CHAPTER VII
FINDINGS AND CONCLUSION

An Overview

Entrepreneurship is best understood as a symbiosis of economic variables, subjective variables, psychological and sociological and miscellaneous variables which can be subsumed under a random variable. It is not a mythical combination of unusual qualities possessed by entrepreneur. It bears a close parallel to the concept of intelligence in educational psychology which is conditioned by nature and environment. For quite some time entrepreneurship was considered apart from economic correlates. That the economic structure, either in the way of influence of sales in marketing or working capital in production is an indispensable part of entrepreneurship is gradually being recognised with burgeoning, 'Entrepreneurial growth and development' schemes for small scale industries.
The small scale industrial sector is envisaged by the Government as a kind of micro industrial system that would take care of small geographical segments in order to exploit local resources for industrial production which would increase employment potential, promote economic growth of the community, and raise the standard of living of the people in the locality where the SSI units are established. The SSI sector is planned to be an effective means for the socio-economic transformation of a society. The main objective is to better the economic resources and strength of communities particularly in a backward area like Pudukkottai District.

The Pudukkottai District since its inception had been backward both agriculturally and industrially with scanty employment potential for the educated, less educated and uneducated sections. Hence, the promotion of SSI units in the District through promotional agencies like DIC, SIDCO, SIPCOT, TIIC and commercial banks was a boon both to the entrepreneurs in the District and society at large.

In such a context, the study of the growth of entrepreneurship in small scale industries was
significant because not only will such a study measure and assess the growth of SSI entrepreneurship but will also serve as a comment on the impact of entrepreneurial growth on the socio-economic condition of the study area.

The growth of SSI entrepreneurship in Pudukkottai District was undertaken to be studied through a period of 5 years from 1985-86 to 1989-90. Nearly one decade was allowed since the inception of the District (1974) as a margin period for the SSI entrepreneurship to gain ground in the District. Moreover, the District had its DIC established in 1978. Roughly speaking the seven year gap between the inception of the DIC and beginning of the study period may be taken as a gestation period for SSI entrepreneurial activities to grow roots in the District. Hence, the period of 5 years from 1985-86 to 1989-90 was taken for an indepth study and analysis.

The study covered only the units in Pudukkottai District which have been registered with the DIC in Pudukkottai. The focus was on manufacturing units
which were classified into five dominant groups - food products, engineering, chemicals, timber and other manufacturing units.

The main objective of the study was to measure the growth of entrepreneurship in the SSI sector in Pudukkottai District and to identify the factors that have contributed to entrepreneurial growth and also problems hindering the growth of entrepreneurship in small scale industries in the study area.

The present work is descriptive and analytical in nature based on survey and empirical observation. The primary data were collected from an initial survey of the entrepreneurial field in the District and the records of the selected SSI units and of financial and service institutions. A tentative interview schedule was prepared after a detailed discussion with the officials relating to SSI units, academic experts and the research supervisor and the same was administered to 20 entrepreneurs. In the light of the responses and suggestions received, a duly validated interview schedule was prepared and administered to a sample of 200 entrepreneurs, who
were selected on a proportionate random sampling method. The sample made up 10% of the universe of the study. The samples were representative of the five major groups of SSI units in the District and care was taken to select the samples in such a way that the five dominant groups were adequately represented by the samples.

Data from primary sources, related to literature and similar research investigations and the interview schedule were the major tools employed. Adequate statistical tools were also employed to analyse the data and arrive at the findings.

The report of the study has been presented in seven chapters.

The present study focussed on Pudukkottai District, an area backward in all respects, in order that the SSI Sector's growth in the area could be studied against the perspective of its efficacy to tackle the problem of unemployment and for economic growth. The study of entrepreneurship in the sector, especially against the background of the financial
and service institutions in the District is important for measuring the growth of entrepreneurship in SSI units in the study area.

The study was given a direction and purpose by an analysis and evolution of related research and published works. The research study had the objectives of measuring the growth of entrepreneurship in the SSI sector in the study area between 1985-86 to 1989-90, the level of growth of entrepreneurship in SSI units and to examine the factors that have contributed to entrepreneurial development in the study area. It further attempted to identify the problems hindering the growth of entrepreneurship and also measures to counter the constraints. Five dominant groups of SSI units registered with DIC of Pudukkottai were taken for survey and samples representing the five groups of industries were chosen on proportionate random sampling method in such a way that 10% of the universe was represented in the samples. Data were collected, analysed and interpreted applying appropriate statistical tools.

For a better comprehension of the growth of
entrepreneurship in SSI units in Pudukkottai District, the general industrial profile of the District was given with main focus on the SSI units and marginal focus on medium and large scale industries. The infrastructural facilities available to small, medium and large scale industries were surveyed and the growth of these industries in the study period has been traced. The trends in the growth of SSI units and the significant relationship between the number of units and the number of persons employed were also undertaken for study. The survey of the industrial profile revealed that the scope for the growth of medium and large scale industries was not promising but the scope for SSI entrepreneurial development was great. During such a study an attempt was also made to identify the problems faced by SSI entrepreneurs in the study area.

To provide a focus, the industrial survey of the study area, was placed against a historical entrepreneurial survey. The developing concept of entrepreneurship from the pre-independence period to the present decade through the post-independence
period in India was analysed with a view to studying the growth of entrepreneurship in SSI units under the patronage of governmental agencies and also to analysing the growth of entrepreneurship in the SSI sector in the study are against the background of the factors that influenced such growth.

The growth of entrepreneurship in SSI units was also examined against the background of the institutional support provided to all SSI sector. The assistance rendered by the IDBI, SIDBI, SISI, TIIC, DIC and commercial banks etc., with regard to term loans and working capital loans was also studied. The importance with regard to the subsidies and incentives offered by the DIC, TIIC, and other institutions was also taken up for study. Other types of assistances such as purchase of machinery, technical, consultancy and training were also analysed.

It was revealed that the overlapping of the institutions while rendering assistance to SSI entrepreneurs could be avoided. It was felt that the allocation of one type of assistance to one
institution would go a long way in maximizing the benefit of assistance rendered, in minimizing the expenditure, energy and time of the entrepreneurs and in keeping all records, registers and documents of entrepreneurial ventures up to date.

In order to measure the growth of SSI entrepreneurship in the study area, the researcher identified 10 components of growth such as:

(i) Investment in fixed capital;
(ii) Investment in working capital;
(iii) Consumption of raw-materials;
(iv) Production capacity utilisation;
(v) Value of Production;
(vi) Value of sales;
(vii) Profits earned;
(viii) Subsidies and Incentives enjoyed;
(ix) Employment Generation; and
(x) Diversification of products and product lines.

An analysis of the contribution of the above factors to the growth of entrepreneurship in small scale industries in the study area was undertaken. The rate of growth among the sample units in relation
to all these 10 factors was computed and the figures arrived at were converted into scores using a 'Growth Scale' technique. The sample units were classified into low, medium and high level growth units based on their scores. Units with a score of 0 to 30 were classified as low growth units those with 30 to 60 scores as medium-growth units and those with a score of above 60 were classified as high-growth units. It was found that there were only 8 (4%) high-growth units, 26 (13%) medium-growth units and 126 (63%) low-growth units in the sample. The variations in growth were also analysed using statistical tools like mean, standard deviation and co-efficient of variation.

It was observed that the high growth units showed greater consistency and stability in growth from the medium and low growth units.

After measuring the growth of entrepreneurship in the SSI sector in the study area, the researcher took 15 identified factors of measurable importance and studied their impact on entrepreneurial growth using chi-square tests. These factors were classified
as personal, environmental, and organisational factors.

Personal Factors

(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;

Environmental Factors

(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;

Organisational Factors

(x) Locational factors;
(xi) Types of the organisational structure of the units;
(xii) Source of getting ideas for establishing the units;
(xiii) Period of emergence of the units;
(xiv) Developmental plans of units; and
(xv) Price fixation policy of product in the units.

It was found that six of these factors have significant association with entrepreneurial growth. They are:

(i) Educational level of the entrepreneurs;
(ii) Previous industrial/managerial experience of the entrepreneurs;
(iii) Membership in Trade Associations;
(iv) Level of Production capacity utilisation;
(v) marketing of the product and responding to competition; and
(vi) Developmental plans of industry

The remaining nine factors were found to have no association with entrepreneurial growth in SSI units. The researcher then proceeded to examine the probable causes for the association or absence of association of these factors with the entrepreneurial growth in the SSI sector in the study area.
In the light of such a study and analysis, the researcher has tried to pinpoint the findings of the study and their implications.

7.2. Findings

Pudukkottai is one of the industrially 'backward' Districts in Tamilnadu, but it has the potential for industrial growth as it is well-connected by road and rail to important industrial centres like Madurai, Thanjavur and Tiruchirapalli. The District also has a well-developed system of postal, telegraphic and telephone communication.

There is also a plentiful supply of educated and trained personnel. In fact, there is an acute incidence of unemployment/underemployment and thus a crying need for EDPs in the District.

During the study period from 1985-86 to 1989-90, 54 EDPs were conducted in the District. The maximum number of 14 (26%) such programmes were conducted in 1986-87. It fell to a minimum of (15%) in 1987-88 and 1988-89 and rose to 12 (22%) in 1989-90. This fluctuating trend is not encouraging.
It is also discouraging to note that the number of large and medium scale industries in the District rose only by 5 from 28 in 1985-86 to 33 in 1988-89. During 89-90, the number has remained static at 33. This shows the 12 EDP's conducted in 1989-90 have failed to evoke any concrete response in the form of new units springing up. There was a similar stagnation in 1987-88 too.

The year 1986-87 has been the most productive in terms of establishment of new units. 3 new large and medium scale industries were started during the year - one each in the field of basic metal, electrical apparatus and metal products. A new unit was added in the rubber and plastic products sector in 1988-89. The rest of the spheres like cotton textiles, chemicals, food, paper products etc., have remained static. This shows that there is a sort of stagnation that has to be overcome. It is also sad to noted that no new areas for setting up units have been explored during the study period; of course sustaining established units is a laudable and imperative duty, but that cannot be an excuse for
any lassitude in the matter of motivating new ventures.

This however, is in sharp contrast to the earlier period from 1979-80 to 1984-85, when significant progress was made, the number of large and medium scale units increasing from 8 in 1979 to 21 in 1984. In 1983 alone, 8 new units were started involving a capital investment of Rs.1237.65 lakhs and generating employment for 811 persons. In 1985, 5 new units were started with a capital outlay of Rs.977.93 lakhs generating employment for 582 persons. In contrast the subsequent years have shown a decline. However, the proportion of employment generation per unit was larger in both the years and in 1987, the capital outlay per unit was also comparatively high. The fact remains that nearly 79% of the large/medium scale industries were started before 1986 and only 21% of the units were started during the study period. This viewed in the context of unutilised resources like developed plots, worksheds etc., in the SIPCOT and the SIDCO industrial estates cries out for some active steps
to reactivate the process of EDP's in the District.

The taluk-wise distribution of large and medium scale industries too shows wide variations - Kulathur and Pudukkottai account for the lion's share of the units. Avudayarkoil draws a blank, Arantangi, Kandarvakottai and Thirumayam claim 2 each and Alangudi has but one. This, of course, is due to the location of the SIPCOT and SIDCO industrial estates in Pudukkottai Taluk. But there is no reason why EDP's should concentrate on those two mentioned taluks. A true EDP should aim at converting every home into an industry, or at least every village should have an industry.

The same imbalance is seen in the block-wise distribution of large and medium scale industrial units. Out of the 13 blocks in the District, 5 have drawn a blank, 2 have one unit each, the other 4 have two each. Two Blocks of Pudukkottai and Viralimalai have with them 23 out of 33 units started so far (1989-90).

Over the years, the Government at the centre
and in the State have been focusing greater attention on SSI units realising their employment potential and suitability to Indian economic conditions. This has been reflected in the increasing number of SSI units in India during the study period. The number of units which stood at 13.55 lakhs in 1985-86 rose to 18.27 lakhs in 1989-90. The number of persons employed in this sector too rose from 96 lakhs in 1985-86 to 119.60 lakhs in 1989-90. The value of production and exports also showed a steady increase during the study period.

In Tamilnadu too, this growth was clearly visible. From the year 1983-84 to 1987-88, the share of Tamilnadu in the number of new SSI units, rose by 1.5%.

At the District level, however the annual growth of SSI sector in terms of number of units, capital outlay and employment generation has been fluctuating from as high as 374 units in 1985 to 252 units in 1990. The direct employment generation in 1985 was significant with a figure of 1913 persons. With regard to capital outlay, the peak was in 1988
when Rs.285.20 lakhs were pumped into the SSI sector, using the technique of Least Squares Method of correlation it was found that the growth rate in the SSI sector in the study area was 211.67% by 1985 and 110% by 1990 from the base year 1984. From this, it could be forecast that the growth rate would be 144.17% by 1995 with 292 likely units. Further, the analysis of data through Karl Pearson's Product Moment Correlation and 't' test, reveals that there was a significant correlation between the number of units and employment potential in the District.

The SSI units in the study area are engaged in a wide variety of activities. There are manufacturing, fabricating, processing, assembling and service units catering to agriculture, industry, transport and consumer needs.

The Taluk-wise distribution of SSI units showed a concentration of units in Pudukkottai (487) and in Kulathur taluks (183) though in the last two years of the study period, Aranthangi taluk has claimed a larger number of units (94) than Kulathur (65). Thus, in the last two years, an attempt has been made
to give the neglected taluks a larger share. It is noteworthy, however, that the Kandarvakottai taluk has made very little growth in establishing SSI units (21) over the study period.

Block-wise too, Pudukkottai claims the lion's share of 487 units out of the 1236 units started during the study period. Again the Kandarvakottai block has the poorest share of 21 units.

The District also has 9 Industrial Co-operative Societies (vide Table 2.14), and 789 Handicraft units.

The DIC, Pudukkottai has launched various forms of assistance under the Rural Industries Project (RIP), Rural Artisan Training Programme (RAP), 20 Point Programme, Self Employment Programme for the Educated Unemployed Youth (SEEUY) and various other Governmental schemes. Inspite of these, some SSI units have fallen sick from 1988-89 to 1990-91, 32 units had complained of sickness. Of them, 9 were identified as sick units by the DIC and a rehabilitation assistance of Rs.1,61,400 was sanctioned to
them. Among large and medium scale industries too, 4 units have been declared sick between 1989 and 1990.

The achievements of the banking sector in the District in the implementation of the Annual Credit Plan during the study period shows how the industries sector has claimed amounts lower than those allotted for agricultural sector. In real terms, the industries sector has claimed more than the service sector though in terms of percentage of achievement, of target, the services sector has claimed a better result than the industries sector. The percentage of achievement was highest in 1987 (99%) and least in 1988 (58%) in the industrial sector. This shows that in 1988 and 1990 targeted amount have remained unrealised to the industrial sector.

The TIIC has been assisting the SSI sector in Tamilnadu. Its active role in financing the SSI sector is revealed in the steadily maintained tempo of financial assistance. The amount sanctioned by the TIIC to the SSI sector rose from Rs.92.39 lakhs in 1985-86 to Rs.135.06 lakhs in 1988-89; but fell marginally to Rs.124.68 lakhs in 1989-90. The percentage of assistance to sanctions was however
fairly high ranging between 85% in 1989-90 to 93% in 1985-86.

The review of the District-wise performance of the TIIC shows that Pudukkottai is yet to receive its due share of the assistance channelised through TIIC. Among the backward Districts, Pudukkottai's share of TIIC's assistance has been comparatively on the decrease, though in absolute terms the quantum of assistance has been fluctuating. Pudukkottai stood third in terms of the number of units receiving TIIC's assistance in 1985-86 and 1986-87. But during the same period, it was fourth and sixth respectively in the amount of assistance received. In 1987-88, it became fourth among the twelve backward Districts in the State in terms of number of units receiving financial assistance and seventh in terms of quantum of assistance. In 1989-90, Pudukkottai became the seventh district among the twelve in terms of number of units and eighth in terms of quantum of assistance. Thus, the share of Pudukkottai District in TIIC's assistance has been decreasing during the study period when compared to the assistance granted to other backward Districts.
However, in the District level, the share of the SSI's in TIIC's assistance has been on the increase. TIIC has been assisting mainly to SSI units and SRTO's. The amount sanctioned and disbursed to the SSI sector has been more than those sanctioned to SRTO's in the years from 1987-88 to 1989-90. The disbursements to SSI sector rose from Rs.50.73 lakhs in 1985-86 to Rs.139.44 lakhs in 1989-90, a 174.87% increase which is encouraging indeed. The percentage of disbursements to sanctions also shows how the SSIs have maintained a better growth than the SRTO's. This shows how the main thrust of the TIIC, Pudukkottai is on the SSI sector.

The quantum of loans outstanding with the SSI units also shows that there is an increasing trend, but for a minor fall in 1987-88. This compared with the loans outstanding with other than SSI units shows, how in 1989-90 the SSI's have an amount outstanding that is equal to more than 6½ times of that in other units. This speaks for the quantum of assistance with a fairly convenient repayment time pumped into the SSI sector during the study period.
In Pudukkottai District alone, 40 industrial sheds had been constructed by SIDCO since 1989 at three centres - Mullur, Mathur and Vallanur. Of these 35 sheds had been already allotted. There were also 37 developed plots all of which had been allotted. In addition, Tiny sheds were constructed at 4 centres - Pudukkottai, Thirumayam, Malaiyur and Kandarvakottai. An amount of Rs.53,700 had been spent under this head between 1979 to 1989.

The SIDCO had distributed raw-materials worth Rs.3895.81 crores to SSI units in the State during the period 1987-88 to 1989-90. In Pudukkottai District alone, raw-material assistance was to the tune of Rs.471.69 lakhs during the study period. The marketing assistance provided by SIDCO to SSI units was to the extent of Rs.4779.11 lakhs with 1449 units during the study period. It also provided subsidies and incentives to the SSI sector.

In Pudukkottai District, SIPCOT had spent Rs.182.52 lakhs on development of plots with infrastructure facilities as on 1989-90 (Vide Table 4.8). During the same period, 83 plots have been developed over an area of 412 acres.
The DIC, Pudukkottai serves as an umbrella organisation and provides many types of assistance to SSI entrepreneurs. They include registration, subsidies and incentives and rehabilitation of sick SSI units. A total of 1234 SSI units had been registered by the DIC during the study period. The capital investment stood at Rs.1075.36 lakhs and employment generation at 6468 persons.

Under the Single Window Concept, and Industrial Clearance Committee has been functioning since 1974. The committee has met 70 times and disposed of 291 applications out of the 345 applications received during the study period. It is significant that the percentage of disposals to applications received has been 100% during the last 2 years of study and nearly 90% during 1986-89 and 1987-88. There are also five trade associations in the District which contribute to entrepreneurial growth.

Among the 10 factors that were identified to measure entrepreneurial growth in the SSI sector it is found that there was a steady growth in average fixed capital investment in the sample units during
the study period. The growth rate was maximum in the engineering units (16.15%) followed by food products (15.13%). The overall annual growth rate for all groups of industries was 13.89%. This is because the financing agencies have maintained a steady flow of funds to the SSI units.

The same tempo is reflected in the average working capital investment in the sample units, the engineering and food-products industries registering the growth rate of 20.40% and 16.5% respectively. The overall annual growth rate is 13.80%.

The average value of raw-materials consumed also presents a similar picture with the engineering units recording a growth rate of 12.05% and food products units of 11.48%. The overall annual growth rate was 11.01%.

The overall annual growth rate in production capacity utilisation was at 13%. It is significant that the other manufacturing units have made greater progress in this regard at 13.60%.
Problems in marketing, inadequacy of working capital are some of the reasons given by respondents to account for the unutilised production capacity in the sample units.

In the average value of production too, the engineering industries are in the forefront with a growth rate of 17.36% followed by the other manufacturing units with 14.01%. The overall annual growth rate among the sample units was 14.43%.

The very same trend is reflected with minor variations in average profits earned. The overall annual growth rate for all the sample units was 11.65%. But all the groups of industries except timber and food products recorded a growth rate below the annual average recorded by all the units. This is due to marketing problems arising out of a multiplicity of identical units in the study area.

In the average amount of subsidies and incentives availed, however, the engineering industries recorded a growth rate of 10.48% followed by timber units at 10%. The overall annual growth rate registered was 8.47%. This shows the financial agencies like TIIC, DIC
have been quite liberal with the subsidies and incentives to the engineering sector.

In employment generation, the engineering units are in the forefront with a growth rate of 14% followed by food products units (12%). The overall annual growth rate among the sample units is 11.43%.

In diversification of products too, the engineering units stand first with a growth rate of 15% followed by chemicals with 13.33%. The overall annual growth rate is recorded at 12.31%. Out of the 60 sample units in engineering, only 14 had made attempts at diversification during the study period. This shows that very little attempts were made at diversification. This viewed in the light of the low profitability and value of sales shows a lack of resilience on the part of the local entrepreneurs in the engineering field.

The codification and analysis of the data using 'Growth Scale' technique also ratified the findings recorded above. The engineering units stood first in the codification of scores relating to 6 of the
10 components of growth followed by food products industries.

Among the 10 components of growth, the maximum overall annual growth among the sample units was registered in the average value of production at 14.3% followed by average investment in fixed capital at 13.84% and average working capital at 13.80%. The least increase was recorded in average value of subsidies and incentives availed at 8.47%. The overall average annual growth rate of increase in terms of all the ten components for all the sample units in the study area was 11.25%.

The significant aspect regarding growth rate is that all the ten components have registered a positive growth rate. The average annual growth rate of 11.25% along with the individual rate of growth for the ten components shows that though the percentage-wise growth rate does not show a rapid growth trend, there is steady increase in growth rate.

Then a study of component-wise growth in terms of 'input and output' was made. For this purpose,
the following components were treated as 'input' components:

(i) Average investment in fixed capital (13.89%)
(ii) Average investment in working capital (13.80%)
(iii) Average production capacity utilisation (12.97%)
(iv) Average value of consumption of raw-materials (11.01%)
(v) Average value of subsidies and incentives utilised by the units (8.47%).

The following components were considered 'output' components:

(vi) Average value of production (14.43%)
(vii) Average diversification of products (12.31%)
(viii) Average value of profit earned (11.65%)
(ix) Average employment generation (11.43%)
(x) Average value of sales (11.04%)

The overall average annual growth rate increase in terms of 'input' components was 12.03%. The overall average annual growth rate increase in terms of 'output' components was 12.17%. Comparing the input and output data, it was found that the
percentage of increase with regard to input components was 1.16%. Though, this indicates a positive growth rate, it can not be treated as a significant growth rate, since the growth rate relation of output to input is only marginal.

An attempt was also made to analyse the industry-wise increase in overall annual average growth rate in terms of all the ten components to find out in which group of industry, the growth was prominent. The maximum overall average annual growth of 14.06% was registered in the engineering units. This was followed by food products (12.49%), chemicals (11.45%), timber (10.97%) and other manufacturing units (10.52%). The analysis shows that the engineering units showed a dominant growth for two reasons. One is that the financial assistance extended was more towards the engineering SSI units. Secondly, engineering group products have a steady market because large and medium scale industries like B.H.E.L. Trichirapalli and T.V.S. Pudukkottai provided marketing potential for engineering industry products for their own output.

A study of an industry-wise overall average
annual growth rate in terms of all the ten components was made with the help of output and input components of growth. The figures are presented below:

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Output (%)</th>
<th>Input (%)</th>
<th>Increase/ Decrease (%)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Other manufacturing units</td>
<td>11.79</td>
<td>9.26</td>
<td>2.53</td>
<td>1</td>
</tr>
<tr>
<td>(ii) Chemicals</td>
<td>11.75</td>
<td>11.16</td>
<td>0.59</td>
<td>2</td>
</tr>
<tr>
<td>(iii) Engineering</td>
<td>13.64</td>
<td>11.48</td>
<td>-0.84</td>
<td>3</td>
</tr>
<tr>
<td>(iv) Timber</td>
<td>10.46</td>
<td>11.48</td>
<td>-1.02</td>
<td>4</td>
</tr>
<tr>
<td>(v) Food Products</td>
<td>11.88</td>
<td>13.10</td>
<td>-1.22</td>
<td>5</td>
</tr>
</tbody>
</table>

It was evident from the study that there was increase in terms of output and input in the case of other manufacturing units (2.53%) and chemical units (0.59%). In the case of engineering, timber and food products, there was a notable decrease in terms of output and input (0.84%, -1.02% and 1.22%).

On the basis of all the ten components, the study revealed that the engineering industry registered an overall average annual growth rate of
14.06% but when the same industry group (in terms of five components each) was studied in terms of output to input, the study revealed that the engineering units recorded a decrease in growth by 0.84%. That is the ratio between input and output is such that the output is not greater than the input. For a significant growth, there should be significant increase in the output over to input.

The aggregate score value of the ten components of growth for each of the sample SSI units led to a classification of the sample units into low, medium and high growth units. It was revealed that out of the 200 sample units only 8 (4%) units had attained a fairly high level of growth. 26 (13%) units reached medium level growth while 166 (83%) units remained at a low level of growth. This shows that the supporting agencies for EDP have an up-hill task ahead of them. The very large percentage of units with low level of growth is a matter for concern.

When the scores of high, medium and low-level growth units were subjected to statistical analysis, it was found that the high growth units made steady,
uniform, and consistent growth during the study period. This shows that the units that have registered high level growth are functioning with a definite plan and programme while others lack a sense of direction. Various factors ranging from financial instability, to market fluctuations and labour unrest are responsible for inconsistency, instability and low level of growth in the sample units.

Among the 15 factors that were identified as contributing to entrepreneurial growth and about which null hypotheses had been formulated in relation to growth, the social group to which the entrepreneur belongs has no direct bearing on the growth of entrepreneurship in SSI units. A chi-square test revealed that the community factor had no influence on entrepreneurial development. The units owned by SC/ST entrepreneurs however seem to be at a disadvantage. This shows that some special EDP's are called for atleast in the case of SC/ST entrepreneurs.

Similarly, it was found that the age group of the entrepreneurs too, has no association with entrepreneurial development.
However, the educational level of the entrepreneurs had a definite bearing on entrepreneurial growth. None of the units started by uneducated entrepreneurs had registered medium/high level of growth.

Similarly the previous industrial experience of the entrepreneurs was also found to have definite influence on entrepreneurial growth. Among the 118 units in the sample owned by entrepreneurs with no previous experience/entrepreneurs with less than 10 years of experience, only 2 had reached a high level of growth and only 10 had attained a medium level of growth.

The membership in trade associations was also found to have a direct effect on growth of entrepreneurship. Out of the 8 units that had attained a high level of growth, 5 were run by entrepreneurs who were members of their trade associations. Similarly, among the 26 units in the sample that had achieved a medium level of growth, 23 were owned by such entrepreneurs who were members of trade associations.
However, the various kinds of subsidies and incentives offered by the Government did not appear to have much influence on entrepreneurial growth.

The level of production-capacity-utilisation was also found to have a direct influence on entrepreneurial growth, though all the 18 units which had registered 100% capacity utilisation had remained at a low growth level. However, the largest number of high growth units was among those units which had a capacity utilisation from 50% to 99%.

Similarly, market responsiveness was found to be a key factor in entrepreneurial development. The highest level of growth was attained by units that faced severe competition and responded to them.

Skilled labour is normally vital for the success of any industrial undertaking. But the analysis revealed the availability of skilled labour alone could not contribute to entrepreneurial growth. However, skilled labour may not be numerically significant but their essentiality for running industries can never be underestimated.
It is found that locational factors too, had little to do with entrepreneurial growth. This may sound curious but may be industrial profile of the District is such that the entrepreneur has little to choose with regard to location.

The type of organisational structure and pattern of ownership of the sample units were also found to have no association with the growth of entrepreneurship.

The same was the case with the source of ideas for the setting of the units and the period of operational existence of the units. They did not have any significant association with entrepreneurial development. However, perspective plans of development had much to do with entrepreneurial growth. Nearly 88% of the units with high growth level had plans for expansion/modernisation. 17 out of 26 units that had registered a medium growth had similar plans. It is encouraging to note that nearly 75% of the sample units had plans for expansion, modernisation and diversification. A few units had plans for all these, but for purposes
of tabular presentation and statistical analysis, they have been included in one or the other of the slots, depending on the ranking of the factors given by the respondents.

The way in which the product was priced also did not have any association on entrepreneurial growth.

7.3. Problems and Recommendations

The investigation threw light on certain problems that lie in the way of entrepreneurial growth. They are discussed below.

(i) The major problem faced by the entrepreneurs of the SSI sector, relates to inadequacy of working capital assistance. The rigorous traditional norms followed by the commercial banks in providing working capital assistance were found to exercise an adverse effect on SSI entrepreneurship. The procedural formalities and the delay in disbursement of working capital consequent on them appear to have discouraged SSI entrepreneurs. Further, from the statements of the
sample entrepreneurs, it was identified that the rigid insistence of the commercial banks on security against working capital loan offered was another significant discouraging factor.

Regarding the problem of inadequacy of working capital assistance, the commercial banks could relax the terms and conditions especially those insisting on the security. Working capital assistance may be rendered taking into consideration, the viability and feasibility of the project undertaken. The commercial banks might also make provision for extending assistance, atleast marginally towards reinvestment loans at phased stages. The may also introduce considerable financial concessions to entrepreneurs who are regular and prompt in repayment of the working capital loan. These measures would go a long way in attracting more number of potential entrepreneurs and would pave the way for the growth of entrepreneurship.

(ii) The second problem pertains to inadequacy of certain infrastructural facilities. While the
industrial plot and workshed have been adequately taken care of by the SIPCOT and SIDCO in the study area, supply of power and water has been posing great hardship to the SSI entrepreneurs. Inadequate supply of power, frequent shut down of power and lack of water resources hamper both the regular functioning of the units and growth of entrepreneurship in the study area.

Regarding power supply, power shortage is a state-wide problem, acute especially during summer. To augment the power supply, the DIC, which is rendering all forms of assistance, could install powerful generators in each industrial estate and thus ensure uninterrupted supply of power to entrepreneurs. The cost towards the installation and maintenance of such power generators could be met initially by the Government and it could be reimbursed by the units benefitted in easy instalments.

Regarding water supply, a place rich in underground water, not far away from the industrial estate could be identified by experts
in the field and a common mode of supplying water from such a source to all the units might be attempted. The system could be something like the common well system in agricultural areas with a dry climate.

(iii) Problems with regard to marketing of products is caused by various factors. The important factor that affects the marketing of SSI products is the production of same goods by many units in the study area which gears up competition to the highest pitch. This results in glutting the market with the same product. Consequently, the demand decreases and products move slowly, thus, affecting ultimately the financial resources of the entrepreneur. Further, if the quality of the product remains mediocre or poor, the demand for such product in the market will not be high.

With regard to the marketing problems, the following recommendations might be taken up for consideration.

While registering the SSI units care might be taken by the DIC not to encourage the
starting of many units bent on producing the same products for which the demand could not be that high in the market. The DIC might act as an authorised co-ordinating agency bringing the producing units and the market agents closer. The DIC might also announce concessional measures that would encourage the market agents to go in for the products from the registered SSI units. Moreover, the number of items in the reservation-items list may be increased by the Government in order to promote the marketability of SSI products. Measures could also be taken to ensure the quality of SSI products so that their appeal to the consumers will be greater. A separate agency for testing the quality of the SSI products might be set up so that sub-standard products are not allowed to reach the market. Further, a cell in the DIC might be opened for devising schemes for the SSI entrepreneurs for enhancing and promoting the quality of good produced.

(iv) Another important problem relates to inadequate availability of the required raw-materials.
Scarcity of raw-material and price fluctuations were the major causes for inadequate availability of raw-materials. Further, when a group of units concentrate on the production of the same or similar products, the demand for the necessary raw-material required increases. The increased demand for a particular kind of raw-material makes either the cost of the raw-material exorbitant or creates a situation where the raw-material becomes scarce. The abnormal cost or inadequate availability of raw-material affects the financial resources, and production capacity utilisation of the units and thus adversely affects the economic condition of the units and the growth of entrepreneurship.

Hence, the DIC, which is rendering assistance to entrepreneurs in obtaining scarce raw-materials like cement, iron and steel paraffin wax, fatty acid etc. should make a periodical assessment of the availability of raw-materials required by the units and ensure that such raw-materials are made available to the units in time. It could facilitate the
inflow of such raw-materials from other Districts/States through the other DIC's and other Government agencies like SIDCO and create raw-material banks for essential items and ensure a smooth and steady flow of essential raw-materials in time to enable units to continue the production process uninterrupted.

With regard to raw-materials, it should be mentioned that the study area should have its own raw-material depot for supply of raw-materials in Pudukkottai Town. At present its depot is functioning in Trichi. The raw-materials most in demand might be abundantly stored to forestall any inadequate availability or scarcity of raw-materials. The measure of encouraging new units that would utilise natural resources available in the study area may be adopted by the SIDCO in order to reduce the demand for scarce raw-materials.

(v) Other basic problems relate to lack of proper awareness on the part of the SSI entrepreneurs regarding the various kinds of subsidies
and incentives offered by the Government to the SSI sector, lack of leadership qualities, lack of managerial skill, lack of technical know-how and lack of training etc.

Well designed and systematic entrepreneurial development schemes, with participation of psychologists, economists, industrialists and bankers may assess entrepreneurship and may weed out the inefficient and reward leadership qualities in the burgeoning small scale industry in the study area. The DIC, SISI and other supporting agencies might organise EDP's and frequently and periodically hold 'Entrepreneurs Awareness Meets' with focus on every aspect in which the entrepreneurs lack competence of special importance, or intensive training programmes for developing managerial skills, technical know-how, and for imparting leadership qualities etc. Distributing printed leaflets in the regional language explaining the facilities available etc., among the entrepreneurs would also create an awareness among the entrepreneurs.
Another problem is with regard to the quality of entrepreneurship. The survey has shown that a sizeable portion of the sample entrepreneurs lack adequate knowledge of the trade and the business environment. That is, there is a lack of adequate entrepreneurial education and training relating to various factors like managerial skills, marketing potential, creative enterprises and long term vision with regard to financing, production, marketing and investment in fixed capital and working capital.

Efforts might be taken by the promoting organisations to impart the latest technical know-how to SSI entrepreneurs to areas which require an up-to-date knowledge of technical innovations relating to the respective industries.

Frequent training programmes aimed at improving management and marketing skills of entrepreneurs may be undertaken. Orientation of entrepreneurs towards long term industrial vision in terms of financing, production,
marketing and reinvestment may be undertaken by the service and technical institutions. Further, regular and periodic meetings of entrepreneurs and promoting agencies may be conducted in order to thrash out problems that crop up during the course of entrepreneurial activity.

(vii) Another important problem relates to the sickness of SSI units. Sickness among the SSI units in the study area has been caused mainly by mismanagement of funds, inadequate working capital and labour problems. Sickness not only affects the unit and the individual entrepreneur but also creates a discouraging climate among the entrepreneurs which in turn affects the numerical and qualitative growth of entrepreneurship.

It is suggested that the problem in respect of mismanagement of funds may be remedied by making the entrepreneurs concerned undergo an orientation cum training programme meant exclusively for developing the different
skills in prudent financial management required by the entrepreneurs.

As for the problem of inadequate working capital besides initial assistance, the financing agencies may provide supportive financial assistance to entrepreneurs, two or three years after starting the units. But another method that would involve entrepreneur and increase his responsibility would be to frame a provision in such way that every entrepreneur would deposit a certain amount of money with one of the financial agencies every month so that after completion of a stipulated number of years or achievement of a stipulated sum as deposit, the entrepreneur would be allowed to borrow from the agency on a marginal interest with necessary conditions governing prompt repayment in various easy instalments. It may be administered more or less like the provident fund of Government employees.

With regard to problems in labour management, the entrepreneurs may be exposed to
programmes arranged by the promoting agencies specially designed to educate the entrepreneurs in analysing the sources of labour unrest and subjects like industrial psychology communication strategies inter-personal relationship and the art of negotiations.

(viii) Another notable factor is that the potential entrepreneurs have not taken into account the available natural resources in the study area for entrepreneurial ventures. The ignorance of entrepreneurs regarding the entrepreneurial possibilities relating to the use of the coast line, the palm trees and the cashew farms abundant in the District, was a notable feature emerging from the study.

The promoting agencies may think on creative lines with regard to tapping the available resources in the study area for promoting entrepreneurship. Coir-based industries and industries, relating to palm products, may be suggested to potential entrepreneurs since the study area abounds in palm trees. Cashewnut
based industries may be encouraged in view of the fact that a large quantity of cashewnut is available in the District, especially in areas like Kandarvakottai and Adhanakottai. The coast line of Pudukkottai District may be used for salt production and for growing sea-fish industries.

(ix) Finally, another constraint faced by the SSI entrepreneurs in the study area is that they have to approach different promoting agencies for different forms of assistance with the results that they have to waste a lot of time and energy which if saved could be bestowed on efforts leading to the further growth and development of entrepreneurship in SSI units.

Assistance with regard to finance, raw-materials, marketing, subsidies and incentives, EDP's, orientation and training programmes, technical consultancy and quality testing facilities etc., may all be brought under a single nodal agency covering all the registered SSI units in the District. This will not only
save the time and energy but also help in prompt and systematic maintenance of all books, registers, records, documents and information with regard to every registered SSI venture, its growth and development.

The overall analyse of the study points to the fact that though there is a positive trend in the growth of entrepreneurship in the SSI sector, it is significant that the growth is only marginal. The promotional and supporting agencies and the entrepreneurs should purposefully come together to thrashout the problems and findout ways and means for significant pattern of growth. That is, if effective measures were undertaken, the output ratio could be made to become significantly greater than the input. Since the growth and development of SSI entrepreneurship, a sure means to improve and promote the economy of the backward area like Pudukkottai District, focus may be intensified not only on increasing the number of SSI units in the study area but also supervising and monitoring the efficient functioning of industries for the growth and
development of entrepreneurship in the SSI sector.

The course of the present study has touched upon a few areas each of which could be elaborated into separate investigations.

(i) A study of the courses for the existence of unregistered SSI units, then its nature and performance in relation to entrepreneurial development.

(ii) A study on the motivational factors relating to entrepreneurial development in the SSI sector;

(iii) A study of the causes for labour problems and management of Labour Relations in SSI units;

(iv) A study of the impact of Entrepreneurial Development programmes on the SSI Sector;

(v) A study on Institutional Assistance to Entrepreneurial Development in the SSI sector.

(vi) A study of availability of natural resources
and potential for the growth and Development of entrepreneurship in SSI units.

(vii) A study of correlation between subsidies and incentives enjoyed and performance achieved with regard to SSI entrepreneurship.

(viii) A comparative study of the growth of entrepreneurship in the SSI sector in relation to the medium and major industries; and

(ix) Problems and prospects of entrepreneurial growth in the SSI sector for nineties.

If research investigations in the areas mentioned above were undertaken in right earnest, their findings may throw further exploratory light on the growth of SSI entrepreneurship in the study area. Further, they might act as a stimulus to the SSI entrepreneurial growth in the study area, thus paving the way for remedying the economic and employment backwardness of the area. That is, such research enterprises, which go into the heart of the SSI
field, will have socio-economic relevance and through acquiring such relevance, they will open new vistas for an expanding growth of SSI entrepreneurship.