CHAPTER 1

Introduction and Research Design
CHAPTER I
INTRODUCTION AND RESEARCH DESIGN

Small Industries offer many opportunities; besides adding to production, they broaden the industrial base. They enable the process of modernisation as well as entrepreneurship to speed to more regions and layers of society.

- Mrs. Indira Gandhi

This chapter elucidates the justification and significance of the study undertaken in the light of its potential relationship to problems like employment and economy against the local and national perspective. In order to give a focussed direction to the study, this chapter pronounces the objectives and hypotheses of the study. It has dealt comprehensively with relevant studies already made. It has also offered a pre-view of the methodology adopted and the tools employed and attempted to suggest the line of progress of the study through its synoptic discussion of the chapter scheme.
'Entrepreneur' is a word highly respected in all corners of the country. It conjures up visions of active and purposeful men and women accomplishing a wide variety of significant deeds. The entrepreneur is an important agent in society.¹ He/She performs a central mediating role between the society at large and a single operating unit. Entrepreneurship is one of the most important inputs in economic development. It is entrepreneurial competence that makes all the difference in the rate of economic growth. Economists have long recognised entrepreneurship as one of the factors of production. It has to suit the changing ethos of socio-economic reality.²

Entrepreneurship is a sort of magic wand in the hands of experts. It requires strong will, steadfastness in whatever you undertake, good managerial talent, an almost uncanny financial acumen


and a keen intellect always on the search for new pastures and ventures.\textsuperscript{3}

The need for broadening entrepreneurship in India arises from the need to speed up the process of activating the factors of production leading to a higher rate of economic growth, dispersal of economic activities, development of backward areas, creation of employment opportunities and improvement in the standard of living of the weaker sections of the society in the process of growth.\textsuperscript{4}

Small Scale Industries (SSI) play a key role in the process of industrialisation of a developing economy. Of late, entrepreneurship in the SSI sector is being highly emphasised. This is because small scale units provide immediate large scale employment and hence a higher labour/capital ratio, when compared to the large scale sector. SSIs need only a shorter gestation period, lower investment and

\textsuperscript{3}Sundararaman, L.N.S., Entrepreneurship - The Success Factors, Entrepreneurial Opportunities and Challenges, Monograph Published by Alagappa University, Karaikudi, April 1990, p.75.

\textsuperscript{4}Op.Cit., p.5.
offer a method of ensuring a more equitable distribution of national income. They facilitate an effective mobilisation of resources, capital and skill which might otherwise remain unutilised. Small Scale Industries stimulate the growth of industrial entrepreneurship and promote a more diffused pattern of ownership and location. Entrepreneurship in this sector is being encouraged primarily because the small manufacturing units have made phenomenal progress during the last three decades and to-day occupy an important position in the industrial economy of India.\(^5\)

At present there is a greater involvement of banks and other financial, service, and technical institutions in creating an institutional infrastructure necessary for the rapid growth of entrepreneurship in different sectors.

The National Science and Technology Entrepreneurship Development Board (NSTEDB) was formed by the Government of India under the Department of Science

\(^5\) Ibid.
and Technology in January 1982 with the objective of developing opportunities for self employment for science and technology personnel and encourage and motivate them to take entrepreneurship as their career. It has selected 12 backward districts in the country, to launch on 'opportunity profile project now known as 'Science and Technology Entrepreneurship Development' (STED) with the aim of promoting entrepreneurship and to create entrepreneurship awareness. For giving encouragement and guidance to the new entrepreneurs, the Government of India has come forward to start Science and Technology Entrepreneurship Parks (STEP) in universities and colleges.

The National Institute for Entrepreneurship and Small Business Development (NIESBUD) was established in New Delhi on 6th July, 1983 by the


Government of India as an apex body for co-ordinating and overseeing the activities of various institutions/agencies engaged in entrepreneurship development particularly in the area of small scale industry. The Entrepreneurship Development Institute of India (EDII) at Ahmedabad was also established for the promotion of entrepreneurial development.

In addition to the financial, service, and technical institutions, the Government has established industrial estates for the promotion of SSI units. In Tamilnadu, Small Industries Development Corporation (SIDCO) and the State Industries Promotion Corporation of Tamilnadu Ltd. (SIPCOT) play a vital role in entrepreneurial development by establishing industrial estates.

The Government of India under its '20 Point Programme' has introduced a wide variety of self-employment programmes for different target groups.

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such as rural youth, ex-servicemen, educated unemployed etc. These programmes are given the generic name of Entrepreneurship Development Programmes (EDPs). Both the Central and State Governments have been providing many subsidies and incentives to prospective entrepreneurs.

The New Industrial Policy of the Government (1991) has a significant influence on industrial development. It reflects the direction and pattern of industrial development the country desires to have to help realise the economic, social and political objectives of national development by means of industrialisation. The industrial policies announced in the years 1948, 1956, 1977, 1980 and 1990 laid great stress on the effective promotion of cottage, village and small scale industries. The New Industrial Policy announced on August 6, 1991 seeks to strengthen the base of the small scale and tiny sector.

The Government of India has been paying increasing attention to the development of small scale industries since the adoption of planning in
the country. The outlays for the development of small scale industries in various Five Year Plans have shown an increasing trend. It reveals encouragement and patronage granted by the Government to SSI units. All these efforts of the Government of India, the State Governments, financial, service and technical institutions have led to significant growth of entrepreneurship.

To-day the SSI sector has emerged as a dynamic and vibrant sector. At the end of the VII Plan, it accounted for nearly 35% of the gross value of output in the manufacturing sector and 40% of the total exports of the country. It also provided employment opportunities to around 12 million people. More specifically, there has been tremendous growth in the last two years i.e., 1989 and 1990. The growth of employment in SSI sector has been 7.2% whereas in the organised sector, it accounted for only 2.7%.

The present study is an attempt to probe entrepreneurial development in this vital SSI sector in Pudukkottai District and the factors influencing it.
1.2. Statement of the Problem

The small scale industrial sector gained the attention of the Government of India mainly because of its potential efficacy as a solution to problems relating to economy and employment. Though the overall perspective was larger at the national level, the immediate thrust was on regional and sub-regional perspectives. That is, the small scale industrial sector was to enrich the local and regional economy and improve employment potential, making optimum use of local and indigenous resources. Hence, the Government has tried to link the financial and service institutions with the small scale industrial sector at regional and local level to give the necessary impetus for development.

The focus on the regional/local economic and employment frontier was contemplated with a view especially to better the economic and life conditions of people in areas which are industrially and agriculturally backward.

In Tamilnadu, the Pudukkottai district has been a backward area prior to and since the
formation of the district. Except in a very few large-scale units - the most notable of which are the automobile units of T.V. Sundaram and Sons (TVS) and a few engineering industries and a few medium scale industries, the district had remained industrially undeveloped.

The formation of the District Industries Centre (DIC) in the District Headquarters gave a fillip to the growth of entrepreneurship in the District. With the State Industries Promotion Corporation of Tamilnadu Ltd., (SIPCOT) and the Tamilnadu Small Industries Development Corporation Ltd., (SIDCO) providing plot, shed and infrastructure facilities, with the Lead Bank (Indian Overseas Bank, Pudukkottai) and the Tamilnadu Industrial Investment Corporation Ltd., (TIIC) extending financial assistance, and with the DIC, SIDCO, Small Industries Service Institute (SISI) and other service and technical institutions offering assistance in the form of subsidies and incentives, raw-material and marketing; a proper atmosphere for the growth of entrepreneurship in small scale industries in the district was created.
It is in this context that the present study is undertaken to investigate the growth of entrepreneurship in the SSI sector in Pudukkottai District. It aims to assess and to interpret the growth of entrepreneurship in SSI units in Pudukkottai District during the period 1985-86 to 1989-90, i.e., a period nearly a decade after the formation of the district in 1974 and the establishment of the DIC in 1978. The study also aims at identifying the factors that have contributed to the growth during this period.

1.3. Review of Literature

Studies carried out in fields related to the research topic facilitated clarity of perception and easy identification of relevant methods of research. The study of related research work focussed on published works, research articles and reports of various agencies. A Bird's eye view of some of those studies is presented below:

'Industrial Entrepreneurship in Madras State', (Berna James, S.J., 1960) studied the growth of 52 medium scale manufacturing firms in Madras and
Coimbatore. It also focussed attention on establishing the fact that the SSI units in Tamilnadu had been the seed for the growth of medium scale industries. 9

'Small Industry in Economic Growth - A Case Study of Kerala', (Ommen, M. A., 1972) had taken up 45 sample SSI entrepreneurs relating to light engineering industries in Kerala. The study observed a low proportion of entrepreneurs in Kerala, the normal requirement being five entrepreneurs per every population of 1000. Inadequacy of education and lack of proper technical knowledge were identified as the major factors for the lower proportion of entrepreneurs.10

'Entrepreneurship in Small Scale Industries in Madurai City and Its Environs', (Subramaniam, R et al. 1975) attempted to identify the factors...
contributing to the development of entrepreneurship in Madurai City. The study revealed that the economic factor is more dominant and influential than the social and caste factors.\footnote{Subramaniam, R. and et.al., Entrepreneurship in Small Scale Industries in Madurai City and Its Environs, Sangam Publications, Madras, 1975.}

'The Environment and Entrepreneur', (Tandon, B.C., 1975) discussed in detail the four entrepreneurial environments viz., economic, legal, political and cultural. It examined the influence of these four factors on the growth of entrepreneurship.\footnote{Tandon, B.C., Environment and Entrepreneur, Chaukh Publication, Allahabad, 1975.}

'Small Entrepreneurial Development in Some Asian Countries', (Sharma, S.V.S. 1979) aimed at making a comparative study of Seven Asian countries. The policies of the respective Governments towards small entrepreneurs were examined. The organisational set up and the problems faced by the entrepreneurs were analysed.\footnote{Sharma, S.V.S., Small Entrepreneurial Development in Some Asian Countries, Light and Life Publishers, New Delhi, 1979.}
'Study of Entrepreneurial Growth and Development Programmes in North India', (Krishnalal Sharma and Harnek Singh, 1980) focussed attention on identifying the reasons for the failure of small entrepreneurs in North India in general and in Uttar Pradesh in particular.\textsuperscript{14}

'Entrepreneurship Development in India and South East Asian Countries', (Bhattacharya, S.N., 1983) was also a comparative study of industrial and agricultural entrepreneurship in South East Asian Countries. A model of entrepreneurial development for the countries studied was also developed.\textsuperscript{15}

'Dynamics of Industrial Entrepreneurship', (Hadimani, R.N., 1985) made an attempt to describe the efforts put in for the promotion of entrepreneurship among the artisan castes. Entrepreneurial training,

\textsuperscript{14}Krishnalal Sharma and Harnek Singh, Study of Entrepreneurial Growth and Development Programme in North India, Asia Publishing House, New Delhi, 1985.

\textsuperscript{15}Bhattacharya, S.N., Entrepreneurship Development in India and South East Asian Countries, Metropolitan Book Company (P) Ltd., New Delhi, 1983.
educational and human resource factors and the economic factors were treated as important in the development of industrial entrepreneurship. 16

'Entrepreneurial Management' (Khan, R.R., 1985) attempted to establish the thesis that the motivation, attitude and the skills of entrepreneurs determined long term development of ten units. The study relegated the other supporting factors to secondary importance. 17

'Entrepreneurial Performance in Indian Industry', (Sharma, R.A., 1985) attempted to examine the mercantile and community background of entrepreneurs in 242 manufacturing units. The study also focussed on the environmental factors and the education of entrepreneurs and their impact on entrepreneurship. 18


'Entrepreneurship and Growth of Enterprise in Industrial Estates', (Gangadhara Rao, N., 1986) attempted an evaluation of the industrial estates as a device for promoting and encouraging entrepreneurship.\(^19\)

'Industrial Entrepreneurship in India', (Lakshmana Rao, V., 1986) examined the role of entrepreneurship in the development of the national economy. It further attempted to analyse the policies of the Government for promoting industrial entrepreneurship in the Vijayawada - Guntur region in Andhra Pradesh.\(^20\)

'Entrepreneurship Development', (Bhanushali, S.G., 1987) examined the cultural and economic background that preceded entrepreneurial awakening in Kolhapur. It analysed the origin and development of the concept of entrepreneurship and attempted


to measure the entrepreneurial personality by correlating it to the social, educational and occupational antecedents of entrepreneurs. The study developed some psycho-socio-economic criteria to measure the development of entrepreneurial personality in the small scale engineering industry in Kolhapur.\textsuperscript{21}

'Entrepreneurship in Small Scale Industries', (Gupta, M.C., 1987) took up the SSI sector in Uttar Pradesh and evaluated the role of entrepreneurship. It identified and examined the environmental and motivational factors that affect entrepreneurship. It also attempted to study the performance of entrepreneurs against their socio-economic background.\textsuperscript{22}

'Entrepreneurial Development', (Saravanavel, P., 1987) analysed the concept of entrepreneurship


against different perspectives. It also examined the factors influencing the growth of entrepreneurship using socio-demographic variables, economic variables, and systematic linkage variables. A part of the study dealt with women entrepreneurs especially in Kerala and it also analysed the objectives of and operational problems in entrepreneurial development programmes.

'Women Entrepreneurs in India', (Vinze, M.D., 1987) was a micro study of women entrepreneurs in Delhi. The study identified the factors that impeded the growth of women entrepreneurship in India. The factors identified were lack of confidence among women, social pressure, disbelief in Women's entrepreneurial ability and the reluctance of the financial agencies to assist women entrepreneurs.

'Patterns of Entrepreneurship in Agra',

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(Singh, B.N., The Indian Journal of Commerce, 1964) took up for examination 25 small firms in the light engineering industry. The most active motivational factor identified was profit earning.25

'Planning and the Growth of Industrial Entrepreneurship in India', (Rao, K.S.H., and Sumchra, D.G., The Indian Journal of Commerce, 1965) highlighted the role of governmental policies and programmes in promoting entrepreneurship. The study found that the policies of the Government played an important role in the development of entrepreneurship in most cases.26

'Impact of Public Policies on Industrial Entrepreneurship in India', (Mishra, M.L., The Indian Journal of Commerce, 1966) was another study on the impact of public policies on the development


of industrial entrepreneurship. The study established that the impact was both positive and negative.\textsuperscript{27}

'The Entrepreneur, Technician, and Manager in Small Scale Units', (Pathak, H.N., Economic and Political Weekly, 1972) studied 12 units over a period of 2 years. The units selected from industrial estates were subjected to a study of problems at the stages of inception, and expansion/diversification. The study identified factors like contacts, education and finance as influencing the starting of industrial ventures.\textsuperscript{28}


background of entrepreneurs. The study found that units with favourable capital base grew steadily and expanded.29

'Class, Caste and Community of South Indian Industrialists: An examination on the Horatic Alger Model', (Nafziger, E. Wayne, 1975) made a study of 54 SSI entrepreneurs in Visakhapatnam in Andhra Pradesh. The study considered the economic and occupational background and entrepreneurial and managerial experience of the entrepreneurs. The study also took into account factors like initial capital, access to governmental assistance and business success. The study found that the socio-economic class-status of businessmen is substantially higher than that of the general population.30


"Entrepreneurship Development: Problems and Prospects", (Ramesh, P. Sinha, Man and Life, 1982) undertook a study of 100 selected sample units in Patna to investigate the availability and utilisation of Government facilities by entrepreneurs and to identify the major impediments encountered by entrepreneurs.\(^{31}\)

"Success in Urban Small Entrepreneurship", (Choudhary, K.V.R., Khadigramodyog, 1986) was a study of small industrialists of the industrial estates around Hyderabad and Secunderabad. It tried to investigate the association of factors like age, education, experience, family background, membership in political or social organisations, official contacts and the financial resources of the entrepreneurs with the success in urban small entrepreneurship.\(^{32}\)

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'Growth of Entrepreneurship in Small Towns', (Murthy, B.E.V.V.N., SEDME, 1986) was an exploratory study of the growth of entrepreneurship in Anakapalle and Gudivada. An evaluation of entrepreneurship performance was carried out on the basis of factors like employment, turn-over, profit, pre-investment and capacity utilisation.  

'Entrepreneurial Process and Promises', (Murthy, B.E.V.V.N., Chandrasekhar, M., Gangadhara Rao, M., Decision, 1986) was a study of 334 entrepreneurs of Anakapalle and Gudivada of Andhra Pradesh. It examined factors like ambition, compulsions, material support from family or Government in relation to entrepreneurial ventures. Initial capital was identified as the greatest stimulating factor in entrepreneurial activity. 

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'Entrepreneurship Development: Present Status and Emerging Priorities', (Chakaravarty, T.K., SEDME, 1987) was an examination of some important features of the current entrepreneurial scene. The study emphasised the need for an integrated approach and proper training programmes for entrepreneurship development. It suggested the introduction of the entrepreneurship theme in educational institutions and training programmes for the trainers of entrepreneurs.35

'Personal Variables Vs Entrepreneurial Success - Sample Study of Amaravathi', (Kaptan, S.S., SEDME, 1987) attempted to test the validity of the hypotheses that entrepreneurial success was influenced by personal attributes of an entrepreneur like educational background, professional background, community background, prior experience, management education and sense of commitment. 61 small units in 100 M.I.D.C. industrial estates of

Amaravati in Maharashtra formed the sample for the study.  

'Entrepreneurship and Rural Industrialisation', (Uma Mohan and Hari Narayanan Rao, Rural India, 1987) studied the inter-relationship between rural industrialisation and entrepreneurship. But the study found that inadequacy of finance, shortage of power, lack of marketing facilities, scarcity of raw-materials, inadequate infrastructural facilities and training, procedural delays, and heavy taxation exercised a constraint on rural entrepreneurship.  


37 Uma Mohan and Hari Narayanan Rao, Entrepreneurship and Rural Industrialisation, Rural India, for October and November, 1987, pp.188-189.
in entrepreneurship at the grass-root level.\textsuperscript{38}

'Success in Grass-Root Entrepreneurship', (Uma Mohan, Ch., and Hari Narayana Rao, C., SEDME, 1987) attempted an analysis of the success of grass-root entrepreneurship in four types - low success, moderately low success, moderately high success, and high success. The study was conducted on 36 Small Gramodaya industrial units in Anantapur district (Andhra Pradesh). The level of success was analysed in relation to factors like the age, education, caste, occupational background and previous experience of the entrepreneurs and another location of the units.\textsuperscript{39}

'Case Studies in Latent Industrial Potential: Small Industry in a North Indian Town', (McCroy James, T., 1956) studied 17 small scale firms in a North Indian Town fictitiously termed as 'chopur'


in Uttar Pradesh. The aim was to discover whether there were different patterns of growth in the small machine industries and to identify the factors associated with growth, decline and stagnation. 40

'Socio-Psychological Factors influencing the Adoption of the Innovation of starting a Small Industry Unit', (S.I.E.T. Institute, Hyderabad, 1974) was a survey of small units in Hyderabad and Secunderabad. It identified economic gain, ambition, social prestige, social responsibility, and demand for product in the market as motivational factors for starting industrial units. Capital shortage and redtapism in the Government departments were identified as the main discouraging factors. Education, family background and experience were also identified as motivational factors. Income and social contacts were identified as factor not

40

significantly associated with entrepreneurship.  

'New Entrepreneurship in Small Scale Industries in Delhi', (Ramachandran, P., Economic and Scientific Research Foundation, 1975) studied 94 new small scale units in 11 modern industries in Delhi. The study revealed that the social status and occupational background of the entrepreneurs were responsible for the growth of entrepreneurship.

'Entrepreneurial opportunities and challenges', (Report of the State Level Entrepreneurs Meet, Alagappa University, Karaikudi, 1990) dealt with entrepreneurship from four major angles - scope and opportunities, financial and service institutions and entrepreneurship, Women entrepreneurship and the success factors in entrepreneurship.

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42 Ramakrishnan, P., New Entrepreneurship in Small Scale Industries in Delhi, Economic and Scientific Research Foundation, New Delhi, 1975.

43 Entrepreneurial Opportunities and Challenges, Report of State Level Entrepreneurs Meet, Alagappa University, Karaikudi, April, 1990.
'Industrial Entrepreneurship and Productivity in Andhra Pradesh', (Vadapalli Lakshmana Rao, 1977) analysed the structure, growth and performance of the small and Large scale sectors.\textsuperscript{44}

'Growth of Entrepreneurship in Small Scale Industry - An Empirical study of Madurai Region', (Sounthara Pandian, C., Unpublished Ph.D., Thesis, Submitted to the Madurai Kamaraj University, Madurai, 1991) aimed at studying the development of the concept of entrepreneurship and the factors influencing the growth of entrepreneurship in small scale industries in Madurai region. The study also attempted to identify the problems hindering the growth of entrepreneurship.\textsuperscript{45}

'A Study of Entrepreneurship in Madurai District', (Satchi Danandam, M.V., and Dhulasi


Birundha, V., Unpublished Research Project, Madurai Kamaraj University, Madurai, 1990) reviewed entrepreneurship in Madurai District from four perspectives multiple factor analysis, psychological and economic factors, risk analysis and sociological variables. It was found that entrepreneurship was a symbiosis of all the four factors.46

A review of the earlier studies cited and other similar studies enabled the researcher to identify the fact that no comprehensive study has so far been made to measure the growth of entrepreneurship in small scale industries in a backward but fast developing district in Tamilnadu namely Pudukkottai District. Hence, the present study.

1.4. Objectives of the Study

The study has the following specific objectives:

(i) To trace the growth and development of

46

entrepreneurship in the District, since the formation of Pudukkottai District; 

(ii) To examine the role and functions of the supporting institutions in the growth of entrepreneurship in the SSI sector; 

(iii) To study and measure the level of growth of entrepreneurship in the SSI units in the study area; 

(iv) To examine the factors contributing to entrepreneurial development in the District; and 

(v) To identify the problems hindering the growth of entrepreneurship and suggest measures for entrepreneurial growth and development.

1.5. Scope of the Study

The main focus of the present study is the measurement of growth of entrepreneurship in small scale industries in Pudukkottai District. It aims at identifying the factors that influenced entrepreneurial development in the SSI sector in the study area and highlighting the most significant factors of growth and development in the small scale industrial sector.

1.6. Limitations of the Study

The study covers only the SSI units in Pudukkottai District that are registered with the District Industries Centre, (DIC), Pudukkottai. The study does not cover the
unregistered SSI units mainly because (i) they are difficult to locate and (ii) it would be difficult to get authentic data regarding various aspects of investment and performance. Only manufacturing SSI units and units representing five dominant groups – food products, engineering, chemicals, timber and other manufacturing units have been chosen for the study which covers a five year period from 1985-86 to 1989-90, which is the most critical and most appropriate period for the purposes of this study. This study period falls 10 years after the formation of the District (1974) and seven years after the establishment of the District Industries Centre, and thus has allowed a reasonable period of growth in SSI units in the District to pass.

1.7. Hypotheses

The study attempts to test the validity of the following null hypotheses through a detailed and systematic investigation to establish specifically the cause and effect relationship:

(i) The social group (to which an entrepreneur belongs) does not contribute to the growth of entrepreneurship in SSI units;

(ii) The age group of the entrepreneur does not have a bearing on the growth of entrepreneurship
(iii) The educational level of the entrepreneurs does not affect the growth of entrepreneurship in SSI units;

(iv) The previous industrial/managerial experience of an entrepreneur does not contribute to entrepreneurial growth in SSI units;

(v) The membership in trade associations does not contribute to the growth of entrepreneurship in SSI units;

(vi) The subsidies and incentives do not contribute to the growth of entrepreneurship in SSI units;

(vii) The level of production capacity utilisation does not have a bearing on the growth of entrepreneurship in SSI units;

(viii) The marketing of the product responding to competition, does not contribute to the growth of entrepreneurship in SSI units;

(ix) The availability of skilled labour does not promote the growth of entrepreneurship in SSI units;
(x) Locational factors do not contribute to the growth of entrepreneurship in SSI units;

(xi) The type of organisational structure of the unit does not contribute to the growth of entrepreneurship in SSI units;

(xii) The source of ideas for establishing the industrial units does not influence the growth of entrepreneurship in SSI units;

(xiii) The period of operational existence of the industrial unit does not have a bearing on entrepreneurial growth in SSI units;

(xiv) Developmental plans do not contribute to the growth of entrepreneurship in SSI units; and

(xv) The price fixation policy of the unit has no effect on the growth of entrepreneurship in SSI units.

1.8. Methodology and Tools

The present research work is a descriptive and analytical study based on empirical observation and comprehensive survey. The study of growth of entrepreneurship in the small scale industrial units
in Pudukkottai District involved a survey of the selected SSI units. Primary data were collected from the field and the records of the selected small scale units.

Data with regard to SSI units have also been collected through personal interview. For this purpose an interview schedule (Vide Appendix A) has been used.

A comprehensive survey of the units selected for study was conducted which involved the financial, service and technical institutions in the district. A number of small scale entrepreneurs and officials of the various supporting organisations at different levels were contacted for gathering relevant basic data. It was found through the survey that the SSI entrepreneurs in the district could be classified into entrepreneurs registered with District Industries Centre (DIC), Pudukkottai and those unregistered. The focus of the research investigation was on those entrepreneurs whose units were registered with the DIC, Pudukkottai.
1.9. Construction of Tools and Pre-Test

A preliminary interview schedule was constructed and administered to 20 entrepreneurs of SSI units from out of the selected sample. The response obtained was classified and subjected to analysis in consultation with officials of the financial, service and technical institutions related to SSI entrepreneurship, selected sample entrepreneurs, the office bearers of SSI trade associations, the research supervisor and other subject experts. This was done in order to establish the validity and reliability of the interview schedule and to identify the variables for the study. The draft interview schedule was revised in the light of the criticism, suggestions and additional information given by the researcher's guide and fellow researchers. Then, the interview schedule was pre-tested by administering them to ten entrepreneurs of each group of five industries viz., food products, engineering, chemicals, timber and other manufacturing units selected for the study to judge the arrangement of questions, wording, format sequence, and the like. They were redrafted
in the light of their comments.

A pilot study was conducted and the interview schedule was revised in the light of the pilot study also for the purpose of bringing it to the present shape so as to make the study a comprehensive one.

1.10. Sampling Design

The researcher has selected five groups of industries such as food-products, engineering, chemicals, timber and other manufacturing units in Pudukkottai District. A frame consisting of 1760 manufacturing small scale units in all as on 31.3.1990 registered with District Industries Centre, Pudukkottai was prepared for selecting the sample units of study. Of these, a sample of 200 (10%) manufacturing units was selected on the basis of proportionate random sampling method. The balanced representation of each category of the five manufacturing groups and the possibility of obtaining the required information were the major criteria for selecting a unit as a part of the sample. The following Table shows the mode of sampling and distribution of units.
TABLE 1.1
Sampling Design of the Study

| S.No. | Industry Group           | In Universe as on 31.3.90 | In sample | |
|-------|--------------------------|---------------------------|-----------|
|       |                          | SSI units | Manu-factur-ing units | % to total | Manu-factur-ing | % to total |
| 1.    | Food Products            | 1128      | 602                   | 34.20      | 60             | 30         |
| 2.    | Engineering              | 617       | 536                   | 30.45      | 60             | 30         |
| 3.    | Chemicals                | 271       | 155                   | 8.81       | 20             | 10         |
| 4.    | Timber                   | 306       | 123                   | 6.99       | 20             | 10         |
| 5.    | Other manufacturing Units| 574       | 344                   | 19.55      | 40             | 20         |
|       | Total                    | 2896      | 1760                  | 100.00     | 200            | 100        |

Source: DIC, Pudukkottai

The number of SSI and manufacturing units in each category in the universe and the sample among the manufacturing units are illustrated in Figure 1.1.
1.11. Selection of the Study Area

The researcher has chosen the title "Growth of Entrepreneurship in Small Scale Industries - A Study with reference to Pudukkottai District". The study has covered the SSI manufacturing units located in Pudukkottai District and this is done purposively for many reasons:

(i) Pudukkottai District has adequate resources for starting new units, particularly in the SSI sector and hence a representative District.

(ii) The rural background of the district, which would help the agriculturists and agricultural labourers engaged only through a part of the year, makes industrial units imperative for employment opportunities throughout the year;

(iii) There are a large number of financial corporations, banks and technical institutions in the District whose services would make it easy for developing entrepreneurship in the district.
(iv) Since the DIC, Pudukkottai is a co-ordinating agency linking the potential entrepreneurs with financial agencies, the various Central and State Boards and with marketing agencies, the DIC is the lynch-pin of small scale industrial development in initiating and promoting the growth of entrepreneurship in the district.

In this district, small scale industries like those manufacturing food products, engineering, chemicals, timber and other manufacturing units have been prominent and commonly prevalent. So, a section of such units registered with the DIC, Pudukkottai has been chosen for the study.

1.12. Reference Period

The investigation covers the period of five years from 1985-86 to 1989-90. The rationale behind the choice of this period was the fact that the Pudukkottai District was formed in 1974 and the District Industries Centre (DIC) was established in 1978. That is the time gap between the inception of the district and its DIC and the first year of
the study period was nearly ten years. This ten year period must have been sufficient for the DIC to formulate its programmes of assistance and for the entrepreneurs to establish themselves in the district. Such time gap is essential for entrepreneurship development. Hence, allowing the first ten years as a gestation period for inception and growth, the next five year period was taken as the period of assessment for the purposes of this study.

1.13. Field Work and Collection of Data

Field work for this study was carried out by the researcher himself. It was conducted during the period from October 1989 to July 1990 covering a period of ten months.

The process of data collection was carried out at four levels. First of all, the DIC of Pudukkottai was approached for data with regard to the number of registered units, block-wise, Taluk-wise, product-wise, classification of units, and the subsidies and incentives, and other forms of assistance given to the units. The SIDCO and SIPCOT
were contacted for gathering data regarding infrastructure facilities and about marketing, raw-material and other forms of assistance. The financial institutions like TIIC and commercial banks especially the Lead Bank of Pudukkottai (Indian Overseas Bank, Pudukkottai) was approached for collecting relevant data with regard to the financial assistance rendered to the SSI entrepreneurs in the study area.

Secondly, the trade associations of SSI entrepreneurs were approached and data were collected regarding the financial, raw-material, marketing and other problems of the SSI units.

Thirdly, the constructed interview schedule was taken individually to every one of the 200 manufacturing small scale entrepreneurs for gathering their responses. The entrepreneurs were briefed on the purpose and significance of the study and of the items of response to be registered on the interview schedule. The items in the interview schedule were read out and explained and the responses were carefully recorded by the researcher
himself. The completed interview schedule was checked and edited. The omissions and commissions were rectified by revisits to the field and by correspondence. All the responses thus collected became the primary data for analysis.

Finally, the information relating to entrepreneurship in SSI units from secondary sources was collected in order that this information would elucidate and serve as a perspective to the data already collected from the entrepreneurs and supporting institutions.

1.14. Data Processing

The data were edited by assigning a code number for each response. A master table was constructed for further processing. With the help of the master table, data were transcribed in transcription cards which were used for preparing the classification of tables for further analysis.

1.15. Measurement of Variables and Construction of Scale

The main theme of this study is the growth
of entrepreneurship in the small scale industrial sector. The Least Square Method of Correlation (Statistical tool) was employed to forecast the growth in number of SSI units in the district in 1995 on the basis of secondary data collected relating to years from 1974 to 1990 and the number of units in each year. Karl Pearson's Product Moment Correlation technique was employed to find out the correlation between the number of persons employed and the growth in number of SSI units. 't' test was also applied to find out whether there was significant correlation co-efficient between the number of persons employed and the number of SSI units in the district.

Statistical tools such as Analysis of Variance, chi-square test and scaling technique were also used for measuring the variables. There are two types of variables in the study viz., dependent and independent variables.

The dependent variable of the study is 'growth of entrepreneurship'. This was measured through a 'growth Scale'. The scale has been based on a
scoring scheme constructed with ten components - such as investment in fixed capital, investment in working capital, consumption of raw-materials, production capacity utilisation, value of production, value of sales, profits earned, subsidies and incentives enjoyed, employment generation, and diversification of products and product lines. The scale is similar to the one developed in the unpublished doctoral thesis 'Growth of Entrepreneurship in Small Scale Industry - An Empirical study of Madurai Region' submitted by Sounthara Pandian, C., to the Madurai Kamaraj University, Madurai, in 1991.

The independent variables which influence the dependent variable of the study are the following:

(i) Social/community group of the entrepreneurs;

(ii) Age group of the entrepreneurs;

(iii) Educational level of the entrepreneurs;

(iv) Previous industrial/managerial experience of the entrepreneurs;

(v) Membership in trade associations;

(vi) Impact of subsidies and incentives;
(vii) Level of production capacity utilisation;
(viii) Marketing of the product and responding to competition;
(ix) Availability of skilled labour,
(x) Locational factors;
(xi) Types of organisational structure;
(xii) Source of getting ideas for establishing the units;
(xiii) Period of operational existence of the units;
(xiv) Developmental plans for the units; and
(xv) Price fixation of the product.

1.16. Framework of Analysis

The level of growth of entrepreneurship in the small scale industrial sector was measured by using scaling technique called 'Growth Scale' constructed on the basis of ten components of growth such as investment in fixed capital, investment in working capital, consumption of raw-materials, production capacity utilisation, value of production, value of sales, profits earned, subsidies and incentives enjoyed, employment
generation and diversification of products and product lines.

The total scores allotted for the construction of the growth scale is 100. These 100 scores are equally distributed among the ten components. Since the significance of the components is not varying a uniform scoring scheme has been employed.

After analysing the level of growth of entrepreneurship in sample SSI units, the variation in growth of SSI units in low, medium and high level of growth of units based on scores allotted to each of the three levels, has been measured. The mean, standard deviation and co-efficient of variation have been computed for the scores, to identify and measure the variation in the size of growth of entrepreneurship.

Fifteen factors influencing the growth of entrepreneurship in the small scale industrial sector were identified. The influence of these independent variables (factors influencing the growth of entrepreneurship) on the dependent variable (growth of entrepreneurship) has been
analysed with the help of Chi-square tests.

1.17. Chapter Design

The revelations of the study are presented in seven chapters:

The First Chapter presents all the necessary preliminary information about the research work. The statement of the problem, review of literature, objectives and scope of the study, methodology and tools employed, mode of sampling, the choice of the title and study area, selection and method of data collection and the mode of data analysis employed and scheme of the report are briefly setforth in this chapter.

The Second Chapter takes up an overall discussion of entrepreneurship with special reference to the SSI sector. The historical evolution of the concept of entrepreneurship is traced and the pattern of Indian entrepreneurship discussed from a historical perspective. The significance of the factors that motivate entrepreneurship in the SSI sector are also elucidated
in this chapter.

The Third Chapter gives an account of the general background of the study area with focus on factors relating to its industrial potential. It also discusses the background of the large and medium scale industries in the study area. The focus gradually enlarges on to the small scale sector in the district with specific discussion of the Industrial Estates in the district. The problems besetting the SSI units are also hinted at.

The Fourth Chapter discusses the role and functions of the institutions and organisations meant for the promotion and development of entrepreneurship in SSI units. The institutions have been classified under two heads - the financial and the service institutions. The nature and extent of assistance rendered by such institutions at the National, State and District levels have been presented.

The Fifth Chapter is analytical in nature. This chapter focusses attention on identifying the ten components of growth and on measuring the growth
of entrepreneurship in the sample SSI units in this study are individually as a result of each of the ten components identified. Using the Growth Scale models, the quantum of growth and variation in level of growth of entrepreneurship are analysed.

Chapter Six is also analytical. In this chapter, fifteen factors influencing the growth of entrepreneurship in the SSI sector in the study area have been identified. An attempt has been made to find out whether there is a significant association between these factors and the entrepreneurial growth.

The Last Chapter recapitulates the significance of the entrepreneurship in SSI sector. It also presents a condensed overview of the preceding chapters, gathering together the various arguments and the pieces of evidence. It enlists the significant findings of the research investigation. This chapter further highlights problems faced by the entrepreneurs in the study area. Recommendations have been made for achieving higher degree of growth in the light of the problems identified and discussed. Finally, it makes suggestions for further avenues of research in the area.