CHAPTER - VI
SUMMARY AND CONCLUSION

6.1 Introduction
The primary data collection on fifty small scale industrial units established in Tiruchirappalli Taluk of Tiruchirappalli district, registered with the Inspector of factories in the year 2000 & earlier and still functioning were taken for the study. The fifty sample industries have been classified into eleven categories of industries. These industries have both problems and prospects. Under the aegis of the analysis of the study, the researcher has ascertained the findings of the study.

6.2 Findings of the study
After a detailed analysis of the study, the investigator could arrive at the following findings:

- The growth of SSIs has been increased in the Tiruchirappalli district from 16155 units in 2000-01 to 21338 units in 2007-08, due to various government incentives. The average annual growth rate of number of SSI sector for the period 2000-01 to 2007-08 works out to be 4.20 per cent.

- The generation of employment by SSI has also been increased from 47940 in 2000-01 to 66820 at the end of March 2008. The average annual growth rate of employment in the SSI sector for the period 2000-2001 to 2007-08 works out to be five per cent.
The investment has risen from Rs. 20018.45 lakhs in 2000-01 to Rs. 2,02,618.20 lakhs at the end of March 2008, due to various schemes, incentives and modernization process. Investment and employment generation have exhibited a negative correlation. The correlation coefficient is - 0.95. The investment and employment of SSIs are moving in the opposite direction. But the employment generation is not proportional to the amount invested. It can be attributed that SSIs’ in the district are capital intensive. The amount of investment per SSI unit and investment per worker has increased during the study period.

In the beginning of 1970’s, there was only a single engineering unit functioning in the study area. Number of engineering units has been gradually increasing over the study period. After the advent of BHEL, SSIs have got more work orders. This is the major reason why the performance of SSIs has increased considerably in the study area. During the year 1991-2000, most of the SSI units had come into existence under the aegis of BHEL, because there were slew of work orders for BHEL from different parts of countries.

The survey revealed that all the fifty units were set up and managed by males. More partners are found in engineering units as compared to other categories of industries. This is mainly because of the huge investment and lucrative business.
• In the beginning, Sole proprietary concerns were numbered twenty six. Later twenty four units did follow partnership. Of which, majority of the engineering units followed the paradigm of partnership. This is mainly because of the huge investment, lack of co-operation among family members, old age problem and death of the proprietors and so on. Through the partnership, most of the small scale industries flourished a lot in the study area.

• It is observed that six engineering units are run by founders and rest of the fourteen units is run by partners. This gives positive opinion about the partnership. From the fifty SSI units, twenty eight units are operated by founders and nineteen units are run by partners (contribution of engineering units towards partnership is more because of huge investment). Two rice mill units are found to be sick because of the hectic competition and marketing problems faced by the entrepreneurs. One metal industry is run by a heir (hereditary occupation).

• Out of fifty SSI units, forty units have run in their own premises (contribution of engineering units towards own premises is more). This shows the capacity of engineering units. Six SSI units have functioned in rented premises and four units have functioned on leased (two rice mill units, one engineering unit and one crusher unit). This shows the optimistic view on the performance of SSIs in the study area.
• In the study, it is observed that most of the SSI units such as engineering units, rice mills, plastic industries, furniture industries, and saw mill are run in Factory buildings. Most of the crusher units are run in trading centres. Electrical & Electronic industries and auto-garage are functioned in service centres.

• Of the fifty SSI units, thirty eight units are from semi urban area. Mostly engineering units are located in semi urban area. This contributes a major role in the development of SSI units in the study area. Twelve SSI units namely crusher industries, plastic industries, furniture industries and metal industry are located in rural areas because of the stringent laws prohibiting pollution.

• Only two SSI units have been shifted their original place of operation. In the year 1995, Bharat Power Electronics changed its location for the facilities of size and marketing. And Rockfort Masala Industry changed its original place of operation in the year 1985 for the facilities of marketing and popularity. After the shift from the original location, Masala industry expanded more branches in the study area.

• It is found that most of the SSI units are run by entrepreneurs between the age group of 36 – 45 years. This is mainly because of the maturity and experience in the field of small scale industrial units.

• Of the 50 SSI units incorporated in the survey study, 14 units are managed by ITI & Diploma holders. Eleven units are run by
undergraduate technical degree holders. This is mainly because of the technical education of the entrepreneurs which motivated them to become successful entrepreneurs. Two rice mills are run successfully by illiterates. This is mainly because of the experience earned through the ancestors.

- It is observed that forty seven units are run by married people. So that, most of the entrepreneurs are not given up their efforts in business. This is the reason why more SSI units are found in the study area. From the structure of families, it is observed that most of the SSI units are run by joint families.

- It is observed that majority of the thirty two entrepreneurs are from the same district. This is mainly because of the lucrative business in SSI units. Fourteen entrepreneurs are from other districts. Four entrepreneurs (three from engineering units and one from saw mill) are from other states namely Andhra Pradesh and Gujarat respectively. This clearly shows the positive growth in the performance of SSI units in the study area.

- It is clearly shown that most of the SSI units are run by the entrepreneurs who belong to Hindu religion. And rest of the units is run by Muslims and Christians. It is inferred that SSI units are at present owned and operated by the entrepreneurs belonging to Hindu religion. Other religious people are also owned few SSI units in the study area.
• Of the 50 SSI units under the study, 40 units are owned by the entrepreneurs who belong to Backward Community. Five units are run by the entrepreneurs who belong to Forward Community and remaining five units are run by the entrepreneurs who belong to most Backward Community. Scheduled Caste and Scheduled Tribe community people have not ventured to start SSI units during the study period.

• From the residential details of the entrepreneurs, it is observed that 38 entrepreneurs have lived in their own residence. This shows their capacity through the performance of SSI units.

• The value of property of small scale engineering units is Rs. 253.5 lakhs. The entrepreneurs declare that these properties are earned through their own SSI units. From this study, it is understood that Masala industry pays more rent of Rs. 96,000 per year. And the engineering units pay the yearly rent of Rs. 80,000 for three units. The advance would be based on rental value and location of the SSI units.

• Year of experience of the entrepreneurs is one of the important determinants in enhancing the performance of SSI units. With the year of experience earned through BHEL, most of the employees resigned their jobs and became entrepreneurs in small scale industries. It is evidently shown that experience makes the people to start new SSI units in the study area. Of the 50 units, 19 units are run by the entrepreneurs who have got the experience of 21 years & above.
• It is observed that most of the SSI units have adopted the modern methods of production. Especially, all the rice mill units have expended more on modern methods of production in order to speed up the production process. Fifty per cent of the engineering units have adopted modern methods of production and rest of the units has been following the primitive methods of production. Even then, the entrepreneurs successfully run their business. Majority of the crusher units have also adopted the modern methods of production (conveyor system). This has reduced the labour force considerably and sped up the production process too.

• Initially, most of the entrepreneurs established their SSI units in the study area with own finance. This shows the capacity of the entrepreneurs under the aegis of SSI units. Currently, majority of the entrepreneurs utilize their own funds and borrowed funds. Because entrepreneurs have their hope of earning high profits in the future. Moreover, Nationalized Banks also extend their fullest support to the entrepreneurs by way of providing loans with low rate of interest.

• Fixed capital represents the value of all fixed assets of the factory as on closing day of the accounting year. It covers all such goods new or used that have a normal economic life of one year or more. For example, land, building including those under construction, plant & machinery and transport equipments. Fixed capital is playing a pivotal role in starting SSI units. There would be a vast difference of amount between initial fixed capital and current fixed capital. This is mainly because of the vast decrement in the value of money. In the earlier
stage, total amount fixed capital was Rs. 778.19 lakhs. From which, engineering industries contribute (55.64 per cent) a major role and followed by the rice mill units. At present, the total amount fixed capital is Rs.3545.30 lakhs. The contribution of the share of fixed capital is as similar as the earlier stage.

- In the initial period, the calculation of fixed capital per unit was Rs.15.56 lakhs. At present, it has increased to Rs. 70.91 lakhs due to the development and the expansion of the industries. Engineering industries were playing a dominant position in the earlier phase. At the time of data collection, the situation has been changed and the performance of Masala industry is on the increase. The poor performance has been found in Auto garage.

- The fixed capital per worker has been calculated. In the earlier stage, it was Rs. 0.066 lakhs and at the time of data collection the fixed capital per worker is Rs. 2.126 lakhs. From which, it is observed that most of the SSI units under study, invest their amount on capital intensive technology. At the inception stage, the fixed capital per worker for the Saw mill industry was huge (Rs. 10 lakhs) and followed by the Metal industry with Rs.3.50 lakhs. At present, the same position is been retained by saw mill industry and the amount of fixed capital per worker has reduced (Rs. 8 lakhs) due to the increment in the number of workers (from two to four).

- Working capital comprises of stock of materials, power & fuel charges, stock of finished goods and semi finished products, cash in
hand and at bank, net balance of amounts recoverable over amounts payable as at the end of an accounting year. It excludes fixed deposits, long term loans and investments. Exorbitant cost of raw materials, higher charges for power & fuel, more wages to the workers due to high cost of living, communication and logistics expenses are the reasons for the hike in working capital. In the initial period, the calculation of working capital per unit was Rs.8.29 lakhs. At present, it has increased to Rs. 27.75 lakhs due to the zooming price of raw materials, power charges and wages of labourers. Saw mill unit was playing a dominant position in the earlier phase. At the time of data collection, the same situation is prevailed because of the expenditure which is spent on raw materials as compared to other types of industries. The main reason for the hike in expenditure on raw materials is due to the import of raw materials from other countries such as Malasia, Burma, Sri Lanka and Singapore.

- The working capital per worker has been calculated. In the earlier stage, it was Rs. 0.351 lakhs and at the time of data collection the working capital per worker is Rs. 0.832 lakhs. From which, it is observed that cost of raw materials and wages have increased. At the inception stage, the working capital per worker for the Saw mill unit was very high (Rs. 40.08 lakhs) and followed by the Rice mill units with Rs. 0.58 lakhs. At present, the same position is been retained by Saw Mill industry and the amount of working capital per worker has reduced (Rs. 37.07) due to the hectic competition and close substitutes of products.
Out of 50 SSI units surveyed in the study area, most of the SSI units availed financial assistance from nationalized banks and utilized their own funds. Initially, only four units borrowed funds from nationalized banks. Currently, most of the engineering units are resorted to borrow more loans during the years (2001 – 2008), due to the continuous orders from BHEL. During the first time of borrowing, the entrepreneurs used their own funds for SSI units. Due to the financial deficiency, entrepreneurs had to borrow loans from some other sources to meet out their expenditure. Since the SSI units are more in the study area, the entrepreneurs must expend more amounts on modern methods of production and other additional expenditures. This makes the entrepreneurs to contract more loans from nationalized banks.

Borrowing capital per unit for the first time was Rs. 7.380 lakhs. Engineering units were playing a dominant role in getting more borrowings out of seven types of SSI units. At the time of data collection, borrowing capital per unit is on the increase (Rs. 16.104) due to the modernization of SSI units. At present, the Masala industry borrows more loans as compared to other types of SSI units. This is mainly because of the expansion of branches and for the development of the particular unit. Saw mill is resorted to borrow more loans for the purchase of raw materials from abroad. Rice mill units are relying upon agriculture for its raw materials. It is seasonal in nature. So, the entrepreneurs are found it very difficult to get raw materials (paddy) in time. This leads to excessive borrowing for stocking raw materials during the seasonal period.
Initially, total number of male and female workers was 872 and 310 respectively at the inception of SSI units. Currently, the male workers are 1432 and female workers are 236. This shows the increment in the number of male workers (skilled) and the decrement in the number of female workers (unskilled) due to the advent of modern methods of production in SSI units in the study area.

With regard to worker per unit, Masala industry plays a dominant role in both stages (initial period and current period). Initially, Crusher industries were retaining the second position. At present, engineering industries retain the second position due to the favorable salary structure.

It is observed that there are no changes taken place on raw materials in both periods (initial period and current period). Most of the SSI units get raw materials indigenously and remaining few SSI units get raw materials from both local area and abroad. Saw mill alone gets raw materials from abroad. This is mainly because of the order of prohibition Act by the Indian Government regarding felling of trees. Entrepreneur of saw mill gets raw materials from Malaysia and other countries. This results in hike in the price of raw materials. Rice mill units get raw materials from Thanjore. Crusher units are much affected because of the prohibition of quarrying order by the Tamil Nadu Government. These units get raw materials from Karur. This leads to more transport cost. This is indeed a major problem in the study area.
• Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives. From the study, it is observed that engineering units do not market their products elsewhere because BHEL gives order and get back the finished products. Rice mills market their products through the Government. Crusher industries market their products through all the four channels of marketing. Furniture industries Saw mill, Tyre industry and Metal industry are marketing their products on the basis of orders. Masala industry markets their products through agencies and retailers.

• It is observed that most of the SSI units market their products within district, ten SSI units market its products within state and three SSI units market their products within India. Seventeen engineering units market their products within district because of the continuous BHEL orders.

• During the initial stages, the 50 SSI units had produced goods worth of Rs. 804.82 lakhs per month. From which, the engineering units alone produced goods worth of Rs. 385 lakhs per month followed by Electric & Electronic industries produced goods worth of Rs. 285 lakhs per month and rice mill units with Rs. 50 lakhs per month. At present, actual production has increased substantially due to the continuous orders from BHEL. Hence, engineering units alone produce goods worth of Rs.2250 lakhs per month followed by Electric & Electronic industries produced goods worth of Rs. 400 lakhs per
month and rice mill units with Rs. 80 lakhs per month. There is a vast
difference between initial production and current production. This is
mainly due to the advent of modern methods of production in all SSI
units in the study area.

- With regard to production per unit, industries like Masala, Plastic,
  Saw mill, and Furniture industries were a playing dominant role in the
initial period. At present, Furniture and Masala industries are playing
a pivotal role as compared to other types of industries due to the
continuous demand. The calculated value of production per unit in
early period was Rs. 16.09 lakhs and the same in the current period is
Rs.56.70 lakhs. This is mainly due to the advent of modern methods
of production.

- Most of the SSI units have the maximum actual capacity of
  production of 81 per cent and above. This is mainly because of
modern methods of production in all SSI units in the study area. Most
of the SSI units are at the capacity utilization of 41 – 60 per cent. This
does not mean that SSI units’ fullest capacity is this much. Despite
SSI units have got more capacity, the SSI units cannot produce more
because of the poor demand.

- SSI units such as engineering units, electrical & electronic industries,
tyre industry, auto garage and metal industry are not shown the actual
sales, because these industries produce goods on the basis of orders.
Engineering units get orders directly from BHEL and despatch the
finished goods again to BHEL. So, there is no possibility of actual
sales in engineering units. Auto garage and electrical & electronic
industries are not producing goods but rendering service. Hence, the value of actual sales is not shown in the table. Tyre industry and metal industry produce goods on the basis of orders. Thus, there is no possibility of actual sales in these units.

- Out of 50 SSI units, only 18 units maintain their stocks. Engineering units and electric & electronic industries do not maintain stock because BHEL gives direct order to these units and gets back the finished goods at once. Tyre industry and Metal industry do not maintain stock because these industries produce goods only on the basis of orders. So, there is no chance of stocks in these industries. The remaining 38 SSI units have fewer stocks.

- Initially, 50 SSI units had the yearly net profits of Rs. 88.01 lakhs. Out of which, engineering units contributed more to the total net profit. At present, 50 SSI units have the yearly net profits of Rs. 580.5 lakhs. In this, engineering units alone contribute more to the total net profit. It is observed that there is a vast difference between initial net profit and current net profit. This is mainly because of the recent technologies adopted in all kinds of SSI units in the study area. At the inception phase, engineering industries were playing a dominant role for the profit per unit. Lately, the Masala industry is playing a major role when compared to other type of industries due to the continuous demand.

- During the initial period, 29 SSI units out of 50 units had reinvested their net profits. At present, two units namely Metal and Masala
industries do not invest any amount for its business because the entrepreneurs of these industries already invested more for their business and try to get profit out of the previous investment. Out of 20 engineering units, only one unit reinvests its net profits in business. Other engineering units have so many commitments for instance, loans of the entrepreneurs.

- At the initial phase, SSI units expended Rs.25.04 per year for excise duty, sales tax, income tax and purchase tax. From which, the single engineering unit alone paid Rs. 2 lakhs per year and saw mill unit paid Rs. 75,000 per year for excise duty. At present, engineering units pay Rs. 8 lakh per year and saw mill alone pays Rs. 2 lakh per year for excise duty. This shows the productive capacity of these industries.

- Initially, most of the SSI units paid heavy amounts of sales tax. Engineering units alone contributed Rs. 8.76 lakhs per year and followed by electric & electronic industries paid Rs. 3.47 lakhs for sales tax. Currently, engineering units alone contribute Rs. 19.67 lakhs per year and followed by electric & electronic industries pay Rs. 10.56 lakhs for sales tax. Masala industry also pays more for sales tax. Engineering units do not pay sales tax but BHEL deducts the amount for sales tax during the settlement of bill.

- Most of the SSI units paid less amount of income tax. Currently, engineering units’ alone pay Rs.29.19 lakhs per year for income tax. Electric and electronic industries pay Rs.6.50 lakh per year. And
Masala industry contributes Rs. 1 lakh per year for income tax. This shows the capacity of SSI units which earn more, so that, these units do not bother about paying more for income tax. This is indeed generating the revenue of the Government.

- It is observed that out of eleven categories of industries, rice mills alone have contributed more for purchase tax because of the purchase of raw materials (paddy) from other districts. Comparing up with the previous years, contribution towards the purchase tax by the entrepreneurs is more. This is mainly because of the poor productivity of agriculture in India which is coercing the entrepreneurs to obtain the raw materials at the higher cost.

- In the analysis of expenditure per unit, it is found that the Saw mill unit was retaining the first position at the inception phase and current phase as compared to other types of industries. At present, the Masala industry is a retaining the second position. Expenditure per unit in Masala industry is Rs. 39.27 lakhs.

- At the initial phase, most of the SSI units did expend less for power and fuels. Without which, no industry would run. Recently, most of the SSI units do expend more for power and fuels because of the hike in unit cost and price of fuel. All SSI units contribute Rs. 12.14 lakhs per month for power and fuels. From which, engineering units alone contribute more for power. This shows that the entrepreneurs are least bothered about paying more for power; their avowed aim is to produce more goods. During the initial periods, the total expenditure
on raw materials was Rs.184.57 lakhs per month. Recently, it is about Rs. 368.11 per year for raw materials. From which, engineering units alone expend Rs.20.46 lakhs per month. This is the poorest amount as compared to the previous phase. The reason is BHEL supplies raw materials to small scale engineering units in the study area.

- Without transport, entrepreneurs cannot get raw materials. So, it is considered to be the most important factor in SSI units. Initially, total transport cost was Rs. 4.54 lakhs per month. Recently, it has gone up to Rs.43.08 lakhs per month because of the hike in price of fuel. Engineering units incur more for transport cost comparing up with other SSI units in the study area.

- During the initial stages, the total amount of wages Rs.20.72 lakhs per month was expended for workers. Currently, it has been increased to Rs.86.92 lakhs per month for all SSI units in the study area. Engineering units expend more on wages because the number of workers working in engineering units is more.

- Apart from the working capitals such as raw materials, transport cost, taxation, power and fuel expenditure etc., there are other incidental expenses such as rent, interest on loan, telephone bills and lease payments, staff welfare etc., have to be incurred for the development of SSI units. Though the amount is fewer, it contributes more for the growth of SSI units in the study area.
• From the study, it is observed that initially finance was the major problems for engineering units, rice mills, and crusher units in the study area. At the time, the nationalized banks were reluctant to provide loans to these units. So, the entrepreneurs of these units had to depend upon some other sources for their survival. Few engineering units were severely affected by marketing problems due to the hectic competition prevailing in the study area. It was very difficult to get technical laborers in the good old days. Hence, engineering units were affected drastically. Most of the SSI units’ namely Electric & Electronic industries, Plastic industries, Furniture industries, Tyre industry, Auto garage, Metal industry and Masala industry were not at all affected by the mentioned problems because of the less number of units available in the study area.

• Currently, less number of SSI units has been affected by financial problem as compared to the previous phase. This is mainly because of the provision of Government loans to these SSI units. From the survey, it is observed that majority of the SSI units have been affected by hectic competition. This is mainly due to large number of units available in the study area. Engineering units are mostly affected by erratic power supply and lack of skilled laborers. Crusher industries are severely affected by stringent Government policies (prohibition of quarrying and environment protection act etc.). So, entrepreneurs of crusher industries find it very difficult to run their industries in the study area. Of late, engineering units are also affected by poor orders through BHEL because of the huge number of small scale engineering units operating in the study area.
• It is lucidly understood that most of the entrepreneurs concentrate on their own professions or related professions. Only 3 out of 50 entrepreneurs have engaged in other businesses such as milk business, road contract, building contract and brick making too.

• It is clearly observed that most of the SSI units were affected mainly because of the erratic power supply. It hampers the production of SSI units in the study area.

• From the study, it is understood that most of the entrepreneurs do not need technical consultancy because there are more skilled workers in SSI units. So, entrepreneurs are not interested in technical consultancy.

• Most of the entrepreneurs of SSI units in the study area felt that the Government schemes are indeed upholding their business. Out of fifty entrepreneurs, eight are not for the Government schemes because it hampers their business drastically. For example, crusher units.

6.3 Suggestions

Under the aegis of the meticulous findings of the study, the following suggestions have been made for enhancing the performance of SSI units in the study area:
• The present study has revealed that the majority of the SSI entrepreneurs did not avail any kind of Government subsidies and incentives due to lack of awareness and knowledge in approaching the Government officials in fulfilling their procedural requirements. Hence, the entrepreneurs can be given education through the Government officials in this regard.

• Since there are slew of SSI engineering units in the study area, the entrepreneurs felt that there would be a poor work order from BHEL comparing up with the previous phase. Hence, uniform system of work order must be followed and there should not be any undue favoritism with regard to the provision of orders to all SSI engineering units.

• The women participation in SSI engineering units is very poor. Hence, the Government must shoulder the responsibility in imparting special entrepreneurial programmes that educate the women entrepreneurs more potential. This leads to the start of new SSI units by women in the study area.

• Marketing problem is one of the major obstacles for SSI entrepreneurs. Majority of them are concentrated their marketing activities within the district. Hence, there is a stiff competition among entrepreneurs. This can be overcome through the support of Government.

• There must be a proper location of SSI units especially pollution emitting industries. So that, the welfare of people can be enhanced. In
In this regard, pollution control board should have to decide the location of these units.

- In the study, it is clearly shown that there would not be any entrepreneurs from SC and ST community at the time of data collection. Under the aegis of the Government, vocational education and financial assistance can be given to these people. This leads to make these people more effective and successful in their business.

- It is observed that most of the SSI entrepreneurs get loans from the nationalized banks because of the low rate of interest. If these banks can further reduce the rate of interest, the beneficiaries would be more. This results in enhancing the performance of SSI units.

- Expenditure is on the increase for crusher industries and saw mill unit because of the Government restrictions on stop quarrying and felling of trees respectively. This leads to increase the cost of raw materials. In this regard, the Government can very well consider these industries for preferential treatment in taxes, rebates and interest deduction scheme for the better performance.

- Since the entire small scale engineering units’ bank on BHEL, the direct export to foreign countries is not possible. So, the government should make arrangements for getting foreign orders for these SSI units in the study area.
• The Government can uphold the SSI units through providing continuous power supply to enhance their performance in the study area.

6.4 Conclusion

It is lucidly observed that after the advent of BHEL, many positive changes viz., generation of employment, number of small scale engineering units and economic status of the people have been made in the study area. The structural and infrastructural bottlenecks such as lack of finance, defective marketing, shortage of skilled workers and erratic power supply are hampering the hassle free working of SSI units. In order to tide over these problems, the pertinent suggestions have been made by the researcher. If these suggestions are indeed properly implemented in practice, the future of SSI units in the study area will be rosy and promising.