 14 functioning co-operative spinning mills have been classified into three groups on the basis of installed spindle capacity, as shown below in Table 2.1.

Table 2.1

<table>
<thead>
<tr>
<th>SI no.</th>
<th>Installed spindle Capacity</th>
<th>Total no. of CSMs</th>
<th>No. of CSMs selected on sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About 12,000 spindles</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>About 25,000 to 30,000 spindles</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>About 50,000 spindles</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Records of the CSMs
A Sample of 5 CSMs comprising one each from the first and third groups and three from the second group was chosen at random. Thus the five CSMs as shown in Table 2.2 formed the sample for the study.

### Table 2.2

**List of Sample CSMs selected for the study**

<table>
<thead>
<tr>
<th>SI no.</th>
<th>Name and address of the CSMs</th>
<th>Short Name</th>
<th>Spindle Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ramanathapuram District Co-operative Spinning Mills Ltd., Achankulam, Ramanathapuram District</td>
<td>RSM</td>
<td>12,000</td>
</tr>
<tr>
<td>2</td>
<td>Srivilliputhur Co-operative Spinning Mills Ltd., Srivilliputhur, Kamarajar District</td>
<td>SSM</td>
<td>25,000</td>
</tr>
<tr>
<td>3</td>
<td>Tiruchirapalli District Co-operative Spinning Mills Ltd., Karur, Karur District</td>
<td>TSM</td>
<td>25,000</td>
</tr>
<tr>
<td>4</td>
<td>Anna Co-operative Spinning Mills Ltd., Andipatty, Theni District</td>
<td>ASM</td>
<td>25,000</td>
</tr>
<tr>
<td>5</td>
<td>The South India Co-operative Spinning Mills Ltd., Pettai, Tirunelveli, Tirunelveli District</td>
<td>PSM</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Source^ Records of the CSMs

**Profile of the selected sample Co-operative Spinning Mills (CSMs)**

Details regarding the origin of the selected sample CSMs are shown in Table 2.3.

Ramanathapuram District Co-operative Spinning Mills Ltd., Achankulam, (RSM)

RSM is located in Achankulam Village at Kamuthi Taluk in Ramanathapuram district. This CSM was registered under the Tamilnadu Co-operative Societies Act on 19-03—1982 and commenced its production on 01-12-1985. Total licensed spindle capacity of this CSM is 23,264 spindles. The present installed total spindle capacity of this CSM is 12,320 spindles. Total area of the CSM is 25.03 acres and
### Table 2.3

Profile of Sample Co-operative Spinning Mills (CSMs)

**Locations:**

- Ramanathapuram District Co-operative Spinning Mills Ltd., (RSM) - Achankulam Village, Kamuthi Taluk, Ramanathapuram district
- Srivilliputhur Co-operative Spinning Mills Ltd., (SSM) - North Srivilliputhur village, Madurai-Thenkasi Road, Srivilliputhur Taluk, Kamarajar District
- Tiruchirapalli District Co-operative Spinning Mills Ltd., (TSM) - Malai Kovilure Nagamballi Village, Karur Taluk, Karur district
- Anna Co-operative Spinning Mills Ltd., (ASM) - Shunmugasundarapuram Village, Andipatty Taluk, Theni District
- The South India Co-operative Spinning Mills Ltd., (PSM) - Narasinganallur Village, Perai, Tirunelveli Taluk, Tirunelveli District

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Particulars (2)</th>
<th>RSM (3)</th>
<th>SSM (4)</th>
<th>TSM (5)</th>
<th>ASM (6)</th>
<th>PSM (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total area of the CSM</td>
<td>25.03 acres</td>
<td>36.27 acres</td>
<td>55.20 acres</td>
<td>42.86 acres</td>
<td>85.37 acres</td>
</tr>
<tr>
<td>2</td>
<td>Constructed area of the CSM</td>
<td>3.21 acres</td>
<td>2.84 acres</td>
<td>2.52 acres</td>
<td>3.53 acres</td>
<td>8.65 acres</td>
</tr>
<tr>
<td>4</td>
<td>Date of commencement of commercial production</td>
<td>01-12-1985</td>
<td>14-10-1961</td>
<td>15-02-1966</td>
<td>06-06-1984</td>
<td>14-07-1958</td>
</tr>
<tr>
<td>5</td>
<td>Licensed spindle capacity</td>
<td>23,264</td>
<td>25,088</td>
<td>25,020</td>
<td>25,000</td>
<td>50,080</td>
</tr>
<tr>
<td>6</td>
<td>Installed total spindles</td>
<td>12,320</td>
<td>25,088</td>
<td>25,020</td>
<td>24,960</td>
<td>50,080</td>
</tr>
<tr>
<td>7</td>
<td>Count spun</td>
<td>20(^s), 40(^s), 60(^s) and 80(^s) counts</td>
<td>10(^s), 20(^s), 30(^s), 40(^s) and 60(^s) counts</td>
<td>20(^s), 40(^s), 60(^s) and 80(^s) counts</td>
<td>20(^s), 40(^s), 60(^s), 80(^s) and 100(^s) counts</td>
<td></td>
</tr>
</tbody>
</table>

Source: Records of the sample CSMs
the total area of construction of the CSM is 3.21 acres. This CSM produces yarn of 20s, 40s, 60s and 80s counts.

Srivilliputhur Co-operative Spinning Mills Ltd., Srivilliputhur, (SSM)

SSM is located in north Srivilliputhur village at Madurai-Thenkasi Road in Srivilliputhur Taluk, Kamarajar District. This CSM was registered under the Tamilnadu Co-operative Societies Act on 14-10—1956 and commenced its production on 14-10-1961. Total licensed spindle capacity of this CSM is 25,088 spindles. The present installed total spindle capacity of this CSM is 25,088 spindles. Total area of this CSM is 36.27 acres and the total area of construction is 2.84 acres. This CSM produces yarn of 10s, 20s, 30s, 40s and 60s counts.

Tiruchirapalli District Co-operative Spinning Mills Ltd., Karur, (TSM)

TSM is located at Malai Kovilure Nagamballi village in Karur Taluk, Karur district. Karur was originally affiliated to the Tiruchirapalli District. Now Karur has become a separate district, after bifurcation from Tiruchirapalli District. This CSM was registered on 07-10-1963 and commenced its production on 15—02—1966. Total licensed spindle capacity of this CSM is 25,020 spindles. The present installed total spindle capacity of this CSM is 25,020. Total area of the CSM is 55.20 acres and the total area of construction is 2.52. acres. This CSM produces yarn of 20s, 40s, 60s and 80s counts.

Anna Co-operative Spinning Mills Ltd., Andipatty, (ASM)

ASM is located in Shunmugasundarapuram Village at Andipatty Taluk in Then: District. This CSM was registered under the Tamilnadu
Co-operative Societies Act on 07-09-1981 and commenced its production on 06-06-1984. Total licensed spindle capacity of this CSM is 25,000 spindles. The present installed total spindle capacity of this CSM is 24,960 spindles. Total area of this CSM is 42.86 acres and the total area of construction is 3.53 acres. This CSM produces yarn of 20s, 40s, 60s and 80s counts.

The South India Co-operative Spinning Mills Ltd., Pettai, Tirunelveli, (PSM)

PSM is located at Narasinganallur Village in Pettai at Tirunelveli Taluk in Tirunelveli District. This CSM was registered under the Tamilnadu Co-operative Societies Act on 19-04-1952 and commenced its production on 14-07-1958. Total licensed spindle capacity of this CSM is 50,080 spindles. The present installed total spindle capacity of this CSM is 50,080. Total area of this CSM is 85.37 acres and the total area of construction of the CSM is 8.65 acres. This CSM produces yarn of 20s, 40s, 60s, 80s and 100s counts.

Techniques and tools of analysis

The study employs analytical tools pertaining to the disciplines of accountancy, finance and economics. Linear equations \( y = c + mt \) and cubic equation \( y = p_0 - Pit \pm P2t^2 \pm P3t^3 \) have been employed for measuring changes in business operations. Concept of net value added by manufacture has been used for assessing value additions achieved by the sample CSMs. Wholesale price indices have been used as deflators for converting values in current prices to values in constant prices. Profitability analysis includes computation of time value of money. Multiple regression analysis has been used for identifying the factors
influencing profit. Efficiency of the management of working capital has been evaluated with the help of operating cycle analysis. Pattern of mobilisation and application of funds has been brought out in the form of fund flow analysis.

Financial health of the sample mills has been estimated in bankruptcy analysis of Altman’s “Z” score.

**Nature of the Study and Data**

The present study is a descriptive one. It employs secondary data collected from the sample CSMs. Audited statements of annual accounts and annual reports of the sample CSMs were the chief sources of data.

**Period of the study**

The study covers the period of eleven years from 1989-90 to 1999-2000.

**Chapter Plan**

The study is presented in seven chapters.

1. The first chapter introduces the subject of Textile industry in co-operative sector.
2. The second chapter embodies review of literature and design of the study.
3. The third chapter contains analysis of the performance of the sample CSMs in production, value additions and sales.
4. The fourth chapter carries profitability analysis of the sample CSMs.

5. The fifth chapter covers operating cycle analysis of working capital management of the sample CSMs.

6. The sixth chapter deals with fund flow analysis of the sample CSMs and prediction of financial health of the sample CSMs through Altman’s “Z” score model.

7. The seventh chapter consists of summary of findings and suggestions.

Limitations of the Study

The main sources of data are only the audited statement of accounts and annual reports of the co-operative spinning mills. It is needless to say that the audited statement of accounts and published annual reports incorporate complete information in quantitative terms of the past performance of a business unit, but the use of these statement of accounts and annual reports for analysis and interpretation is not without limitations. The financial position reflected by the annual reports is true and fair only for the last day of the accounting year and it may not be relevant for the remaining part of the year. Moreover the published accounts show the values at historical prices.

In this study, attempt has been made to convert the values at current price by using wholesale price indices as deflators to values in constant price. Yet such conversion through inflation has yielded an unrealistic picture.
The executives and officials in the selected CSMs made available freely the financial reports and the audited statement of accounts. But they were found to be unwilling to part with the necessary information. It was possible to collect some relevant information through general discussions with the executives. On the whole, the primary data were not adequately available.

In spite of the above limitations, the study is made as scientific as possible based upon the secondary data, making allowance to the above limitations.

**Operational Definitions of Concepts**

1] Textile industry in co-operative sector - Textile industry in co-operative sector in Tamilnadu refers to the selected spinning mills in co-operative sector in Tamilnadu.

2] Handloom - Handloom means any cloth woven on handloom from cotton, silk, woolen yarn or a mixture of mill yarns. A handloom uses human power for undertaking all the motions in weaving operation.

3] Co-optex - It is the apex body of the primary handloom weavers co-operative societies in Tamilnadu. It takes up the responsibility of supplying yarn to its affiliated societies and purchases the hank yarn needs of the affiliated societies from CSMs.

4] Hank yarn - It is the reeled yarn which can be used only by the handloom weavers.
5] Cone yarn-The yarn which is coned on paper/plastic cone is called cone yarn. It can be used only by power looms and hosieries.

6] VAM - Value Added by Manufacture (VAM) is the surplus of the ex-factory value of output over the value of consumption of raw materials, stores and fuel, including depreciation.

7 ] Rupee - Rupee is a unit of Indian currency with rupees for plural and one US$ (US Dollar) is equal to Rs.45.35 as on 05-02~2004.

8] A lakh is an Indian unit of number equal to one hundred thousand.
References


12] Ibid., p.414.

13] Ibid., p.418.


23] Ibid., p. 39.


28] Proposal for Comprehensive Rehabilitation Scheme, the South Arcot CSM, Saram, 1986, p. 3.

29] Ibid., p. 4.


