CHAPTER I
1. INTRODUCTION

The deity creates matter. They require transformation so as to fulfil human needs. Industries transform raw materials into finished goods capable of satisfying man's requirements.

The Textile Mill Industry (TMI) is a manufacturing establishment concerned with form utility. It transforms cotton from its natural form which has negligible use into yarn which can satisfy innumerable requirements of a greater number of people. Besides it can also modify the form of matter viz. blended cotton and increase the utility content of cotton.

Whilst industrialisation had played a greater role in the economic development of advanced countries like the UK and the USA, the TMI contributed most significantly in the initial stages, to the development of the countries. The percentage share of industries in the national product of these countries increased appreciably—from 34 to 56 in the period from 1835 to 1962 in the UK, 25 to 52 between 1835 and 1962 in France, 39 to 52 between 1900 and 1955 in Germany, 16 to 38 between 1878 and 1927 in Japan and 28 to 58 between 1928 and 1958 in the USSR.
Among the share of the industry in the national product, that of the manufacturing industry remained significant eg. in the UK, in the period 1907-55, the percentage of industry's share in the national product increased from 46 to 56 and of this increase, that of the manufacturing industry rose from 59 to 69.

Among the manufactures, textiles formed a considerable percentage of the structure of manufactures. Eg. in the US, during 1880-1948, it was 19% of the GNP, next only to food. In the UK, till 1913, textile products were the single largest item of GNP. Thus TMI remained a potent source of the development of an economy.

Spinning and weaving are the principal activities of the TMI. Archeological discoveries reveal the origin of the arts of spinning and weaving in India. By 1854 when the first cotton mill was established spinning became a mechanised process and in 1858 with the introduction of looms, weaving was mechanised. The number of mills increased and around 1900, the Cotton Mill Industry (CMI) was well expanded and developed and since then it registered phenomenal growth. The CMI demonstrated its potentiality as an agent of developing the economy. In the process of its expansion, it caused ripples of development in the various sectors of the economy - agriculture by increasing cotton cultivation, industry by prompting the establishment of its input suppliers and tertiary by leading to
the promotion of services indispensable to it such as advertising, banking, insurance, transport etc., It generated considerable volume of employment, earned foreign exchange through exports, contributed to the State Domestic Product (SDP), Exchequer and industrial research. Besides, the CMI activised a number of industries by supplying them the raw material—yarn.

The CMI emerged as the principal source of raw material supply to the Decentralised Textile Sector (DTS) which consists of handlooms, powerlooms, carpet, duree, tape, hosiery and nawar looms, braiding, jari and wick making works beside dyeing and printing works. In the initial stages of its growth, the CMI played a complementary role to the HLI, which is the principal constituent of the DTS. The CMI initiated expansion in 1901 which continued till 1960 and in the process, the loomage in the industry expanded consuming more of its yarn. Besides, the industry expanded the spindleage to correct the imbalance between spindleage and loomage, then existed, in it. In the same period, the constituents of the DTS, other than handlooms also expanded and consumed more yarn. Consequently the spindleage for feeding them increased from 71 lakhs to 4.1m. between 1953 and 65. But the spindleage run for feeding the HLI increased from 2.68M to 2.94M only ie., by 10 percent while the number of handlooms increased from 20.6 L to 30.9 L ie., by about 50 percent. This
imbalance in the spindleage available for feeding the different segments of the DTS, forced the HLI to starve for yarn, threatening its very existence.

The HLI remains next only to agriculture in importance in the national economy. An exclusive arrangement for the supply of yarn to handlooms was realised inevitable. The Planning Commission prescribed co-operation as an instrument of planned economic action and it was applied to the field of processing which prompted the establishment of a spinning mill in Guntakkal in 1951, in the Co-operative Sector. It was sponsored by the Madras State Handloom Weavers Co-operative Society. Due to the reorganisation of States in 1953, Guntakkal became a part of Andhra Pradesh from the erstwhile Madras Province. The Industrial Resolution (IPR) 1956 emphasised on the building up of a large and growing Co-operative Sector to realise the objective of a socialist pattern of society. Consequently a large number of decentralised industrial units were set up which included CSM also. These CSM formed the CSI. It became the State-Capitalist enterprise as substantial volume of State Capital supplanted the meagre private investment. In Tamil Nadu, the first CSM was organised in 1952 and went into production in 1957. By 1969 there were 36 CSMs in the country and 12 in Tamil Nadu. In 1980 the country had 62 CSMs which increased to 195 in 1990. The number of CSMs was 12 in 1980 which
rose to 17 in Tamilnadu, in 1985.

In every Five Year Plan period, the Government allocated a sizable sum of money for the expansion of the CSI and it emerged a counterpart of the CMI and so has potentiality for the development of the economy. The State Government in 1990 decided to modernise the mills and expand the existing mills in the Co-operative sector in the state. The expansionary plan would serve the purpose well if its performance can be assessed in the light of the development of the State.

In all the countries, where it was established the CMI got located in particular regions and contributed to their development, for example Lancashire in the UK and New England in the USA. In India the CMI lay scattered but remained concentrated in the erstwhile Bombay and Madras Presidencies, contributing to the development of the regions. It was joined by the CSI since 1957.

The present study is a maiden attempt to assess the performance of the CSI in the light of its ideals, explore and examine its contributions to the development of the Tamil Nadu economy, and social upliftment and evaluate its significance in the State economy.

2. THE RESEARCH FRAME.

The research frame accommodates the problem which prompted the study, the objectives which lie behind the study, the hypotheses framed, the sample meant for the
study, the tools employed in the collection of data, analysis 
of the data and findings brought out by the study.

3. **OBJECTIVES OF THE STUDY**

1) To study the role played by industrialisation in 
   the economic development of the country.

2) To study the contribution of the Co-operative Spinning 
   Industry to the development of the state economy.

3) To evaluate the contribution of the CSI to the economic 
   development of Tamil Nadu.

4) To identify the specific problems that confront the 
   CSI in Tamil Nadu.

5) To recommend suitable measures for the development 
   of CSI in Tamil Nadu.

4. **HYPOTHESES FORMULATED**

   Based on the objectives presented in the preceding 
   paragraph the following hypotheses have been formulated:

   1. The major part of share capital and other funds 
      of the CSI consist of public funds-loan from the 
      Government. The industry has been established 
      to supply yarn to members at just price. These factors 
      impose the need for efficient performance on it. 
      Technical efficiency would ensure appropriate volume 
      of production at right cost; economic efficiency 
      would ensure appropriate surplus. Thus efficient 
      performance can enable the industry to meet its obli-
gations. Therefore, it can be postulated that the CSI has performed up to the expected norms of economic and technical efficiency.

2. The CSI is a part of the decentralised textile industry. It has been accorded increased importance due to increased target of decentralised cloth production. To meet the increasing requirements of the DTI, the CSI has to grow. It involves expansion of productive capacity, productivity, production, sales, employment etc., Thus it may be postulated that the CSI has registered growth up to the expected level.

With reference to other objectives, the empirical data collected will be analysed and generalisations arrived at, as hypotheses could not be formulated in the absence of established or stipulated norms and standards regarding the various aspects of the contributions of the CSI to the State economy.

5. SAMPLE

The census survey method has been followed covering all the seventeen spinning mills of the CSI in Tamil Nadu.

6. THE TOOL

In the present study three tools were employed to collect the required data - A) Interview, B) Content
Analysis of relevant records, and C) Information Schedule.

A) INTERVIEW SCHEDULE:

It was used to elicit relevant data from the officials of the Department of Textiles of the Government of Tamil Nadu, Cooperative Department of the Government of Tamil Nadu, the Managing Directors, Heads of Administration, Production and Personnel Departments of CSMs and other experts in the related areas. The data were related to goals, source of finance, appointment of managing directors, trend of production, price fixation, standard, norms and conventions of labour appointment, profitability, social security schemes and service to the Co-operatives— all of the industry.

B) CONTENT ANALYSIS

The Content Analysis Technique was employed to collect data from articles, bulletins, journals, literature, reports and surveys. From articles data on the formative period of CMI have been collected; from bulletins, cotton production capacity utilisation of CMI, Capital structure, employment, financial and profitability ratios, volume of production, wholesale price indices collected; journals provided data on the origin of textile art, the set up of first cotton mill in India, growth of the CMI, Capital and financial performance of Cooperative societies, Govern-
merit's encouragement to co-operatives, growth of Co-operative sector in Five Year Plans, value added by manufacturing industry in India and Tamil Nadu, productivity trend of CMI; literature supplied data on the formative period of CMI in Madras Presidency; reports, produced data on the significance of Decentralised Textile Industry (DTI) supply of raw material, employment, wages paid, handlooms since 1885, supply of yarn to HLI, employment, production, taxes paid to Central and State Governments, Industrial Co-operatives, aid to them and their performance, State Domestic Product, State income, contribution of manufacturing sector, production of CMI, performance of handlooms, powerlooms and textile industries, Co-operative movement, its growth, employment and wholesale price index, financial performance of member mills of SITRA, cost and trend of production, inputs of CMI and surveys furnished data on production trend of cotton in India, features of manufacturing sector i.e., divisions, composition of capital base, employment, wages and emoluments, inputs consumed value of production, value added by manufacture, sale value, taxes paid, features of Co-operative sector and State Domestic Product of Tamil Nadu, CMI in the State, its growth, structural ratios, the place of CMI in the economies of western countries, Asia, US and the importance of regions eg. Lancashire and New England in the economies of UK and USA; recommendation of Labour Commissioner of Textiles and implementation by CMI, capital structure,
borrowed funds, price and sale of yarn of CSI, distribution of handlooms in the State and problem.

C. INFORMATION SCHEDULE

An Information schedule with two parts was framed to collect data. Information Schedule Part (A) was utilised to gather information on the name and place of the mill, the distance between a mill and the nearest town, commencement of production, nature of activities, number of spindles, period when expansion was undertaken, extent of expansion, satisfaction of plant requirement, alternate source of power - installation of generator, satisfactory availability of cotton and power, adequacy of staff per category, provision of employment to local people, satisfaction of production norms and standards, membership in any association, the technical qualification of the managing director, relation between market trend and production, the principal consumers, sale of output inside State etc.

Information Schedule Part B was employed to gather information on the performance of the CSI in Tamil Nadu. They were related to: 1) acquisition of land, plant and machineries, 2) acquirement of share capital from members, Government, 3) enlistment of labour - spinning, non-spinning and administrative, number of workers from rural areas under each category, the ratio between spindle and workers,
the standard, the ratio between spinning and non-spinning worker, etc., followed and aggregate expenditure on labour, the number of days worked, number of shifts functioned per year, 4) procurement of plant and machinery, cotton, agro-industrial products like bamboo, cane, jaggery, jute, starch, tallow, other industrial products such as artificial fibre, building materials, chemicals, electrical accessories, engineering equipment, furniture, hardwares, lubricants, malleables and tubes, packaging materials, spare parts stationery and tools and electricity: services like advertisement, banking, insurance, finance, communication, consultancy, printing and transport, all items of different sectors of State origin; 5) consumption of inputs etc., of State origin and general; 6) finance-current liabilities, total debts, sale value, value of production, net output, net output per spindle, reserves, net fixed assets, net current assets, depreciation on plant, vehicle and building, total investment, investment in co-operatives, gross profit, net profit, net worth, working-capital, interest, Income tax, State Sales tax, local taxes, registration fee, total cost, total revenue, total expenditure; 7) efficiency norm for utilisation of plant and spindles, actual performance per count, achieveable volume of production on existing technological level per count and achieved production 8) total volume of production, production per count of yarn, 9) volume and value of yarn supplied to handlooms, powerlooms, and hosiery and sale value of waste cotton; 10) donations
and subscriptions to associations and research institutions;
11) volume of expenditure on social security measures, family planning incentives, medical care, education, etc., of dependents of workers; 12) donations on emergency to society and 13) volume of taxes paid.

Thus the study rests for its major part on published data which have been supplemented by the data gathered from experts.

Information on all the items enumerated above were collected from all the seventeen CSMs for the period 1970-90 in Tamil Nadu.

7. THE ANALYSIS

The performance of the CSI has been classified as Financial, Technical, Growth, Development, Rural, Sectoral Social and Revenue areas. Every area has exclusive group of indicators which has activised them and every performance area has been evaluated through these indicators.

A. FINANCIAL PERFORMANCE. It involves, the maintenance of solvency, generation of sales, activisation of assets for sales, earning surplus, productivity of capital, maintenance of cost below revenue and growth of capital.

Solvency position of current and long periods has been evaluated through liquidity and leverage ratios and they have shown efficient performance. Current ratio
which is a part of liquidity ratios has been compared with the standard suggested by Dr. Kadvekar which has indicated efficient performance.

Activisation of assets towards sales generation has been assessed employing the activity ratios. It is done under two captions—as a ratio between sales and fixed assets and sales and total assets. The former showed efficient performance and the latter less efficient performance. The Sales—Total Asset ratio of CSI and that of CMI have been compared and it revealed less efficient performance of CSI. The utilisation of spindle capacity has also been examined which also indicated less efficient performance. The sale performance of the CSI compared with the norm suggested by S.C. Mehta has revealed less efficient performance.

Profitability has been examined through sales and investment. The former reflects gross and net profit; the latter, profit as a ratio to capital employed and net profit a ratio to net worth. Profitability indicators showed less efficient performance. The gross-profit of the CSI has been compared with the standard set by the Maharashtra Rajya Sahakari Sangh, Bombay and that of the RBI, also which reflected inefficient performance. The net profit earned by the CSI compared with the standard set by S.C. Mehta also revealed less efficient
performance. The actual earning was compared with the money value of CSI's obligations and it showed the former being lower and the performance less efficient; the dividend obligations and actual earning were wide apart. The comparison of actual net profit earned with the standard suggested by S.C. Mehta indicated that the performance remained less efficient.

Total revenue and total cost were examined and it showed that cost exceeded the prescribed percentage; comparison of actual cost incurred with the standards set by the AIFCOSPIN confirmed it. The analysis of cost and revenue also showed that the industry failed to maintain quality of yarn necessary to capture the market.

B. TECHNICAL PERFORMANCE: Technical performance means utilisation of plant and machinery in an appropriate manner to reap the optimum volume of production made possible by the available level of technology. It is indicated by the speed of the spindle, the number of twists and turns per inch of the material and capacity utilisation of spindle. The standards of the operation of these indicators are fixed by the All India Federation of Cooperative Spinning Mills (AIFCOSPIN). Their performance remained below the standards. Capacity utilisation of individual units has also been examined and it reaffirmed the inference. Average volume of production stood away from achievable volume of production.
C. GROWTH AND DEVELOPMENT

a. GROWTH: Growth of the CSI is channelled through increased sales, employment, net output, productivity of labour and addition to capital and also the ratio between net output and total cost. These indicators have been evaluated. Sales had increased and so the performance remained efficient; it was better than that of the CMI.

The employment performance showed efficiency as percentage rate of employment increased though average employment per unit of fixed capital was lower than that of the CMI. Net output is the original contribution of a manufacturer to the State Domestic Product (SDP); the aggregate of net output of all enterprises constitutes the SDP. So continuous increase of net output would grow the SDP. The net output of the CSI has not grown and so the performance was less efficient. The average volume of net output related to fixed capital when compared with that of the CMI showed less satisfactory performance; the per spindle contribution of net output of the CSI remained lower than that of the CMI and the ratio between net output and capital employed of the CSI has not grown when compared with the CMI. Growth has to be intrinsic also, so that certain economies can be reaped. The intrinsic growth depends on the increasing productivity of factors. Productivity of labour and capital has been evaluated in terms of net output. Productivity of labour has not persistently increased. Its comparison with that of the
CMI showed that the performance of the CSI was less satisfactory. The productivity of capital had also showed less persistent growth. The comparison with the capital productivity of CMI revealed less efficient performance. The overall productivity of all factors in terms of the output, measured through "Coefficient of Efficiency" had not been increasing and so the performance of the CSI in productively employing the factors remained less efficient; the comparison of the coefficients of CSI with the CMI also confirmed this inference. Volume of investment is the most important determinant of this industry's performance and increased volume of investment may better the performance through proper equipment and technology. The expenditure on machinery, equipment and vehicles has been persistently increasing reflecting satisfactory performance. Compared with the growth of the CMI through investment, the growth of CSI remained satisfactory. The other area of performance depends on investment. Though the prime area performed well, the attendant ones fared less efficiently. Among fourteen indicators which demonstrated growth performance, four have indicated efficiency and the other ten, less-efficiency.

b. DEVELOPMENT: Economic development is a cumulative process in which all the sectors of an economy participate. Units of these sectors do not function in isolation but are linked in process of their working. An industry is linked to various units of the different sectors of the
economy. The linkage is direct if the industry supplies its products to the units which need them and backward if it draws its requirements from others. Thus the combined linkage is the powerful source of development. The amount of purchase of inputs from primary, secondary and tertiary sectors of the State indicates the backward linkage effect (BLE) of the CSI on the State economy separately and its sum total shows the combined backward linkage (CBL) effect on the economy. The CSI could purchase cotton with in the constraints of supply imposed in the State and so produced no adverse effect on the development of the primary sector; the expenditure on products of the secondary sector has not increased persistently and also mildly fluctuating in items of tertiary sector the expenditure has not persistently increased and the trend was less violent. Thus the combined backward effect was less satisfactory due to the absence of persistent increase in the ratio. Yet in the nineties, it improved. The CBL effect was calculated on the basis of demand for consumption of inputs. The CSI could make considerable supply of yarn to the handloom, powerloom, waste cotton mill and hosiery industries satisfactorily; market-trend based production could have minimised the loss and increased sales. The entire purchase of various inputs are not currently consumed; a part of it stored for future consumption also. This demand for the items is termed inventory demand which has been adopted for calculating the BLE.
The calculation revealed that inventory demand based BLR is greater than the consumption based BLR and so the fostering impulse of the former greater than of the latter. The CBL with the inventory based BLR has also been satisfactory. The fostering impulse was more pronounced on agriculture and HLI. The BLR of the CMI fluctuated; yet the industry administered the fostering impulse; the FLR had lesser fluctuation but remained satisfactory and the CLR fluctuated but satisfactory. Compared with the CMI, the fostering impulse of the CSI through its product was more pronounced. The linkage ratios of the CSI and CMI were compared under two divisions ie., size and trend. On the primary sector, the CSI exerted greater fostering impulse than the CMI; the impulse of the CSI had been varying. On the secondary sector, it was lesser by the CSI than the CMI; variation of the impulse was milder with the CSI than the CMI. On the tertiary sector, the fostering impulse of the CSI remained lesser with lesser variation than those of the CMI. Comparison on linkage wise basis have also been made. The magnitude of the CSI's impulse (BLR) was greater on the State economy and was charged with lesser variation than those of the CMI. Among the FLR, the largest quantum of CSI's production went to the HLI and on HLI was its greater magnitude of impulse than those of the CMI; on the HI, it was lower than that of the CMI while it varied lesser than with the CMI; on the Cotton PLI, the magnitude of the impulse
was smaller and less varying than that of the CMI. The combined Linkage Ratio (CLR) showed that the CSI and the CMI fostered the primary, secondary and tertiary sectors of the State economy and among the industries HLI, H, CPL and WCM. The fostering impulse of CSI was greater in magnitude and less abrupt in trend than that of the CMI. In physical term, i.e., product impulse, the CSI fulfilled the statutory obligations to HLI only since 1977. The CMI satisfied the requirements of co-operative looms also. The CSI fed co-operative cotton powerlooms uniformly; CMI also supplied but in no year the CPL completely.

D. RURAL PERFORMANCE The rural performance is concerned with the generation of employment opportunities and absorbing the rural unemployed, inorder to alleviate poverty. Largest percentage of workers has been drawn from village as the CSM is a part of Rural Industries Programme. Employment generated included productive and service categories. The CSI's performance in uplifting rural poor remained satisfactory.

E. SECTORAL PERFORMANCE The sectoral performance is connected with share capital participation of the CSI in the enterprises organised on co-operative lines. The performance of the CSI in building up co-operative sector in the State has been satisfactory.
The social performance is related to the provision of essential commodity yarn, feeding handlooms and powerlooms, supporting people for life, provisions for dependents payment of wages, making donations in case of need, employment of repatriates and contribution to research. The number of handlooms and powerlooms fed with yarn by the CSI indicates satisfactory performance in uplifting rural poor. Though there was no continuous increase in the number of these looms fed, yet the size of the looms covered was considerable. The industry assured supply to member co-operatives and made yarn available at just price; supported handlooms which are more employment generative than the CMI which supported mostly powerlooms which are less employment generative. It generated employment with in certain restraints. Evaluated by the ratio between spindle and labour per count, spinning labour and non-spinning labour and the conventional ratio between spinning labour and non-spinning labour, the actual ratio of the CSI was satisfactory than that of CMI. The CSI has satisfactorily contributed to the solution of unemployment problem. It paid an average monthly wage which could alleviate poverty. Thus it satisfactorily uplifted the rural poor. The average expenditure on labour welfare increased persistently and so contributed to the welfare of labour and dependents. It enabled an esteemed life and released bonded weavers from servitude. Every year the CSI has been providing employment to repatriates.
Whenever the need arose, it has contributed to the social cause. Every year the industry has contributed to the social cause. Every year the industry has contributed to various research organisations. Thus socially the CSI has performed satisfactorily.

8. THE PERIOD OF STUDY

The period of the study has been chosen to be 1970 to 1990. This coverage has been chosen for certain specific reasons. Except the hill district, The Nilgiris, in all the other districts of Tamil Nadu, co-operative spinning mills were established, in 1990. Some of the units set up in 1984, could fulfil the requirement of five years for normal working; some which have modernised also fulfil the requirement of the period for normal functioning and the units which expanded spindleage also satisfy this norm in 1989.

9. LIMITATIONS

Though the CSM started functioning since 1957 and developed into an industry in 1965, the period has been chosen to be 1970-90.

For the period from 1970 to 1980, data have been collected and analysis made for every year. But to make the study effective the period from 1980 to 1990 has been added and the data collected for a five year period i.e., 1985 and 90.
In view of certain difficulties in the provision of data for all the ten years from 1980 to 90, data for the available years i.e., 1985 and 90 have been collected. These data have been collected at the mills, personally.

10. **MAIN FINDINGS OF THE STUDY**

   The study has led to the following main findings:

   1. Industrialisation has played a significant role in the economic development of the Country,

   2. The CSI has contributed to the development of the national economy,

   3. The CSI has contributed to the economic development of Tamilnadu.

   4. The CSI has satisfactorily performed in the promotion of labour welfare;

   5. The CSI has performed satisfactorily in alleviating poverty,

   6. The CSI's performance in maintaining educational, medical and social services remained satisfactory.

   7. The CSI has performed satisfactorily in releasing bonded weavers from servitude,

   8. The CSI has satisfactorily performed in enabling people lead an esteemed life,

   9. The CSI has contributed to the growth of the co-operative Movement,

   10. The CSI has contributed satisfactorily to the welfare of society,

   11. The CSI has contributed to the State Exchequer.
12. Specific problems of the CSI like scarcity of power and raw material, and under utilisation of technology confront the industry,

13. The CSI requires certain measures like effective management and planning.

11. **THE CHAPTER SCHEME**

The dissertation comprises of six chapters. The first Chapter deals with the design of the Research study, explains the objectives which prompted the study, the hypotheses framed, the methods employed in the collection of data, the analysis of data, the period of the study, the limitations to which it is subject to and the design in which the dissertation is cast.

The Second Chapter examines the importance of industrialisation in the process of development, the place of cotton textile industry (CTI) in the World economy, the significance of the industry in the Indian economy, the influence of the industry of a particular region in its developments; the origin and development of the Cotton Mill Industry in India and Tamilnadu and the comparative study of the development of the Cotton Mill Industry in Madras and Bombay.

The Third Chapter portrays the relation between co-operation and society, the flowering of the cooperative enterprise, the origin of handloom industry (HLI), the link between HLI and CMI, the misery of the weavers, the interests of the Government and the organisation
of handloom co-operative, the development potentiality of the handlooms, the experiences of consumer cooperative organisations abroad, the realisation of the need for the establishment of co-operative Spinning Mill (CSM), the place assigned to co-operation in the development plans, the cordiality of the CMI with the HLI and its decline, the attention of the Government towards the problems of the HLI and the establishment of the CSI, beside the organisation of the CSI in Tamilnadu.

The Fourth Chapter deals with the course of industrial development from First Five Year plan to the Seventh Five Year Plan in Tamilnadu. It also portrays the importance of handlooms in the economy, the policies of the Government on HLI, the progress of co-operativisation of handlooms and its effect on the development of the CSI, the place of CSI in the economy of the State in the Plan Periods and also the problems that confront the industry.

The Fifth Chapter has three sections. The First Section presents the analysis of the performance of the CSI in the financial, technical and growth areas: evaluation of financial performance through financial ratios; with the comparison of these ratios with those of CMI and suggested norms; technical performance through standards prescribed by Research Associations and growth performance with appropriate indicators with their comparison with prescribed norms and those of the CMI.
The Second Section discusses the performance of the CSI in developing the State economy; analysis of the importance of linkage in development, the activisation of forward and backward linkages and the combined linkage of the CSI; the linkage effect on the development of the State economy. A detailed comparison of the indicators of the CSI with similar indicators of the CMI also form part of this section.

The Third Section explains the contributions of the CSI towards the rural and co-operative development, social welfare and state revenue.

The Sixth Chapter is devoted to the summarisation of the investigation conducted and described in the earlier chapters. It accommodates the principal findings, conclusion drawn and the implications gathered. Suggestions for further study to extend the scope have also been dovetailed.