CHAPTER II

REVIEW OF LITERATURE AND METHODOLOGY

This chapter presents a review of literature of the past research studies on the subject and also presents a description of the methodology adopted in the present study. Though a large volume of literature is available on the subject of small-scale industries, only a few important studies had been reviewed here. Such a review would facilitate the researcher to have a comprehensive knowledge of the concepts used in the earlier studies and would enable the researcher to adopt, modify and formulate an improved conceptual framework for the use of the present study with a view to draw meaningful and useful conclusions. For a better exposition, the chapter has been presented under two broad heads namely,

i) Review of Literature and

ii) The Methodology

2.1 Review of Literature

In this section, an attempt had been made to review the previous studies carried out in relation to the small-scale industries sector.
Woodruff and Alexander (1958) in a study of ten unsuccessful small manufacturing concerns, had concluded that there were a few points of marked contrast between the successful and the unsuccessful concerns: (i) Absence of proper financial records which had deprived the management of sufficient aids to carry on their business on right lines, (ii) in contrast to the successful firms, the unsuccessful firms did not pay much attention to research and product development, whereas in nine out of the ten successful concerns emphasise was laid on such important activities and (iii) all the unsuccessful companies had disclosed lack of proper internal administration. In the successful groups, however the lines of authority were clear and the decisions were made without much fuss.

Baljit Singh (1961) in his study, "The Economics of Small-Scale Industries. A case study of Small-Scale Industrial establishments of Moradabad", had pointed out that 33 per cent of the indebtedness in the small units was owed to the traders and the dealers, 27 per cent to their relatives and friends and 21 per cent to the money lenders.

---


McConnel and Peter\textsuperscript{3} (1963) had conducted an empirical study among 248 small manufacturing concerns in Nebraska to establish the relationship between growth and technological research, product diversification and product differentiation. Over two-thirds of the respondent firms had made some provision, formal or informal for keeping pace with technological advancement. Twenty-eight percent of the respondents were found to have engaged themselves in formal research.

Formal internal research activity was more frequently confined to certain industries such as industries engaged in electrical machinery, paper and allied products and transportation equipment. Regarding the relationship between the size of the firm and the amount of formal internal research activity the study had not come to any clear conclusions. There was found to be no correlation between the volume of sales and the expenditure on research.

The survey conducted by the Central Small Industries Organisation (1969), which was set up by the Administrative Reforms Commission had revealed that on

\begin{footnote}
\textsuperscript{3}Campbell Ma Connel and W.C. Peter, \textit{Research Activity, Product Diversification and Product Differentiation by Small Manufactures in Nebraska}, University of Nebraska, 1963.
\end{footnote}
an average only 20 percent of the credit needs of the small industries were met through institutional sources⁴.

Kopardekar⁵ (1974) attributed the unutilised excess capacity in small firms to lack of finance. The lack of finance, especially, the shortage in the working capital had led to the inefficient utilisation of the installed capacity. Inadequate funds usually led to inconsistent operations among the small-scale units. Many units were not in a position to apportion funds to provide sufficient amounts for the fixed and working capital.

Nag⁶ (1978) in his study, had reviewed the functioning of the small-scale sector, and had brought to light the growing mortality of the small-scale industries. He had urged the public sector to rescue the small-scale sector in the larger interests of the many skilled and unskilled people employed in these various small enterprises. A great responsibility for the public sector in the form of direct participation in entrepreneurial activities, was found to be very essential for ensuring the balanced growth of the industry in the future.

---


⁵D. Kopardekar, *Small Scale Industries*, G.Y. Rane Prakasham, Pune, 1974

G.K. Moorthy\(^7\) (1980) had focussed his attention on the financing of the small-scale industries in the Rayalaseema region of Andhra Pradesh. His emphasis was on the role of the government agencies, financial institutions and commercial banks in augmenting adequate finance for the small-scale sector.

V.S. Mahajan\(^8\) (1980) had focussed his attention on the critical evaluation of the government assistance and the policy measures adopted by the government to protect the small-scale industries. He conducted a survey at Moga to assess the impact of the government assistance on the growth of the small-scale industries. The units which had produced agricultural implements were taken up for investigation and it was concluded by him that the small-scale units were not dependent on the government assistance only. They flourished mainly because of a sudden spurt in demand for their products and through the initial investments made by them from out of their own funds or through their borrowed funds.

A.H. Advani\(^9\) (1981) had analysed the growth of the small-scale industries during the period 1972-1979 with reference to the growth in the number of units, fixed capital, employment, output and the total value added. The study covered all


\(^8\)V.S. Mahajan, "Small and Tiny Units", *Economic Times*, October 2, 1980.

the states as well as the union territories. Based on his macro analysis, he had concluded that for the economy as a whole, the figures were highly impressive. According to the report of the Reserve Bank of India, the total number of sick units in 1979 was found to be 20,700. In Kerala, 66 per cent of the units were reported sick; in Bihar it was 55 per cent, in West Bengal it was 50 per cent, in Andhra Pradesh it was 30 per cent and in Uttar Pradesh it was 27 per cent. These states had exhibited a very high level of incidence of sickness among the small industries.

Madras entrepreneurs had found faulty planning, high infant mortality and omnibus assistance as the major reasons for the growing sickness among the small industries. They blamed the government agencies for their lack of response, and the large concerns and the public sector undertakings for their default in the payment of electricity charges to the Electricity Board, the frequent power-cuts and they blamed the traders for their black-marketing in the supply of raw-materials. However the author had concluded that as far as the small-scale industries in Tamil Nadu were concerned, the position was entirely different; and the entrepreneurs had blown up their management problems very disproportionately to very high levels as compared to other inherent problems.

J.C. Sandesara\(^{10}\) (1982) had analysed the incentives offered and their impact on the small-scale industries. The Government of India, the State Government and

the agencies sponsored by them for the development of the small-scale sector had initiated a number of special programmes over a long period. The objective of the study was to evaluate one of such assistance programmes namely, long-term finance provided by the State Finance Corporations in Bombay, Thare, Jaipur, Hyderabad and the Secunderabad areas. The evaluation was conducted in terms of the impact of finance on the assisted units, as judged by their financial and economic performance as against some other units, which had not received such an assistance. Recipients of assistance for at least 3 years were selected as the sample units and the rest of the units studied were treated as the control units.

The number of sample units studied were 206 covering 10 product groups, namely, metal products, machine tools, paper, industrial fasteners, printing presses, chemicals, agricultural implements, casting, electronics and plastics. The major hypothesis of the study was that the sample units might show a better performance compared to the control units at a given point of time.

Seven ratios were worked out to examine the hypothesis. It was found that profitability, productivity, value added to fixed assets and the surplus to the total assets of the control units disclosed better results in a majority of the units of the different product groups. In the case of the surplus per worker, the wages per worker and the total assets per worker, the sample units had indicated a better level of performance. As regards the overall position, it was found that the performance of
sample units was not superior to that of the control units in all the categories of industries.

Falk\(^1\) (1982) in his study of space requirements for the small-sized firms which was carried out through case studies, had identified a series of stages through which it passes in the normal life of a business unit which was found to be equal to those stages in the life of a normal human being. The case studies had confirmed the hypothesis that the firms had passed through the stages of growth where the requirements of the premises underwent changes.

Banerjess, Shambo Prasad, and Upadhyey\(^2\) (1981-83) had undertaken macro-level studies which related to particular regions. The regional studies focussed their attention on the problems which were faced by the small-scale sector units of the concerned regions. An examination by these researchers had revealed that the problems faced by the small industries located in the different regions were different because of certain basic differences in the different geographical regions. The small-scale units of the underdeveloped regions had more problems than the small-scale

---


sector units of the developed regions. Moreover, the nature of the problems in the undeveloped regions differed from those of the developed regions.

S.K. Goyal\(^{13}\) (1984) in his study, “Small-Scale sector and Big Business”, had pointed out that the number of areas reserved for the small-scale sector had no significance as an index of the scope of the areas reserved for the small-scale sector. He had estimated the changes in the share of the output and had briefly commented on the structure of the exports of the assisted SSI sector units. Further, as there were reportedly an equal number of industrial units which had not registered themselves with the State Directorate of Industries (SDI’s), the size of the assisted SSI sector units had to be assessed only in relation to the total manufacturing capacity, according to the author.

Edapen\(^{14}\) (1984) in his study had found that, between 1961 and 1981, the share of employment in the household industries had declined. He recognized the fact that the non-household sector could not be treated equally with that of the factory or the modern sector, as it represented a higher form of industrial organisation. A sub-sector of the non-factory non-household segment, which was generally referred to as the


small unregistered workshops was found to be different by him. A rising trend in the non-factory non-household segment was observed by him in his study.

Sinha\(^\text{15}\) (1985) in a study of about 100 small-scale enterprises in Patna, had highlighted the problems and bottlenecks faced by the small enterprises in their path of growth. He had reported that the major problems faced by them were the procurement of adequate financial resources and the non-availability of the raw-materials at reasonable prices. He attempted to explain the patterns of growth of the different categories of industries in terms of the utilization of their installed capacity, the expansion of the markets, and finally through their margin of profits. Ninety-three per cent of the sample units studied by him expressed their unwillingness to expand the size of their units and were not generally satisfied with the prospects for their growth.

Forty percent of the entrepreneurs had viewed the proposals for expansion and growth as 'just average', while 17 per cent had revealed their categorical pessimism about the prospects of growth and future expansion of their units.

N. Thanulingam Nadar\textsuperscript{16} (1985) had made a study, of the small-scale industry and its inter-relationship with the large-scale industry in 1980. The main objectives of his study were to study the progress of the small-scale industries in the Coimbatore district of Tamil Nadu, with special reference to the engineering industry; and to measure the degree of inter-relationship between the small-scale engineering units and the large scale engineering units and to identify the factors that had influenced the inter-relationship and also to study the benefits of the inter-relationship that had accrued to the small-scale engineering units.

This study was an empirical research study based on the survey method. Primary data were collected from the field directly and from the records of the selected institutions through an interview schedule and through mailed questionnaires. The inter-relationship of the small-scale units with the large scale units was studied through a survey of the selected small and the large scale engineering units located in the Coimbatore region. Data relating to the period of five years, 1974 to 1979 were collected from the selected small-scale units.

The study proved to be a worth-while experiment as it became evident from the study that (i) the mean inter-relationship score for the small-scale engineering units in Coimbatore lay between 32.37 and 44.79. This had revealed that the inter-relationship of the small-scale units with the large-scale ones in the Coimbatore

region had not been much encouraging; ii) the technical qualifications of the small-scale entrepreneurs, their nearness to the large scale units, the training facilities made available in the large scale units, the amounts due from the large-scale units to the smaller units and issue of orders by the large scale units to the small-scale units were the major factors which had influenced the degree of inter-relationship, iii) the goodwill of the business and the quick disposal of the finished products were the two benefits which were enjoyed by the units having a low degree of inter-relationship.

Goldan\textsuperscript{17} (1986) in his study on the output, input and productivity in the small-scale sector covered the period of 1960-1978. Productivity estimates for the small-scale sector had indicated that the annual Total Factor Productivity growth rate in the SSI was not significantly different from that noticed in the large scale sector. He had found that the growth rate in the labour productivity in the small-scale sector was lower than that of the large scale sector but it was found that the small-scale industries did not experience a fall in the capital productivity as was the case with the units in the large scale sector. It was also found that there was no marked upward (or downward) trend in the capital intensity of the units in the small-scale sector.

Goldan’s study had supported the hypothesis of the operation of the constant returns to scale in the small-scale industries. His estimates of the Cobb-Douglas production function for the manufacturing small-scale sector units did not yield good results and the co-efficients of the factor inputs were found to be insignificant.

A study of the small-scale enterprises carried out by Ian D. Little¹⁸ (1987) had examined the relative factor intensity, productivity and economic efficiency in five industries engaged in producing shoes, printing, soap, machine tools and metal carting.

The study had examined the relationship between the size and the technical efficiency in production, using a three-factor frontier trans log production function to measure the technical efficiency. Frontier production function had been used to in the study to predict the maximum output that could be obtained from a given set of production inputs, based on the best practice that was actually observed in the sample. The extent of the technical efficiency was expressed as a farrel index of one and the technically inefficient firms had indices of less than one. This study had revealed that the technical efficiency differentials among the firms was positively associated with the TFP in only one out of the five industries studied, namely the machine tools manufacturing industry. The other variables contributing to productive efficiency in one or more of the industries had indicated that the age of the enterprise,

the advantage of capital stock, the level of the experience and the level of the managerial education and their training were the other factors which had contributed to the productive efficiency.

N. Durairaj and M. Soundara Nageswaran\textsuperscript{19} (1988) in their study, "Entrepreneurship in small-scale industries in Paramakudi Taluk", had attempted to examine the role of the entrepreneur in the small-scale industries. Though it was a micro level study, it threw much light on the social profile of the entrepreneurs in the small-scale industrial units and had disclosed the problems faced by them.

Kalchetty Eresi\textsuperscript{20} (1989) in his study had pointed out that the lack of self finance for the additional capital requirements of the productive units was more common among the smaller units. The reason was that they lacked the capacity to offer sufficient security for their loans and their external references were suspected, when they desired to borrow from sources outside the country.

S. Gangadharan\textsuperscript{21} (1989) had stated that the root cause of the sickness in the small industry was the outdated technology adopted by them and the misuse of the


\textsuperscript{21}S. Gangadharan, "Textile Industry – Modernisation Pace Poor and Crisis Deepening", \textit{The Economic Times}, Research Bureau, Thursday, May 1989, pp. 1-12
soft loans obtained for modernisation. This finding had been confirmed by B.G. Patel (1988) Tiwari (1987) M.A. Khan (1990) and R.N. Krishna (1993). The inability to modernise and the overall stagnation in the per capita demand had also added to the intensity of the sickness among the small-scale units.

Neelamegam\(^{22}\) (1990) in his article on “Small Business Financing”, had emphasised the fact that the small firms had suffered much for want of capital. Inadequate capital had resulted in lesser investments on labour-saving devices, resulting in lesser productivity and low levels of profit. The short life span of the small-scale firms had also contributed to the inadequacy of capital.

Shetty\(^{23}\) (1990) in his study, “District Industries Centres’ Programmes – An appraisal”, had stated that the industrial scenario in the country encompassed the organised large and medium industries, modern small-scale industries and the unorganised traditional industries. Of the last two segments of the industrial structure, the VSI sector proved to be one of immediate concern. It consisted of a number of sub-sectors, such as khadi and village industries, handlooms, sericulture, handicrafts, coir, small-scale industries and the power looms. The last two represented the modern type of small-scale industries and the remaining six sub


sectors came under the classification of the traditional industries. Considering the inherent advantages of the VSI sector in regard to their potential for employment generation, for rectifying regional imbalances, for ensuring equitable distribution of income and economic benefits, for facilitating the use of local resources, both human and material, and for checking the exodus of the labour force to the urban areas, the need for promoting and developing such types of industries had been emphasised in the various Industrial Policy Resolutions.

Vaidyanathan (1991) had treated the small-scale industry as an equivalent of the non-factory sector industries and had found that nearly three-fourths of the addition in the manufacturing non-factory industry was contributed by such types of industries. He had stated that this was a reflection of the shift of the industries from the household to the non-household sector. He had stated that it was perhaps better to approximate the small-scale sector to the non-household non-factory segment of the manufacturing sector.

Bhagwan Prasad (1992) in his study had stated that the SSI sector had witnessed a rapid expansion in production as well as in employment, in the past 15 years. The rise of the food products industry was found to be the most dramatic

---

feature in the structure of the SSIs as recorded by the census. The total number of units in the food products industry had increased from 6,600 in 1972 to 96,100 in 1987-88.

Bhagwan Prasad\textsuperscript{26} (1992) in his study had suggested that promotional measures for providing support to the food products sector required a re-examination. The ownership pattern of the small-scale sector had undoubtedly disclosed a disturbing signal. While every activity was visualised to be of a higher order, it was a pity that, in relative terms, there was found to be a process of "de-scaling" going on in the small-scale sector.

Balraj Mehta\textsuperscript{27} (1993) in his study, "Small-Scale Industry and Exports", had pointed out that the corporate policy must vigorously promote the private corporate sector, Indian as well as foreign. The role and place of the small-scale sector might suffer a decline in the market-oriented growth process that had set in. The survey had also noted that there were two distinctive features found in the growth of the small-scale industry in recent years, namely, a lower capital-based structure and a lower capital/labour ratio structure. But side by side, there had been the feature of a lower labour productivity and a higher capital productivity even when compared with the


performance of the large scale industry. The wage rates in the small-scale sector were found to be lower compared to the large and the medium scale industries.

Sandesara\textsuperscript{28} (1993) had treated the enterprises which were eligible for Government assistance and were under the purview of the Small Industries Development Organisation (SIDO) as the small-scale sector. Based on data collected from the two censuses of such units, he had argued that, during the period 1972 to 1987-88, productivities of both labour and capital had increased over the period under reference. An important causal factor was found to be the substantial increase in the capital intensity. Structural changes had taken place in the form of increased employment, value additions and increased shares of fixed capital in the industrial groups of food, textiles and services. The metal products group was found to be losing in their respective shares. He also had noted the poor performance of the units producing exclusively reserved products and he had attributed this feature to the possibility that the reservation might have attracted more units, both old and new, compared to the other areas of the small-scale industry and also due to the continuation of the productive activity by the inefficient producers.

Chandra\textsuperscript{29} and others (1993) in their study, had found that the importance of the small-scale sector could be positively emphasised in view of its potential for creating employment on the assumption of a low capital output ratio. The employment generating capacity of the small-scale and the village industries was observed to be higher by eight times than that of the large-scale industries. With the increasing mechanisation of the SSI units this potential might get lowered.

Reddy\textsuperscript{30} (1994) had pointed out that the small-scale sector which had registered high rates of growth since the 1970s had been affected by the new economic reforms which had harmed the small-scale units in more ways than one. Despite its impressive records of production, the growth in employment was a mere three per cent increase. It was widely believed that a shift in favour of the growth of the small-scale industry would result in the generation of more employment and new incomes and would also bring about a more equitable distribution of income and wealth. The survey had pointed out that the number of small-scale units was provisionally estimated to have gone up from 19.48 lakhs in 1992-93 to 29.80 lakhs in 1993-94.


K.V. Ramaswamy\textsuperscript{31} (1994) in his article “Small-Scale manufacturing industries some aspects of size, growth and structure”, had pointed out that the rise in the share of the non-factory segment between 1981 and 1991, ranged between 56 per cent to 65 per cent and the decline of the factory sector had varied between 44 per cent to 35 per cent. Further, the SSI units had recorded very impressive growth rates of employment and the value added to production across the various industrial groups. The structure of the SSI sector had not undergone any substantial change over the period 1972-73 to 1987-88. Broadly speaking, the primary material and agro-based industries, namely, food products, beverages and tobacco, wood, leather and paper products had shown a tendency to improve their employment position and shares of value added production in relation to the metal-based industries. Their better economic performance perhaps was largely due to the specific characteristics of the industries rather than due to the protection given by the Government. Therefore, he had stated that the characteristics of the industries were more important determinants of the growth of the small-scale enterprises. Finally, he had observed that, in the year 1987-88, wages in the SSI sector were found to be lower compared to the wages in the large-scale sector but the labour productivity was

not proportionately lower which was probably due to the labour cost advantages of the small-scale units in production.

Nanjundan\(^\text{32}\) (1994) had emphasised the fact that the use of the microprocessors had brought about a technological revolution and had affected the manufacturing methods in the enterprises in the developed countries in a significant way which tended to favour small-scale production. This technological revolution known as the flexible manufacturing system (FMS) would become the most important factors affecting the small-scale industries in the developing countries in the next one or two decades. It might be too early to judge the efficacy of the strategy to bring about the desired outcome. But rapid technological changes taking place in all the countries of the world were expected to revitalise the small-scale sector. It could be perceived that the future prospects of the small-scale industry would be based on competition, productivity and efficiency.

S.P. Kashyap\(^\text{33}\) (1995) had pointed out that the small-scale sector had helped in generating large scale employment, production of wage goods and increase in levels of incomes in a fairly dispersed manner, and had succeeded in mobilising dormant skills and resources. It had also enhanced the entrepreneurship skills,

---


developed village economies and had aided the process of backward area development. It had also played an important role in the overall process of industrialisation and economic development.

T.L.N. Swamy\textsuperscript{34} (1995) in his study, “Eighth Five Year Plan – Role of Small Industry”, had concluded that the small industry had exhibited to a high growth of productivity and a low growth of employment during 1980-90 compared to the period of 1973 to 1980 in India. It might be due to the fact that the small industry had become more and more capital intensive during the eighties, since use of capital had grown at a very higher rate compared to that of the growth in employment. Moreover, the growth in capital was also closely associated with technological advancement which had reduced the employment of labour.

M. Prasad Kumar and K. Satya\textsuperscript{35} (1995) had made an attempt to identify the causes of sickness in the industries in Coimbatore. They had come up with the finding that the shortage of power, the inadequacy of the raw materials, and the lack of finance were the major causes for the sickness of the small industries. Further the diversion of funds and the lack of qualified and competent skills had also contributed to the ill-health of the small-scale industries.


M. Srinivasalu Bayineni in his article on the “Development of Small Scale Industries”, had said that the economic prosperity of a developing economy like India depended much upon the integration of its agricultural activities with those of the industries. The dynamic features of the development of the agro-based industries were of paramount importance in all rural reconstruction programmes. The strengthening of the agro-industries would help the economy in its attempt to bring about Rural Industrialisation. He was considering the agro-based industries only in his study of the development of the country’s economy.

Nanjundhan (1996) in his article on “Economic Reforms and SSI units” published in the Economic and Political Weekly had said that the composition and terms of reference of the recently appointed expert committee to review the policies and programmes for the SSI sector were a clear indication of what was expected of the committee in respect of finance, technology, regulation and entrepreneurship.

P.M. Mathew (1997) in his article on the “Union Budget and Small Enterprises” published in the Economic and Political Weekly had said that among the entrepreneurs in India the DIC was the most visible agency with power and expertise

---

in the SSI sectors and had stated that it was part of the national pattern which had been evolved. He was considering the concessions given to the Small-Scale Industrial units by the DIC for their development.

Sidharthan\(^3\) (1998) in his article on "The Budget and Industrial Development" published in the Economic and Political Weekly had said that the Budget of 1997-98 had failed to focus on the institutions that were capable of promoting the growth of the most dynamic sector in terms of employment and technology. The focus of the Budget had been on large corporate firms whose role in employment and manufacturing had been diminishing in most of the countries of the world.

Rajendran\(^4\) (1998) in his article on "Small-Scale Industrial Policies" published in the Southern Economist had said that the most significant aspect of the small-scale industry was the stimulation of the economic activity through a far reaching large number of able entrepreneurs. He was considering the Small Scale Industrial Policies and the growth of the SSI units, after the year 1991. Small industries had grown because of their significant position in attaining the major


objectives of self-reliance, creating wide employment opportunities and raising the levels of output, income and also the standard of living.

Hina Sindhu\(^1\) (1998) in his study had revealed that the relative importance of the SSI sector in employment generation had increased over a period of time. The other findings of the study were that there had been a decline in employment in the household industries, a decline in the contribution of the large-small scale sector to employment generation, a substantial contribution by five industry groups, namely, chemicals, non-metallic mineral products, basic metal products and machine tools to employment generation in Gujarat, and lack of adequate evidence for the application of the style based model in Gujarat, as the structural changes in the industrial sector were often accompanied by a very great emphasis on development of the SSI sector.

Vikram Chadha\(^2\) (1999) in his article had pointed out that the small industry which was predominant in the Indian industrial scene needed urgently an upgradation of its production technologies and methods in order to survive in the light of the emerging competitive pressure from other large scale industries. The problems encountered by the SSIs ranged from the shortage of credit and finance; underutilisation of capacities; lack of competitiveness in the input and product

markets, to that of the inadequacy in respect of infrastructural facilities such as power and transport.

The Economic Unit of the Indian Institute of Public opinion\textsuperscript{43} (1999) had suggested that indigenous as well as imported raw materials should be made available to the small sector at reasonable prices. Organisations such as The State Trading Corporation and The State Export Corporation should take the entire responsibility for providing raw materials and also for the marketing of the products of the small sectors. It was necessary to incorporate special export promotion cells in organisations created for the development of the small scale sector. Special attention should be paid to project the products of the small-scale sector in trade fairs and exhibitions in overseas countries. It would be desirable to organise specialised exhibitions devoted exclusively for projecting India’s small scale sector products in strategic overseas markets. It was necessary to encourage the SSI units to participate in the overseas exhibitions free of cost and the expenses of their personnel at these exhibitions should be heavily subsidised by the Government.

M.G. Basavaraja\textsuperscript{44} (1999) in his study on “Role of SSI’s: A study of Karanataka”, had stated that the SSI entrepreneurs should collect and fight for a


\textsuperscript{44}M.G. Basavaraja, “Role of SSIs” A Study of Karnataka”, \textit{Southern Economist}, Vol.38, No.4, June 1999.
swadeshi movement and try to create a public opinion in favour of the indigenous goods. In Karnataka, there were about 2,35,000 registered SSI units with a capital investment of about Rs.3000 crores. They manufactured more than 8000 items. The total output was estimated at about Rs.20,000 crores per annum. About 39 per cent of the total exports from Karnataka were being made by the SSI units. The SSI sector had received much emphasis in the 1999-2000 budget of the State Government, on account of the fact that this sector was labour-intensive, and had contributed a lot towards the development of the traditional and non-traditional exports. In the newly emerging business scenario, the Government which in former times, used to come to the rescue of the SSI would find it very difficult to continue and extend such policies for helping the SSIs. By taking into consideration all these factors, the SSI sector should seriously look to issues like quality improvements, cost reductions, appropriate technology, and large scale marketing for their very survival.

Robin Mukerjee, Pranab Kuamr Das, and Uttam Kumar Bhattacharya\textsuperscript{45} (1999) in their study had attempted to examine the growth performance of the small-scale industries in West Bengal over the past 25 years. For this purpose, alternative growth rates were calculated by them for the SSI units as well as for their employment potential for each district. Broadly speaking, the alternative measures of growth rates presented more or less the same situation. However, there existed much scope for

increasing the number of units as well as for increasing employment. On the other hand, the year-to-year growth rates did not fluctuate much over a period of time for any of the districts. So far as the flow of new registration units was concerned, the inter-temporal variations were not found to be large. Also, the disparities in their flows of new registration seemed to decrease over a period of time. Attempts had also been made to examine the inter-temporal district wise variations in the absolute number of the newly registered units as well as in respect of their employment. No clear trend in the inter-district disparity was noticed in their study.

Vikram Chandha\(^{46}\) (1999) in his article, “Financing the Modernisation of Small Industries in India” published in the Southern Economist had said that the small industry which predominated the Indian industrial structures were in dire need to upgrade their production technologies and methods in order to survive in the emerging competitive atmosphere.

M.H. Balasubrahmany\(^{47}\) (1999-2000) in his study, “India’s Small Industry Policy in the 90’s: Waning Protectionism”, had attempted to probe into the redefined India’s small industries policy of the 90’s. He had reviewed the strategy evolved for


the development of the small-scale industry and had proposed a few policy measures. He had concluded that the characteristics of the small-scale enterprises were favourable for the achievement of the desirable socio-economic objectives which had made the Indian Policy makers to bring the small-scale sector into the central focus in their economic development strategy, which was evolved by them after Independence. The subsequent thrust on strengthening the institutional framework for the promotion of the small-scale industries and incentives provided for the protection of the small industries became the distinctive feature of India's small industries policy. The policy became comprehensive in terms of new institutions, programmes and incentives by the eighties and in the process of its implementation, protected growth had assumed very great significance.

2.2 Methodology

This section described the methodology adopted in the present study which includes the choice of the study area, the sampling technique adopted, the collection of data, the period of study and the tools of analysis.

Choice of the Study Area

Tirunelveli District in Tamil Nadu was one of the districts which was blessed with good basic infrastructural facilities and resources which could contribute to the process of development of the industries in the area and in particular to the
development of the small scale industries. But the pace of development in the Tirunelveli District was found to be relatively slow. The majority of the working population depended on agriculture. This was found to be the main reason for the stagnation in the industrial development of the Tirunelveli district. The Government of India had declared almost the entire district as an industrially backward area. Hence, incentives were provided for the starting of industries in this district. By and large, the whole background makes us conclude that the policy was sufficient enough to accelerate the pace of industrial development in the District. There was also scope for promoting the industries based on Tourism, since there were a number of tourist spots in the Tirunelveli district. These were the main reasons for selecting the Tirunelveli district as the study area to evaluate the performance of the small-scale industries.

**Sampling Technique**

In order to evaluate the economic performance of the Small Scale Industries in the Tirunelveli District, 300 Small Scale Industrial units were selected by adopting the proportionate probability random sampling method. The small-scale industries registered as such in the District Industries Centre as on 31.03.2001 which consisted of 11,553 units was taken as the population. These units were classified into six categories, namely Agro and Forest based industries, Textile based industries, Chemical based industries, Engineering and allied industries, Electrical and
Electronics industries and Miscellaneous industries which included all other industrial ventures. The proportionate probability random sampling technique was adopted to select the 300 sample units from the list of 11,553 small-scale units. The number of the selected sample units classified into six categories are shown in Table 2.1

**TABLE 2.1**

**SMALL SCALE INDUSTRIES REGISTERED AS ON 31.3.2001 UNDER TEN CATEGORIES IN THE DISTRICT INDUSTRIES CENTRE AND THE SELECTED SAMPLE UNITS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category</th>
<th>Units Registered as on 31.3.2001</th>
<th>Sample Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agro and Forest based industries</td>
<td>1,772</td>
<td>46</td>
</tr>
<tr>
<td>2</td>
<td>Textile based industries</td>
<td>1,055</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>Chemical based industries</td>
<td>1,060</td>
<td>28</td>
</tr>
<tr>
<td>4</td>
<td>Engineering and allied industries</td>
<td>1,615</td>
<td>42</td>
</tr>
<tr>
<td>5</td>
<td>Electrical and Electronics industries</td>
<td>1,032</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>Miscellaneous industries</td>
<td>5,019</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11,553</td>
<td>300</td>
</tr>
</tbody>
</table>
Collection of Data:

The present study was based on primary as well as secondary data. The personal interview method was adopted to collect the primary data from the sample units. For this, a well-designed and pre-tested interview schedule (Vide Appendix) was prepared to collect the information required for the study. With a view to identify the growth components of the small scale industrial units, the researcher had made an in-depth review of the previous studies undertaken, related to the topic of the present study. Further, the researcher had preliminary discussions with the officials of the District Industries Centre and a few well informed entrepreneurs of the Small-Scale Industrial units registered in the District Industries Centre, Tirunelveli. In the light of the information gathered, the researcher had prepared the interview schedule and had also identified the ten factors which had influenced the growth of the small-scale industries.

The secondary data were collected from the published as well as the unpublished reports, handbooks, action plans and pamphlets from the office of the Director of Industries and Commerce, Chennai, and from the District Industries Centre, Tirunelveli.

The period of study pertained to the year 2000-2001. The primary data were collected from the Small-Scale Industries during the 6 months period, from October
2000 to March 2001. The data related to the growth components of the small-scale industries were obtained for period of five years, from 1996-97 to 2000-2001.

**Tools of Analysis**

In order to study the growth and levels of growth of the small-scale industries, ten component factors were identified to prepare the growth scale by adopting the scoring technique. The total scores for the construction of the growth scale was taken as 100. The ten components were allotted 10 scores each. The ten scores were distributed among the 10 components on the basis of the percentage growth of each of the components. The growth percentage was calculated on the basis of the five year data collected for the period 1996-97 to 2000-2001 by using the following formula.

\[
\text{Growth} = \frac{\text{Current year value} - \text{Base year value}}{\text{Base year value}} \times 100
\]

In order to classify the levels of growth, into the high, the medium and the low levels, the arithmetic mean (\(\bar{X}\)) of the total score and the standard deviation (S.D) obtained were used and classified as follows:

\(\bar{X} + SD \geq\) were classified as the high level growth units.

\(\bar{X} - SD \leq\) were classified as the low level growth units; and.
Units which were between \( \bar{X} + SD \) and \( \bar{X} - SD \) were classified as the medium level growth units.

In order to study the extent of the variations in growth; the co-efficients of variation were used.

To identify the factors which had influenced the growth of the small-scale industries, a multiple log linear regression model was estimated.

The ratio analysis was used to analyse the technical efficiency and the economic viability of the Small-Scale Industrial units.