CHAPTER III

Research Methodology
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RESEARCH METHODOLOGY

3.1. Introduction

The purpose of this chapter is to address the research foundation and methods used in this study. Items that will be addressed include the research design, population and sample, instrumentation, reliability and validity of the instrumentation, data-gathering procedures, and the method of statistical analysis and the development of the model to identify the mediating effects of Entrepreneurship Development.

3.2. Formative Research Model

Table 3.1: Formative Research Models and Contributors

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<tr>
<th>Sl.No</th>
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<td>5)</td>
<td>SF-Cost Model (Share Holders Funds Model)</td>
<td>Arulraj. A and Sarangarajan. V 2010</td>
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<td>7)</td>
<td>FERTQUAL Model (Fertilizer Retail Service Quality Model)</td>
<td>Arulraj. A. and Sukumaran. A 2010</td>
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Hence, the researcher states that economic service quality could be adopted for the entrepreneurship in India. By reading service quality models, the researcher has developed the Entrepreneurship Development in the study area. The Entrepreneurship Development is nothing but it is an economic service delivery for the group activities. Without economic service delivery, the Entrepreneurship Development could not be sustained. The researcher develops dimensions for studying the Motivation as a mediating factor for the Entrepreneurship Development in the study areas. In above view of all these different experiences and (sometimes diverging) results, a special consideration of factors contributing to micro-enterprise development and
support by Entrepreneurship Development that reflects on their strengths and weaknesses is indicated in order to build and improve the entrepreneurship / micro-enterprise model.

3.3. Theoretical Framework

The performance of SMEs has been of interest to many researchers, international organizations, and policy makers, at least, since the Bolton report (1971), and therefore has become the subject of a great deal of analysis. This performance may have two strategic outcomes that is often referred to in the literature as firm success or failure (Dess & Robinson, 1984; Ostgaard & Birley, 1995). In a management field, success and failure can be interpreted as measures of good or indifferent management (Jennings & Beaver, 1997), but it may occur for other reasons such as luck (Storey, 2011).

Numerous terms have been used in the literature to describe firm failure, for example: bankruptcy, insolvency, liquidation, death, deregistering, and discontinuance, ceasing to trade, closure, and exit (See for example: Storey, 1994: 78-81; Bruno et al. 1987). These terms overlap each other to some extent (Sten, 1998) and thus, the concept of failure is ambiguous, as it can have different interpretations by different people (Wickham, 2001). The many different interpretations and definitions of both success and failure
make it very hard to compare research findings on the performance of small firms.

In the entrepreneurship literature, the concept of success remains a topic of debate (Gorgieveski et al., 2011). This is despite the evidence that the ‘success’ of small firms has been subject to a great deal of research. However, there is no general agreement in the literature on what is meant by the success of a firm. Indeed, a myriad of perspectives, ranging from mere survival to the achievement of certain levels of performance, exist about such a concept in the entrepreneurship literature. Very often, the terms ‘success’, ‘survival’, ‘growth’ are very closely linked and sometimes used interchangeably. Besides the multidimensional aspect of success, variables that contribute to the success of SMEs are not unanimously agreed upon by researchers. While some analysts suggested that the dynamics of the success of businesses remain a black box (Deakins & Freel, 1998; Dockel & Ligthelm, 2005; Ligthelm, 2010), others argued that the success of enterprises is a function of both external and internal factors (Penrose, 1959; McClime et al., 2000; Guzman & Santos, 2001; Markman & Baron, 2003).

The performance of SMEs usually identifies several causal factors with regard to the internal and external environment of the firm. In terms of internal factors, several researchers have attempted to investigate the characteristics of SMEs and characteristics of the entrepreneur as the
internal factors that influence SMEs performance (Hambrick & Mason, 1984; Bates & Nucci, 1989; Storey, 1994). For the firm characteristics, several studies have revealed that size, age, and location of the firm could be related to business performance (for example: Bates & Nucci, 1989; Liedholm, 2002). On the other hand, other researchers have shown great interest in understanding the relationship between characteristics of the entrepreneur and business performance (for example: Hambrick & Mason, 1984; Boden & Nucci, 2000; Rogerson, 2001).

As for the external factors, it is widely recognized that successful organizations are those that best adapt to fit the opportunities and the constraints inherent in the environment in which they operate (Kalleberg & Leicht, 1991). According to Miller & Dess (1996), the external environment of the enterprise can be classified into two dimensions, namely the general and competitive environments. The general environment consists of the political legal, macroeconomic, socio-cultural, technological, demographic and global factors that might affect the organization’s activities. On the other hand, the competitive environment consists of other specific organizations that are likely to influence the profitability of the enterprise, such as customers, suppliers and competitors.

Several previous studies in both developed and developing countries have identified a range of external performance factors that relate to the general
as well as the competitive environment of the firm (for example: Yusuf, 1995; Swierczek & Ha, 2003; Clover & Darroch, 2005; Beck et al., 2006; Nieman, 2006; Nabli, 2007; Ben Mlouka & Jean-Michel, 2008; Benzing et al. 2009; Olawale & Garwe, 2010; Jasra et al., 2011). For the general environment, data from several sources have identified economic factors, in particular financial resources and taxation, as central for the success of businesses (Beck et al., 2006; Chu et al., 2007; Ben Mlouka & Jean-Michel, 2008; World Bank, 2009; Benzing et al. 2009). Other studies have found that political legal factors significantly relate to business performance (Yusuf, 1995; Beck et al., 2005; Jasra et al., 2011). Much literature has focused on the technological factors. These studies have highlighted the positive relationship between technology, information, and infrastructure and business performance (Swierczek & Ha, 2003; Clover & Darroch, 2005; Nabli, 2007; Olawale & Garwe, 2010). The networking factor, which could be classified under the socio-cultural factors, has been subject to a great deal of research. Numerous studies have documented a positive association between networking and various aspects of firm performance (Duchesneau & Gartner 1990; Zhao & Aram, 1995).

On the other hand, a large and growing body of literature has investigated the competitive environment of the firm in relation to three stakeholders: customers, suppliers, and competitors. There is a large volume of published studies describing the role of customer relationship management as a key
factor in business performance (Dwyer et al., 1987; Morgan & Hunt, 1994; Berry, 1995; Sheth & Parvatiyar, 1995). Similarly, an increasing amount of literature has highlighted the effect of suppliers on the performance of businesses (Dollinger & Kolchin, 1986; Gélinas & Bigras, 2004; Morrissey & Pittaway, 2006). Other researchers have argued that an analysis of the role of competitors and counter-competition intelligence and actions are crucial for the survival of an SME (Ligthelm & Cant, 2002; Rwigema & Venter, 2004; Nieman, 2006). With above literature, the researcher developed the various dimensions for the present study.

3.4. Literature on Various Dimensions

3.4.1. Social Stigma

Social dishonour or digress of women, especially in rural areas, are a common societal norm in our society. The restricted values restrain female entrepreneurs’ mobility. This kind of pattern of societal behaviour hinders women’s open involvement in a variety of entrepreneurial fields. Women entrepreneurs constitute a vital segment of loaners of Grameen Bank. Reportedly, the women entrepreneurs operating in the rural areas are bounded by some social customs and strong religious barriers, creating difficulties in their operations. In view of this problem, it is somewhat difficult for the officials to perform their responsibilities smoothly, especially in dealing with women entrepreneurs working under severe social constraints (Rahman, Hossain and Miah, 2000).
Rigid social customs and strong religious constraints are creating difficulties or women entrepreneurs in operating their business (Hossain and Rahman, 1999). In Bangladesh women are socially neglected. Purdah prevents women to take part in different activities like social, economic, cultural and political. Male members of the family always want to keep their wife in home so that they would not participate in different entrepreneurial activities. Purdah is seen as norms that promote the seclusion of women. Bangladeshi fundamentalists have physically attacked women that can be transgressed sexual norms (Goswami, 1998).

Haider and Akhter (1999) conducted research in Baniachar village, where 84 percent of the women said that they felt that they have to work for survival. However, once they heard the words of fundamentalists, they stayed at home hungry and some NGO officials then helped them to get some food.

3.4.2. Availability of Capital

The norms and values of our society reveal that the male member of a family should take care of financial issues. So the monetary issues are usually remaining out of control of female members of a family, and hence, rural women entrepreneurs suffer from insufficient capital for their action. Lack of capital seems to be the key factor for women entrepreneurship development. Most of the women entrepreneurs of all categories of activities
opined that they could not expand their business mainly due to shortage of capital. Most of them are not getting their desired amount of loan from Grameen Bank. Without sufficient fund no activities can be expanded. Thus finance is the core problem for expansion of activities in all categories of entrepreneurs. Rahman, Hossain and Miah (2000) found that the low level of financial assistance that has been sanctioned by Grameen Bank could only partly fulfil their needs.

Islam and Aktaruzzaman (2001) have depicted that only 5 percent entrepreneurs have capability to finance their business from own source in Jinaidah District. On the other hand, almost 95 percent of rural women entrepreneurs depend on the borrowed capital to run their small enterprises. Based on Hossain and Rahman (1999), the lack of working capital is considered as one of the most serious problems. About 60 percent women entrepreneurs in five villages of Bagerhat district mentioned that they are suffering from problem of insufficient working capital.

3.4.3. Cognitive Factors

A third set of intuitionalists stress the centrality of cultural cognitive elements of institutions the shared conceptions that constitute the nature of social reality and the frames through which meaning is made (Scott, 2001). Culture can be defined as the acquired knowledge that people use to interpret experience and generate social behaviour. It is important to
recognize that culture is learned and helps people in their efforts to interact and communicate with others in the society. Culture includes two major aspects one is what we are and the other is what we have. Again cognition can be simply defined as the act of knowing an item of information. Cognitions precede behaviour and constitute input into the person’s thinking, perception, problem solving and information processing (Luthans, 2005). Cognitive factors are associated with internal issues of women’s life and their environmental interaction.

3.4.4. Risk Assessment Capacity

Capacity to assess risk is a facilitating factor for entrepreneurship development in any country. Modern development is the development of technologies. Production cannot meet the demand of the market unless its quality is up-dated every time with the up-dated technologies. It is obvious from a research that rural women entrepreneurs always depend on traditional technologies. They don’t have much technical knowledge and they don’t have the capability to take risk as well. The opportunities for introducing new technology in the country have increased considerably but such opportunities are mostly available for urban entrepreneurs. As compared to that there is very little scope for rural entrepreneurs to enjoy such facilities. Familiarity with these technologies inspires urban entrepreneurs to take risk. Whereas due to the shortage of knowledge is rural women entrepreneurs cannot assess risk which is the key indicator of women entrepreneurship
development (Rahman, Hossain and Miah, 2000). As rural women entrepreneurs are in practice of using traditional technology, which ultimately results into increasing inefficiency.

3.4.5. Education and Access to Information

Education is very important cognitive factors of women entrepreneurship development in rural areas. Educated entrepreneurs can discharge the entrepreneurial responsibilities effectively. They can take risk more easily and have access to information regarding entrepreneurial activities. But in rural areas women do not have much opportunity to get education. Based on a sample by Hossain and Rahman (1999), 62 percent of the sampled entrepreneurs were illiterates (though they have acquired the ability to sign their names), 30 percent completed primary education, and the remaining 8 percent had education levels beyond primary school. It is tough for the illiterate rural entrepreneurs to have access of information regarding market contacts.

Islam and Aktaruzzaman (2001) revealed that 76.3 percent of the rural entrepreneurs had no education at all, of which nearly 17 percent could neither read nor write and the other 59.3 percent were only able to put on their signature. This clearly shows a serious lack of basic education among rural entrepreneurs. Only about 7 percent of the rural entrepreneurs have secondary level education. Islam and Aktaruzzaman (2001) also analyzed
the problems of rural women entrepreneurs in Bangladesh and found that the lack of education is a major problem for them. In spite of extending credit facilities, most of the credit supplying institutions extended no basic education to rural women entrepreneurs. In Bangladesh, most of the rural entrepreneurs remained illiterate and had no concept about the market. Lack of education also restrains access to information.

3.4.6. Entrepreneurial Training

Entrepreneurial training is required for processing, manufacturing, livestock and fisheries activities. But such kind of training facility is available in urban areas. Lack of necessary training, lack of experience seriously affects the efficiency of the rural women entrepreneurs. Lack of training facilities adversely affects the opening of new line of business. Like technical knowledge, the opportunities for entrepreneurial training have increased considerably. But such opportunities are mostly extended to urban areas. Based on Rahman, Hossain and Miah (2000), it is evident that enjoying a certain volume of credit is not enough unless those rural entrepreneurs could also be offered adequate training facilities so as to utilize the available resource at the optimum level.

Islam and Aktaruzzaman (2001) conducted a research on the problems of rural women entrepreneurs in Bangladesh. He found from his research that only 8 percent rural women entrepreneurs have necessary training relating to
their business. On the hand 92 percent entrepreneurs have no training related to their job at all. In consistent with lack of education and training, most of the rural women entrepreneurs have lack of experience in their business. The surveyed data reveals that nearly 78 percent women have experience less than three years. This is the existing culture in our society that the poor women of our society are the victims of deprivation. Rural women do not get enough training opportunities due to our social and cultural norms.

3.4.7. Business knowledge

Invisible culture refers to the norms, values, ideas, thoughts, knowledge which is the major pillar of institutional theory. One of the major problems of rural women entrepreneurs is lack of business knowledge. They have little knowledge about accounting and keeping records. Lack of knowledge in keeping accounts, estimating cost and profit and determination of price adversely affect their operations (Hossain and Rahman, 1999).

Islam and Aktaruzzaman (2001) declared from his research that most of the rural women entrepreneurs have lack of knowledge in their business. For example their surveyed data reveal that nearly 78 percent of the rural women had knowledge and experience less than three years. Only four rural entrepreneurs out of 59 sampled entrepreneurs had experience and knowledge more than seven years. Thus the lack of (i) basic education,
knowledge, (iii) training, and (iv) experience seriously affects the efficiency of rural women entrepreneurs.

The lack of business knowledge is a barrier for expansion of business in the processing and manufacturing and livestock and fisheries. Rahman, Hossain and Miah (2000) observed that knowledgeable entrepreneurs in urban areas felt relatively more comfortable to expend their business in comprising to illiterate or less educated entrepreneurs in rural areas.

Several studies have attempted to explain the link between firm characteristics and business performance (for example, Bates & Nucci, 1989; Storey, 1994; Baum & Locke, 2004). Storey (1994) identified characteristics of the SMEs among the key components that are important in analysing the performance of SMEs, particularly their growth. Business characteristics that affect business performance have been identified as age, size, and location of business (Kallerberg & Leicht, 1991).

3.4.8. Size of the Enterprise

In the developed country literature, researchers have paid close attention to the effect of firm size on its performance. Much evidence in the small business literature suggests that the probability of success increases as the size of a business increase. In their study, which investigated small business failure rates among a nationwide sample of SMEs in the USA, Bates & Nucci (1989) concluded that the larger the firm, the more likely it was to be
successful. Similarly, McMahon (2001) found that enterprise size significantly linked to better business performance of the Australian manufacturing SMEs. This was confirmed by Davila et al. (2003), who argued that being small correlates negatively with survival rates, owing to the limited resources that SMEs find a key liability.

### 3.4.9. Age of the Enterprise

The relationship between firm age and business performance has been investigated from a range of perspectives in particular, industry dynamics and organizational ecology. Hence, a number of studies have recognized the importance of the age dimension of the firm. However, the literature on the impact of age on firm performance is indecisive and often yields contradictory results depending on data and estimation methods used (Sutton, 1997; Nguyen et al., 2004).

In the developed country literature on small firm growth, the relationship between firm age and growth has been explored. The bulk of studies have found that older firms experience less growth (Evans, 1987; Variyam & Kraybill, 1992; Dunne & Hughes, 1994; Heshmati, 2001). In contrast to these studies, other studies have reported contradictory results. For example, the study of Bates & Nucci (1989) confirmed that the age of the firm had an impact upon survival. Their findings suggested that the older the firm, the more likely it was to remain in business. In a similar vein, Boyle & Desai
(1991) also pointed out that statistics have shown that the longer a small business has been in operation, the better the chance that it will stay in business. In line with these studies, Storey (1994) alleged that younger firms have a higher death rate, but they demonstrate a faster growth rate in terms of employment, against more mature firms. A third group of studies report mixed results. For example, Heshmati (2001) found that while younger firms experience faster employment growth in Sweden, older firms experience faster growth in assets and sales.

3.4.10. Location of the Enterprise

Sridhar & Wan (2010) defined location as choice of where a business is to be located which could be small, medium and large cities or urban or rural locations. Several studies have attempted to explain the role of location in business performance (Liedholm, 2002; Harabi, 2003). Dahlqvist et al. (2000) argued that the geographic area, where a firm is located, has implications for its access to markets and resources such as: finance, skilled labour, subcontractors, infrastructure, and other facilities.

3.4.11. Propensity for risk taking

Numerous studies have been carried out in order to determine whether the propensity for risk taking could be considered as one of the fundamental characteristics of the entrepreneur (Brockhaus, 1982). However, authors are still far from reaching unanimity on this notion (Hull et al., 1980; Timmons
et al., 1985). Risk-taking was the earliest identified characteristic of entrepreneurship, proposed by Cantillon (1755). Palmer (1971) asserted that risk assessment, and risk taking constitute primary elements of entrepreneurship.

Propensity for risk taking combines all factors dealing with risk, including taking calculated risks, being realistic when analysing opportunities, and spreading one’s risk. All these are said to be key factors that impact positively on entrepreneurship (Hisrich & Peters, 2002; Stewart et al., 2003; Timmons & Spinelli, 2004; Gurol & Atsan, 2006). According to Delmar (1994), it is essential for the success and growth of a business that entrepreneurs perceive and manage risks appropriately in their environment. Conversely, Siegel et al. (1993) observed an absence of relationship between business growth and the willingness to take risks. Successful SME operators tend to be moderate risk takers who make calculated risk assessments and they are not afraid of failing; rather they are intent on succeeding (Morris & Zahra, 2000). Less successful SMEs do not plan for contingencies and rely on luck alone, which can be characterised as reckless (Rwigema & Venter, 2004).

3.4.12. Competences & Skills of the Entrepreneur

A significant number of researchers have clearly suggested that the competencies of business owners in SMEs constitute an important factor in
determining the success of the enterprise (Chandler & Jansen, 1992; Bird, 1995). Furthermore, Rogerson (2001) argued that in order to understand the factors leading to the success or failure of the entrepreneurship process, it is necessary to look at the capacity needed to be a successful entrepreneur or improve entrepreneurial conduct. Based on this premise, this section investigates competencies of the entrepreneur as key endogenous factors in the entrepreneurial process leading to business success, growth or failure.

Chandler & Jansen (1992) suggested that, in order to explore the competencies required by entrepreneurs in managing their own businesses, researchers should first understand the roles played by entrepreneurs as owner-managers. The available literature suggests that entrepreneurs, particularly those in small businesses or SMEs, are engaged in three important roles: The entrepreneurial role, which assists with business development; the managerial role, which assists with functional needs which include humans resources management, marketing, operations, administration, finance and planning; and the technical or functional role, which is needed for functioning and producing products (Chandler & Jansen, 1992; Ucbasaran et al., 2004; Baum & Lock, 2004; Beaver & Jennings, 2005).
3.4.13. Entrepreneurial Competences

Entrepreneurial competences depict the skills needed to perform the entrepreneurial role that involves various tasks to be performed, including developing a challenging but achievable vision, formulating strategies, recognizing unmet consumer needs, scanning the environment, spotting high quality opportunities, and producing superior products or services (Chandler & Jansen, 1992; Chandler & Hanks, 1994; Thompson, 1999; Wang & Ang, 2004). Lyons (2002) described entrepreneurial skills as the skills needed to develop innovative products and services and to generate solutions to emerging needs in the marketplace.

3.5. Small and Medium Enterprises in Tamilnadu and India

Small-scale industries have been playing an important role for development of the Indian economy. These small-scale industries not only help to create employment opportunities, but also generate income, investment and savings in the economy. Further, these industries may also help in developing regional economy, promotion of export potential, promotional of market facilities, development of infra–structural facilities etc. Small-scale industries also help in eradicating poverty, unemployment problems. The opportunities through SMEs have been helping to provide employment opportunities to rural, urban masses, generating income, and raising the levels of living.
The role model prescribed for the Indian Small Scale Industries is its engine of growth in the new millennium. It accepts ‘competitiveness’ as the ‘mantra’ for its future growth. In the struggle for existence it is always the survival of the fittest. The SME sector has the potential to emerge as an engine to take the economy to the desired destinations of globalization, employment generation, equi-distribution of income, acquiring competitive edge and high rate of economic growth. India’s existing share in world trade of not more than 0.7 per cent is a matter of grave concern as this is not adequate to make the country as a major player in the economic affairs of the world. The situation becomes all the more alarming when it is compared with the position of 1.5 percent in early 50s. Another disturbing feature is that our share at 0.6 to 0.8 o percent has been stagnating at this level for more than two decades now.

Since 1971-72, the small-scale industrial sector has grown at an impressive rate and its share in the national exports increased from 9.6 per cent in 1971-72 to 26.5 percent in 1981-82 and further to 31.5 per cent in 1991-92. At present the SMEs share in national exports is about 35 per cent. The share of India at world trade declined to 0.4 percent due to insufficient contribution from SME sector. This chapter goes deeper into the structure of exports, employment potential, and production.
3.5.1. International Competitiveness

The issue of international competitiveness has been analyzed beautifully by Kumar, Sen and Viadya in their article “India’s Export Competitiveness and Finance” published in India Development Report 2008-2009, which is reproduced as under: Stated that International is competitiveness generally refers to be ability of a country to expand its share in world markets. At a fundamental level, competitiveness of a country in a particular commodity depends on the price at which it delivers the commodity in a foreign market in comparison with the price offered by competing countries for that commodity in the same market. The evolution of overall competitiveness of a country over time is influenced by macro-economic and micro-economic factors. The most important macroeconomic variable influencing export competitiveness is the real exchange rate. A ‘wrong’ exchange rate impedes the country from competing successfully in international markets and can lead to balance of payment problems. The maintenance of the real exchange rate at an ‘appropriate’ level helps the nations to achieve high export growth. At micro level, the evolution of total factor productivity in comparison with trading partners and competing countries play a major role in influencing competitiveness in different industries/commodities. Maintaining a growth rate in productivity is indispensable to retain/increase one’s share in world markets.”
Export promotion has been one of the principal goals of the on-going economic reforms in the country. Several policy-oriented changes have been made in the EXIM policy for meeting the diverse and changing requirements of our exporters. It has been revealed that owing to some specific changes in the demand of products at the global level and structural rigidities at supply level has affected our exports in recent years. India’s exports after registering a phenomenal rate of growth during the period from 1998-99 to 2000-01 failed to make any worthwhile progress during the next six years. The performance was particularly disappointing in 2003-04 when it recorded a negative rate of growth. The competitiveness of Indian exports has lagged behind due to a variety of reasons. It has made a modest recovery during the years 2006-2009.

If India wants to become a dominant economic global player in the current century, it will have to pay special attention to acquiring competitive edges in the entire sector. The country should concentrate especially in the small-scale industrial sector since this sector has vast potential and can emerge as an engine of economic growth in the country. It is crucial that this sector adopts competitiveness as ‘mantra’, not only for surviving but also to justify the leadership role. It is essential because despite possessing great potential this sector suffers from several handicaps due to its small capital and technological base.
3.5.2. Status of Small scale Industries in India

The SME sector has emerged as a dynamic and vibrant sector of the Indian economy in the recent years. There are over 35 lakhs small-scale industrial units in the country. However, the Third Census of SME has found the number of registered and unregistered small enterprises as high as 105 lakh in 2006-07. The small-scale industry (SME) sector continues to remain an important sector of the economy with noteworthy contribution to GDP, industrial production, employment generation and exports. The performance of the small scale sector based on the final results of the Third All India Census of SMEs in 2009 is given in Table. As per the Census of Registered and Unregistered units half for the year 2008-09, there were 115.22 lakh SME units in the country out of which 15.54 lakh were registered working units and 99.68 lakh unregistered units. It is estimated that during 2008-09, the number of SME units has increased to 115.22 lakh from 110.10 lakh in the previous year registering a growth of 4.7 per cent. The linear regression by the method of least square is applied on the years and number of SME units.

3.5.3. Production in Small and Medium Enterprises sector

The contribution of production by SME sector is appreciable after the globalization of Indian economy. It has opened fascinating avenues for entrepreneurs for wide scope of innovation in technology and development.
The value of production at current prices by the SME units also increased by 11.6 per cent. In particular, it is increased from Rs.348059 crore from Rs.311993 crore during 2008-09 and accounted for about 40 per cent of the gross value of the output in the manufacturing sector. The sector is estimated to have grown at the rate of 7.5 per cent at constant prices over the previous year.

3.5.4. Export Performance of Small and Medium Enterprises

The immense potential of the SME sector in improving upon the country’s share in the world trade and making it a dominant economic player in the next century can be accessed from its past performance as exporting sector of the economy. Exports from the SME sector have been growing at an annual rate of over 20 per cent per annum at current prices in rupee terms since 1991-92. It is realized that the growth of export of SME sector since 1971-72, possess the great potential of this sector in boosting the over-all exports. In a span of three decades, i.e. 1978-79 to 2008-09, the total exports from the country increased by 100 times, while that from the SME sector increased by 292 times. During the last 10 years while the total exports increased by 3.6 times, SME exports increased by 3.4 times.
3.5.5. Item – wise Small and Medium Enterprises Export Performance in all India

Today the small-scale sector produced a wide range of items, numbering over 7,500. The items which play dominant role in terms of exports are readymade garments, leather products, processed food and marine products, engineering goods, electrical and electronic goods, plastic goods, basic chemicals and pharmaceuticals etc. The share of SME sector in export of certain items is as high as 100 per cent. In 2008-04, the Sector accounted for 100 per cent of the country’s exports of sports goods, Cashew Kernel and lac, 95 per cent of wool and woollen products, 90 per cent of readymade garments, 70 per cent of processed food and leather and leather products. The share of marine products, basic chemicals, pharmaceuticals and cosmetics has also increased in recent years. In the case of engineering goods its share was 32.81 per cent in 2008-04. An analysis of the performance of SME exports reveals some disturbing features which must be given due consideration while formulating any policy for the growth in future.

3.5.6. Employment Potential

Employment generation has always been one of the main objectives of the policies aimed at economic development and growth of the nation. A rise in economic growth has always led to increased employment opportunities and similarly enhanced employment generation has always contributed
significantly towards economic growth. However, identifying and creating employment opportunities has always been a challenging task in our country, the reasons for which are plenty and well known. More disturbing in this contest is the realization that there has not been commensurate growth in employment vis-a-vis economic growth as demonstrated by the GDP indicators over the past decade. The general impression that the acceleration in growth experienced during mid 1990s would create sufficient employment capable of absorbing increased labour force and reduce the backlog of employment has not proved fully correct.

From the NSS survey results in 2005 it emerges that during the six year period between 1993-94 and 2004-2005, the rate of growth of employment was just above 1%; this is less than half of what could have occurred has the earlier targeted elasticity of employment of 0.4 would have fructified. The NSS data indicated a significant lowering of labour force participation rates mainly among younger age groups and rural women. During the Tenth Five Year Plan, the SME sector has been assigned a target of creating 4.4, million additional jobs. During the Ninth Plan, the sector achieved the target.

However, during the Tenth Plan some disturbing factors have been noticed. These are decline in labour intensity of small enterprises and decline in flow of credit as percentage of net bank credit from 17.5 per cent in 2003 to 11 percent in 2008. Should we be happy with just employment creation or
should we not pay attention on improving the quality of employment. Improvement in quality of job is dependent on skill and entrepreneurial development. The focus in this chapter is on examining the ability of small enterprise in realizing the targeted growth in employment on the one hand and scope of improvement on the quality of job on the other.

There were over 36 lakh small enterprises all over the country, at the end of 2008-09 of which about 1 lakh are in the organized sector (factory sector). It may be mentioned that these figures and analysis subsequently are based on data on SME sector, which were available before the result of the Third Census became available in February 2009. The unorganized sector comprises of SME units engaged in manufacturing apart from those in the handlooms, handicrafts, coir and KVIs sector. The organized sector includes power looms other than the manufacturing SMEs.

There is also a large sub-sector within the SME sector known as Tiny Industries which consist of micro units which are comparable to rural and cottage / household industries. The Small Scale Sector currently provides employment for over 20.0 million persons, dispersed in every corner of the country and has been contributing significantly to its socioeconomic development. With the initiation of wide-ranging economic and structural reforms in the early 90’s Public Sector employment has experienced a decline and the expected growth in the private sector employment has not
been encouraging either. The reasons for this can be traced to rapid automation, adoption of new technology to operate in the competitive markets and in the process lying off excess labour force.

3.6. Tamil Nadu Small Scale Industries

The small-scale industries, made an early start in Tamil Nadu with the Government stepping in to create major industrial estates at Guindy and Ambattur in Chennai. In 1973, Tamil Nadu had the largest number of SMEs in the country with 18,500 registered units and it has maintained this leadership, by and large. When the Second All India Census of SMEs was carried out in 1987-88, it was still the leader in terms of units and employment, though not in the growth rate.

According to SIDBI (2005), in its Report on small-scale industries sector during 1998-99 to 2008-09, the Tamil Nadu SME sector continued to grow fast. The average annual rate of growth (compound) of number of units was 12.8 per cent and of employment 10.9 per cent. A good part of the SME units gets registered under Factories Act and hence gets covered under Annual Survey of Industries (ASI). Within the unregistered part, a small proportion gets registered with DCSME and these get covered under NSSO’s periodic surveys. The units in this SME sector are also registered with the State Level Directorates of Industries and data for this category gets collected from time to time on a census or sample basis.
3.6.1. Strategies of Tamil Nadu Government for the development of small-scale Industries

The Department of Industries and commerce was established to act as a nodal agency for implementing programmes for the development of Small Scale / Tiny sector industries. IT has been entrusted with the responsibility to register small-scale industrial units, assist them in getting statutory approvals and clearances, providing testing facilities for electrical, electronic and chemical industries etc. District Industries Centres (DICs) are catalytic in providing package of service for existing and new industries with special focus on revitalizing the rural economy. DICs provide escort services to the entrepreneurs, i.e., in identification of industries, in the preparation of project profile, obtaining financial assistance from financial institutions and sanction and disbursement of State subsidies and incentives. The Department has also established and maintains Industrial Estates for various activities such as chemical, ceramics, and electrical, electronic and allied industries.

3.6.2. Hurdles and Way Out

The writing on the wall is clear that a time for change in strategy for development of the Indian small-scale sector has come. The ‘niche’ (lower/middle income) market is waning. With the removal of quantitative restrictions on imports in March 2006, the issue of ensuring competitiveness of the SME sector has assumed urgent propositions; some of our
neighbouring countries are having an edge in the production of some of these items which are important in our export basket. In addition, China enjoys commanding position in production of toys and many East Asian countries and China dominate in production of consumer electrical and electronic items. East Asian crisis is showing symptoms of getting over but the recovery in these countries may not be exported led hence Indian exports will face stiff competition in terms of price, quality and timely delivery in these markets.

The current economic reforms have ushered in some challenges before this sector. While some of the challenges are on account of its small size, others are on account of the type of technology used and their location in rural and backward areas and some arise on account of their difficulty in obtaining adequate and timely credit and due to lack of infrastructure facilities.

However, one need not jump to the conclusion that this sector suffers from weaknesses only and has no strong points or inherent strengths to face these challenges. Small enterprises, unlike the big enterprises with the layers of control and separation of ownership, are inherently flexible to react to market signals and changing tastes. This makes the small firms more innovative and open to new ideas. They also interact more closely with their customers to be in touch with changing preferences. In addition, SME units
have better access to cheap labour and have lower overheads, which help they to reduce the cost of production.

3.7. Concept of Small Scale Industries

The Governments of developing countries have adopted positive measures to defeat the forces of stagnation. To perform this gigantic task, a well considered and most suited policy of economic development has been framed. The growth process of these countries aims at accelerating the economic development to enhance the social welfare. Nowadays, most of the developing countries are following the industrialization which is a process of growth and as such is organically linked both to social and economic development. Since the end of the Second World War, most of the developing countries are giving priority to industrialization as panacea for under development and poverty.

3.7.1. Industrial Policy in India

3.7.1.1. Industrial Policy Resolution 1948

The government stressed the role of SSIs for balanced industrial growth. It was stated that SSIs are particularly suited for the utilization of local resources and creation of employment opportunities. The primary responsibility for developing small industries by creating infrastructure has been provided to state governments. Central government frames the broad
policies and coordinates the efforts of State Governments for the development of SSIs.

3.7.1.2. **Industrial Policy Resolution 1956**

It stated that besides continuing the policy support to cottage, village and small industries by differential taxation or direct-subsidies, the aim of state policy would be that the development of this sector is integrated with that of large scale industry. The focus was to improve the competitive strength of SSIs. To achieve these 128 items were exclusively reserved for production in SSIs, and 166 items were reserved for exclusive purchase by government from this sector.

3.7.1.3. **Industrial Policy Resolution 1977**

It emphasizes that whatever can be produced by SSIs must only be so produced. The main thrust of policy was effective promotion of cottage, village and small industries widely dispersed in rural areas and small towns. This thinking specified the following things:

a) 504 items were reserved for exclusive production in the small-scale industries.

b) The concept of District Industries Centres (DICs) was introduced so that in each district a single agency could meet all the requirements of SSIs under one roof.
c) Technological up-gradation was emphasized in traditional sector.

d) Special marketing arrangements through the provision of services, such as, product standardization, quality control, market survey, were laid down.

3.7.1.4. Industrial Policy Resolution 1980

The policy focused on the need of promoting SSIs through integrated industrial development between large and small sectors. Industrially backward districts were identified for faster growth of existing network of SSIs. Following measures were specified in the policy:

a) Investment limit was raised for tiny, small, and ancillary units to 2 lacs, 20 lacs, and 25 lacs respectively.

b) “Nucleus plants” in each industrially backward district replaced the “district industries centers.” These were to concentrate on assembling the products of SSIs and to produce inputs needed by large number of small units.

c) Reservation of items and marketing support for small industries was to continue.

d) Availability of credit to growing SS units was continued.

e) Buffer stocks of critical inputs were to continue.

f) Agricultural base was to strengthen by providing preferential treatment to agro-based industries.
An early warning system was to establish to avoid sickness and take appropriate remedial measures.

3.7.1.5. Industrial Policy Resolution 1990

Main features of this Resolution are as follows:

a) It raised the investment ceiling in plant and machinery for SSIs.

b) It created central investment subsidy for this sector in rural and backward areas. Also, assistance was granted to women entrepreneur for widening the entrepreneurial base.

c) Reservation of items to be produced by SSIs was increased to 836.

d) Small Industries Development Bank of India was established to ensure adequate flow of credit to SSIs.

e) Stress was reiterated to upgrade technology to improve competitiveness.

f) Special emphasis was laid on training of women and youth under Entrepreneurial Development Programme.

g) Activities of Kadhi and Village Industries Commission and Khadi and Village Industries Board were to expand.


The basic thrust of this resolution was to simplify regulations and procedures by de licensing, deregulating, and decontrolling. Its salient features are:
a) SSIs were exempted from licensing for all articles of manufacture.

b) The investment limit for tiny enterprises was raised to 5 lacs irrespective of location.

c) Equity participation by other industrial undertakings was permitted up to a limit of 24 percent of shareholding in SSIs.

d) Factoring services were to launch to solve the problem of delayed payments to SSIs.

e) Priority was accorded to small and tiny units in allocation of indigenous and raw materials.

f) Market promotion of products was emphasized through co-operatives, public institutions and other marketing agencies and corporations.

3.7.2. Improvement of Small Scale Industries in India

1. “Creative management is much the same as the first element of creative and innovative act–new ways. Creative management consists of new ideas, new directions, new methods and new modes of operation. Innovative management is involved with those innovation processes that implement creative ideas and move successfully in new directions”.

2. Innovation: The act or process of innovation; something newly introduced, new method, custom, device, etc. change in the way of doing things; renew, alter.
3. “An Invention is an idea, a sketch or model for new or improved device, product, processor system……. An Innovation in the economic sense is the accompanied with the first commercial transaction involving the new product, process, system or device, although the word is used to describe the whole process”.

4. “Invention is the creation of a new device or process…. Innovation is the introduction of change via some–thing new”.

5. Process innovation: A process innovation is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. Process innovation can be intended to decrease unit costs of production, to increase quality, to produce new or significant improved products.

6. Product innovation: A product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

7. Globalization: Globalization refers to all those process by which the peoples of the world are incorporated into a single world society, global society.
3.8. Institutional Support to Entrepreneurship Development and Profile of the Study Area

This chapter brings out the various organizations & institution support entrepreneurship development. It is appropriate to analyse the service rendered by different agencies and organization, which play an important role in the development of women entrepreneurship. During the last two decades, various studies have been undertaken to identify women is the in multiple role. A number of working groups, task forces and national conference were organized discuss the issue of women. In addition, a women welfare development bureau was setup to intensity efforts and measured needs for ensuring participation of women in national development.

The second half of eighties witnessed an unprecedented spurt in policy perspectives women. The national perspective plan for women (1988-2000) which is a comprehensive all round projection for women’s development in India and the report of the national commission on self-employed women sector have also made, for reaching recommendations in terms of unexercised sector particularly issues, constraints and strategies for women.

Therefore, it is relevant to give a detailed picture of the organizations, which provide different kinds of entrepreneurs. It is necessary in the sense that the first generations of women entrepreneurs were no such originations to come their help. But in course of time, different agencies and organization which
came in to being, not only provide the financial assistance but also provide training in the science and art of entrepreneurship technological knowhow and consultancy services.

3.8.1. District Industries Centre

The District Industries Center was started on 1st May, 1978. As centrally sponsored scheme is providing less than one roof all inputs including license clearances, raw-materials, machinery and equipment, and arrangement for credit facilities as well as marketing. DICs have been established in all district of the country. The total number of approved DICs stands at 422 corering 431 districts.

3.8.1.1. Organization of District Industries Centres (DICs)

The DICs are functioning under the director or industry and commerce. They provide all the services and facilities to the entrepreneurs, including the identification of a suitable scheme the preparation of feasibility report, arrangement for the supply of machinery and equipment, provision of raw materials, credit facilities and input for marketing and extension services quality control, research and entrepreneurial training. The DICs would also ensure that small industries continue to be viable. For this purpose it provides all facilities to the entrepreneurs under one roof at the district and sub-district levels.
3.8.1.2. **Schemes of assistance for DICs**

The various schemes of assistance provided by DICs to women entrepreneurs are briefed below.

**3.8.1.2.1. Single window Industrial Support System (SWISS)**

The DICs provides all services and support to women entrepreneurs under a single roof at the present operation and past operate stages of small industries venture.

1. SSI registration
2. Incentives registration
3. Recommending registration to export promotion council
4. Registration certificate for issue of power loom/spinning units in small-scale sector.
5. Fiscal incentives like octroi exemption, electricity duty exemption, sales tax different/exemption.
6. To release electric connections up to a certain limit.

**3.8.2. National Small Industries Corporation Limited (NSIC)**

It was established in February 1995 to promote, stimulate and accelerate the development of small-scale industries in the country, central Government. The NSIC is to expand its services to small entrepreneurs in both qualitative terms and quantitative terms. The corporation provides industrial finance by
way of supply of machines on hire-purchase to small industrial units all over the country. The corporation is now sharing its experience with other developing countries. It undertakes small industrial projects on turnkey basis and provides total services from feasibility studies to installation and commissioning of plans and training projects. The government store purchase programme is giving a tremendous boost to the marketing of the producers of SSI units. The corporation lists such SSI units as are competent to undertake the supply of various items to the government. The registered units are offered various facilities so as to promote their participation and consequently, enhance their share in government purchase.

3.8.3. Small industries Development Organization (SIDO)

The small industries development organization (SIDO) functions as an apex body concerned with planning the policy, co-ordinating the institutional activities at the central and state scale industries and providing infrastructure for sustained and organized growth. The actives of SIDO related to modern small scale industrial sector excluding those with full in the purview of specialized board such as All India Handloom, Handicrafts, Sericulture, Coir Boards, Khadi and Village Industries Commission. It functions through Small Industries Services Institute, Extension Services, Regional Testing Centers, Tool Rooms and Training Centers and Production Centers. SIDO has 5 allied intuitions as National Small Industries Corporations, Central
3.8.4. District Rural Development Agency (DRDA)

The agency administered by project Director Chief Officers at district level has a network of district project officer (DPO) responsible for planning, implementing and maintaining the activities of the organization. The DPOs are assigned specific jobs in the field of agriculture, animal husbandry and activities related to women. DPO women are the most important functionary for women entrepreneurs having their enterprises in rural areas. The inter-disciplinary co-ordination common at the entrepreneurs can contact at any level of the hierarchical personnel.

3.8.5. National Research Development Corporation of India (NRDCI)

NRDCI is a Government of India enterprise established in December 1953 as a non-profit organization, NRDCI is a service organization. The corporation is engaged in the development and promotion of appropriate technologies and in carrying the same to rural areas for improving the quality of life of the weaker sections of population realizing that economic independence would accelerate the improvement in the status of women, NRDCI is also promoting technologies which are appropriate for women. The corporation has brought out a publication, which serves as a ready
reference for women entrepreneurs and voluntary agencies working for the uplift of women in India.

3.8.6. Small Industries Development Bank of India (SIDBI)

The SIDBI was established under an Act of parliament, Small Industries Development Bank of India Act, 1989, SIDBI commenced operations on April 2, 1990, the objectives are,

- To provide training and extension services support to women entrepreneurs according to their skill and socio-economic status.
- To extend financial assistance and concessional terms to enable them to set up industrial units in the small-scale sector.

Eligible Intuitions are SFCs, SIDCs Commercial Banks, State Cooperative Banks and Regional Rural Bands. The eligible Institutions are seeking refinance from SIDBI. All projects in the SSI sector promoted and managed by women entrepreneurs including cottage and village tiny sector industries are eligible for assistance. The promoter’s contribution has to be 12.5% of the project cost for unit’s setup in category backward districts, and 15% in all other cases irrespective of location. The Debt Equity Ratio is 3:1. The interest rate chargeable by primary lenders is not to exceed the concessional rate specified by SIDBI.
3.8.7. Tamilnadu Industrial Investment Corporation Limited (TIIC)

The Tamilnadu Industrial Investment Corporation Limited, (TIIC) sponsored by the Government of Tamilnadu. TIIC was in corporate in March 1949 and it commenced its operations on 1stsep 1949. It operations are extend over the whole of Tamil Nadu state and the union territory of Pondicherry. The main function is to providing long-term loans for acquisitions of land, building, plant and machinery and to eligible tiny small & medium scale units. It helps to finance modernization, expansion and diversification of existing units. It also encourages new and technologically professionally qualified women entrepreneurs to setup industrial projects. Financial assistance is available from TIIC for the following types of activities.

1. Manufacturing preservation and processing of goods.
2. Service sector units like computer and software development diagnostic centers, clinic lab, etc,
3. Transport for passengers of goods.
4. Generation or distribution of electricity or any other form of power.
5. Setting up or development of an industrial area.
6. Such other activity as may be approved by the development bank.
3.8.8. State Industries Promotion Corporation of Tamil Nadu (SIPCOT)

The SIPCOT was set up in 1971 as a public limited company wholly owned by the government of Tamil Nadu at Madras and the following functions are carried out by a highly competent team of technical and professional managers.

1. Identifying and promoting medium and large-scale industrial projects in public/joint/assistant sectors.
2. Financing the medium and large-scale industries through underwriting of participation in share capital of companies, grant of term loans to them and issue of guarantees on their behalf.
3. Setting up industrial estates and developing infrastructures facilities.
4. Term lending to industrial units under the refinance scheme of ICBI.

3.8.9. Development Banks in Entrepreneurship Development

Over the years, an integrated structure of financial institutions providing term finance and other assistance to industrial sector has been evolved in the country. The structure comprises.

1. Industrial Development Bank of India (IDBI)
2. Industrial Finance Corporation of India (IFCI)
3. Industrial credit and Investment Corporation of India Limited (ICICI)
4. Small Industries Development Bank of India (SIDBI)
5. Industrial Reconstruction Bank of India (IRBI)
6. Life Insurance Corporation of India (LIC)
7. Unit Trust of India (UTI)
8. General Insurance Corporation of India (GIC)
9. Export Credit Guarantee Corporation of India Limited (ECGC)
10. Risk Capital and Technology Finance Corporation Limited (RCIC)
11. Technology Development and Information Company of India Limited (TDICI)
12. Shipping credit and Investment Company of India Limited (SCICI)
13. Tourism Finance Corporations of India Limited (TFCI)
14. State Financial Corporation (SFCs)
15. State Industrial Development Corporation (SIDCs)

The all India development banks comprises of IDBI, IFCI, ICICI and the investment institutions consist of LIC, UTI and GIC, IRBI, which so far have been a specialized financial institutions are providing term finance for rehabilitation of industrial enterprises and provides assistance like the development banks RCTC, TDICI, SCICI and TFCI are specialized
financial institutions providing risk capital finance for shipping and tourism related industries respectively.

There is wide network of state level institution, viz SFCs and SIDCs, over the years, the institutions have been involved in the industrial development process through various schemes of financial assistance and promotional and development activities.

3.8.10. National Alliance of Young Entrepreneurs

The National Alliance of young Entrepreneurs (NAYE) was set up to promote and develop entrepreneurship among women. The women’s wing of NAYE was set up in 1975, the international year of women announced by the U.N. The award progress by the wing to secure rightful place for women in the national economy since there has been impressive. These wings are the leading organizations of women entrepreneurs and encourage them to participate actively in the country’s industrialization. It urge the central and state government to provide special incentives and facilities to women entrepreneurs such as liberal allocation of land and sheds, easier follow up credit, access to up to date technology, training etc., It also organizes conference of women Entrepreneurs.
3.8.11. National Association of Women Entrepreneurs and Executives

The National Association of women entrepreneurs and Executives (NAWEE) thus formed is an all India body and will be a non political, non profit, membership organization to perform the following functions.

1. To act as a clearing house on problem and opportunities facing women entrepreneurs and executive all levels and to assist them in their self-development and protection.

2. To work closely with the government and other public institutions on the role women entrepreneurs and executives in the all-economic and social development of the country, and over further their cause for self-development.

3. To established branches (local, state, etc) regional bodies and units of NAWEE throughout the country.

4. To establish hostels, dormitories and apartment facilities for women entrepreneurs and executives and provide any other facility required for such working women.

3.9. Social Programmes to Women Entrepreneurs

3.9.1. Rashtriya Mahila Kosh

The objective of RMK is that credit becomes a widely known and used facility for enhancement of the daily income of poor women. The
experience of RMK is that the women would have been able to double or triple their daily income with the credit support of Rs. 2000 or Rs. 5000. The activities may be dairying, petty shop keeping and investment of the agriculture operations.

3.9.2. IDBI Mahila Udyam Nidhi Programme (MUN)

IDBI (Industrial Development Bank of India) has setup a special fund bank Nahila Udayam Nidhi with a corpus found Rs 5 crores to provide seed capital assistance upto Rs 10 lakhs in the form of soft loan to new women entrepreneurs setting up projects in the SSI sector. The scheme is operated through state financial corporation (SFC) in every state.

3.9.3. Science and Technology Entrepreneurs Park (STEP)

STEP was started in 1987 with the objective to provide training to rural women for increasing their production capacity and income generating. In this programme, they give training in the areas of traditional business like agriculture, milk, fisheries, handlooms, khadi development etc., 2.5 lakhs of women have been benefited by this programme since its inception. Maximum numbers of beneficiaries are Milk producing area.

3.9.4. Norweginan Agent for International Development Programme (NOARD)

This programme was established in 1982-83 to help the educated and uneducated women financially in non-traditional areas of business like
Electronics, Computer Programming, Manufacturing of Watches, Printing readymade garments, etc.,

3.9.5. Sree Shakti Programme (SBI)

SBI Stree Shakti Programme is exclusively designed Programme by State Bank of India for promoting Entrepreneurship among women. The programme offer six schemes,

- Small business scheme for self-employed
- Small business scheme for professional and self employed women.
- Micro finance and SHGs through women entrepreneurs
- Retail trade scheme for self-employed
- To assist village or cottage and small scale industry
- Equity fund scheme for both professionals of SSI units, and
- Allied agricultural activity for all cultivators

3.10. Profile of the Study Area

In order to view the research problem in its proper perspective, it is essential to provide the socio – economic profile of the study region chosen for the study. The profile of Pudukkottai District as well as the selected blocks namely Aranthangi, Avudaiyarkoil, Gandharvakottai, Viralimalai, Ponnamaravathy and Thirumayam is presented in this chapter.
3.10.1. Location of the District

Pudukkottai District was formed in January 1974 carved out from the then Trichy and Thanjavur Districts. It is having an area of 4663.29 Sq.kms with a total coastal line of 42 kms. The District lies between 78 C 26’ 50” and 760 16’ 00” of the East West longitude and between 9 C 50’ 45” and 100 44’ 00” of the North latitude. The District is bounded by Tiruchirappalli District in the North and West, Sivagangai District in the South, Bay of Bengal in the East and Thanjavur District in the North East (Pudukkottai was formerly one of the princely states of India. It was under different dynasties during the first half of the 15th century and under Mughals till the 17th century. Thereafter, Pudukkottai came under the suzerainty of the Thondaiman kings who had reined the state till it was merged with the Government of India after independence. The Thondaiman kings were noted for the clean sources for agriculture, evolved a sound revenue administration, education systems etc. the palatial administrative buildings for public offices constructed during the period are still remaining as monuments and serving the same purpose till date.

The noted British administrator Alexander Loftus Tottenham was the administrative executive under the Thondaiman rulers. He evolved the famous “Thottenham System” of file maintenance and other office procedures, which are still being followed by Government departments with a little change then and there. Revenue Administration: Pudukkottai District
consists of Two Revenue Divisions namely Pudukkottai and Aranthangi which are further divided into 9 Taluks and 765 Revenue Villages as depicted. On the basis of Development the District is arranged with 2 Municipalities, 8 Town Panchayats and 13 Panchayat Unions with 498 village Panchayats.

Many of the villages are of ancient foundation. The district was one of the homes of pre-historic man. A very large number of burial sites found in the northern and western parts of the district attest this fact. A very brief sketch of political history is given here in order to appreciate and understand the mixed legacy of antiquities, monuments, epigraphs and the like. The history of Pudukkottai is an epitome of the history of South India. In and around Pudukkottai, there are many vestiges of the oldest habitations of man and some of the lithic records known in the south. The Pandyas, Cholas, Pallavas, Haysalas, Vijaynagar and Madurai Nayaks ruled over this part of the country and fostered its communal organisations, trade and industries and embellished it with temples and monuments of outstanding merit. The total population in Pudukkottai District is 14, 52, 269. Out of this 7, 20, 847 were males and 7, 31, 422 were females. The district sex ratio is 1015. They density of population is 312 person per Sq. kms.
3.10.2. Prospective Industries to be started in Pudukkottai District

In the coastal areas of this district, there appears to be good scope for fisheries like, fish processing, manufacturing of fish meal, fabrication, servicing and repairing of mechanized boats, ice plants, cold storage and articles from conch. As there are about 250 acres of salt pans in Manamelgudi, people may come forward to start salt based industries. A big boat building yard may also be planned for fabrication of motorized boat.

Mineral based industries like mechanized bricks, Mangalore tiles, Ceramic and mosaic tiles, Attangudi tiles, granite cutting and polishing, blue metal jelly, 83 quicklime, white cement. etc, can also be started in this district. A big project for granite cutting and polishing may also be considered. Cement plant with higher capacity may also be considered. In Pudukkottai district, forest based industries like manufacturing of paper, gums, sawmill, agro based industries, polymer and chemical based industries, textiles industries, automobile ancillaries, cashew based units, bone meal, solar equipments, poultry and poultry feed, cattle feed and leather products may be successful ventures for new entrepreneurs. With the plenty of eucalyptus trees here, a modern paper plant may be started. In the hardware sector, assembling of computers, hardware maintenance, manufacture and supply of stationeries, furniture and consumables have good scope in future.
3.10.3. Industrial Development in Pudukkottai District

The important agricultural products are Paddy, Maize, Ragi, Corn, Chillies, Groundnut, Sugarcane, fruits and vegetablea, Cotton and Cashnew. The important minerals available in this district are clay, ochres, gneises, rocks, quartz, pinkgranite, sand stone and lime stone. The main forest produce are eucalyptus, cashew and fuel wood. The district has 15 major fishing villages, in Aranthangi, Avudaiyarkovil and Manamelkudi Blocks. As the district is agriculture oriented, there is lack of entrepreneurship among the people for starting industries. To encourage the entrepreneurs, Government of Tamil Nadu has announced many subsidies and concessions.

The researcher formulated the Entrepreneurship Development Mediated Model examines the relative importance of Mediating factor for Entrepreneurship Development through Micro & Small Enterprises in Pudukkottai District, Tamilnadu. The Entrepreneurship Development Mediated Model includes the measurement of sub dimensions of Entrepreneurship Development through Micro & Small Enterprises as follows:

I. Reason (RE): To be self-employed (RE1), More money in business (RE2), Previous occupation (RE3), No other opportunity (RE4), Labour (RE5), Lack of finance support (RE6), To provide employment to others (RE7), Subsidies (RE8) and Others reasons (RE9); II. Facilitate (FA): Sufficient
financial background (FA1), Previous inheritor / Self acquire / Brought by husband (FA2), Government incentives and concession (FA3), Easy marketing (FA4), Previous Employment (FA5), Previous Experience (FA6) and Any Others (FA7); III. Motivation (MO): Education and training experience received (MO1), Friends and relatives in the field (MO2), Government official (MO3), Availability of time (MO4), Potential demand for product (MO5), Regular work (MO6), Partner's Encouragement (MO7) and Government incentives and concessions (MO8); IV. Location (LO): Easy access to transport (LO1), Availability of labour (LO2), Industrial area (LO3), Access of market (LO4), Availability of parent units (LO5), Existence of competitive (LO6), Raw material availability (LO7) and Others reasons (LO8); V. Production (PR): Previous Experience (PR1), Education Same / Related line (PR2), Government incentives / Subsidies (PR3), Availability of raw material (PR4), High Margin of Profit (PR5) and Any others (PR6); VI. Self Confidence (SC): I am good at dealing with ambiguous situations (SC1), I can find even the most disagreeable people good (SC2), I can find something positive even in the most difficult situation (SC3), I am realistic about my strengths and weaknesses (SC4) and I have complete in my capabilities / skills (SC5); VII. Hard Work (HW): I have to lose anything compared to others (HW1), I am known to be a sticker for fighting for my rights (HW2), I set high goals for myself compared to others situations (HW3), When faced with difficult problems, I spend a lot of time
trying to find solutions (HW4) and I give much effort to my work (HW5);

**VIII. Leadership (LP):** I am a motivated person (LP1), I always enjoy in
telling people with to do (LP2), Always encourage other to work happily
(LP3), I am able to deal with negative criticism (LP4) and I tell others when
they have not performed as expected (LP5);  

**IX. Decision Making (DM):** I am making use of talents (DM1), I don't like to work under other (DM2), I
always make rational decisions (DM3), I always make quick and prompt
decision (DM4) and I am comfortable in making important decisions by
myself at work (DM5);  

**X. Innovation (IN):** I always come up with fresh
ideas (IN1), I am praised ad rewarded for being creative (IN2), I
deliberately copy and adapt good ideas from outside our field (IN3), I find
ways to do thing for less cost (IN4) and I take great interest in the latest
innovations (IN5);  

**XI. Management Skills (MS):** Finance (MS1), Dealing
with people (MS2), Marketing / Sales (MS3), Generation / Product (MS4),
Business / Operation (MS5) and Organisation and planning (MS6); and  

**XII. Entrepreneurship Development (ED):** Entrepreneurial awareness (ED1),
Demonstration Programmes for rural areas (ED2), Skills development
programmes (ED3), Entrepreneurial motivational programmes (ED4),
Enterprising development programmes (ED5), Follow-up and support
service (ED6), Group entrepreneurial activity (ED7), Guidance and
counselling for men (ED8) and Help in marketing of product (ED9).
3.11. Hypotheses Development

3.11.1. Hypotheses Development of ED Mediated Model

Mediation refers to a process or mechanism through which one variable (i.e., exogenous) causes variation in another variable (i.e., endogenous). Studies designed to test for moderation may provide stronger tests of mediation than the partial and whole covariance approaches typically used (e.g. Baron and Kenny, 1986; Bing, Davison, LeBreton, and LeBreton, 2002; James and Brett, 1984). It is useful to distinguish between moderation and mediation. Moderation carries with it no connotation of causality, unlike mediation, which implies a causal order. Based on the arguments discussed in the previous chapters and this chapter the researcher formulated the following hypotheses.

Figure 3.1: Proposed Hypothetical Model of “Entrepreneurship Development Mediated Model”
The dimensions of Entrepreneurship Development through Micro & Small Enterprises were influenced by the mediating factor Motivation.

The dimensions of Entrepreneurship Development through Micro & Small Enterprises were positively influenced by the Entrepreneurship Development.

A mediator hypothesis is supported if the interaction path (RE, FA, MS, LO, PR, SC, HW, LE, DM, IN, and Motivation) are significant. There may also be significant main effects for the predictor (Entrepreneurship Development) and mediator (Motivation). Therefore, this research seeks to explore whether the relationship between Entrepreneurship Development and RE, FA, MS, LO, PR, SC, HW, LE, DM, IN are fully or partially Mediated by Motivation.

**Hypothesis 1:** The Entrepreneurship Development through Micro & Small Enterprises dimension Reason is mediated by Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 2:** The Entrepreneurship Development through Micro & Small Enterprises dimension Facilitate is mediated by Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.
**Hypothesis 3**: The Entrepreneurship Development through Micro & Small Enterprises *dimension Location is mediated by* Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 4**: The Entrepreneurship Development through Micro & Small Enterprises *dimension Production is mediated by* Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 5**: The Entrepreneurship Development through Micro & Small Enterprises *dimension Self Confidence is mediated by* Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 6**: The Entrepreneurship Development through Micro & Small Enterprises *dimension Hard Work is mediated by* Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 7**: The Entrepreneurship Development through Micro & Small Enterprises *dimension Leadership is mediated by* Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 8**: The Entrepreneurship Development through Micro & Small Enterprises *dimension Decision Making is mediated by* Motivation towards
attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 9:** The Entrepreneurship Development through Micro & Small Enterprises dimension Innovation is mediated by Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 10:** The Entrepreneurship Development through Micro & Small Enterprises dimension Management Skills is mediated by Motivation towards attainment of Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 11:** The Entrepreneurship Development through Micro & Small Enterprises dimension Reason positively influences the Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 12:** The Entrepreneurship Development through Micro & Small Enterprises dimension Facilitate positively influences the Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 13:** The Entrepreneurship Development through Micro & Small Enterprises dimension Location positively influences the Entrepreneurship Development to the Micro & Small Enterprises.

**Hypothesis 14:** The Entrepreneurship Development through Micro & Small Enterprises dimension Production positively influences the Entrepreneurship Development to the Micro & Small Enterprises.
Hypothesis 15: The Entrepreneurship Development through Micro & Small Enterprises dimension Self Confidence positively influences the Entrepreneurship Development to the Micro & Small Enterprises.


**Hypothesis 22**: Including the interaction between dimensions of the Entrepreneurship Development and Motivation will explain more of the variance in Entrepreneurship Development through Micro & Small Enterprises than the direct influence of dimensions of Micro & Small Enterprises on their own.

The researcher formulated the Entrepreneurship Development Mediated Model examines the relative importance of Mediating factor for Problems based on Entrepreneurship Development through Micro & Small Enterprises in Pudukkottai District, Tamilnadu. The Entrepreneurship Development Mediated Model includes the measurement of sub dimensions of Entrepreneurship Development through Micro & Small Enterprises as follows:

**I. General Problems (GP):** Initial lack of confidence in their own abilities (GP1), Society's lack on women taking up business (GP2), Family's reluctance to support and encourage a women's initiative (GP3), Banker's reluctance to take risk of helping a women entrepreneur (GP4), Lack of market exposure (GP5), Low mobility (GP6), Lack of financial resources (GP7), Absence (GP8) and Any others (GP9); **II. Specific Problems (SP):** Lack of awareness about the existing scheme of assistance (SP1), Lack of support from group (SP2), Lack of knowledge about the latest technologies (SP3), Low marketing (SP4), Raw materials (SP5), Competition (SP6), No
support from government (SP7) and Any others (SP8); **III. Marketing Problems (MP):** Competition reduces the boundary (MP1), Difficulty in reaching the customers (MP2), Changing technologies (MP3), Changing tastes and preferences (MP4) Domination of expensive nature of advertisement (MP5) and Any others (MP6); **IV. Financial Problems (FP):** Inadequate (FP1), Lack of training and extension potential (FP2), Mismanagement (FP3), Low market coverage potential (FP4), Delay payment by customers (FP5), Financial crisis (FP6), Poor quality product (FP7), Low efficiency (FP8), Low production (FP9) and Low level of stock management (FP10); **V. Entrepreneurship Development (ED):** Entrepreneurial awareness (ED1), Demonstration Programmes for rural areas (ED2), Skills development programmes (ED3), Entrepreneurial motivational programmes (ED4), Entrepreneurial development programmes (ED5), Follow-up and support service (ED6), Group entrepreneurial activity (ED7), Guidance and counselling for men (ED8) and Help in marketing of product (ED9).

### 3.11.2. Hypotheses Development of ED Model

Mediation refers to a process or mechanism through which one variable (i.e., exogenous) causes variation in another variable (i.e., endogenous). Studies designed to test for moderation may provide stronger tests of mediation than the partial and whole covariance approaches typically used (e.g. Baron and Kenny, 1986; Bing, Davison, LeBreton, and LeBreton, 2002; James and
Brett, 1984). It is useful to distinguish between moderation and mediation. Moderation carries with it no connotation of causality, unlike mediation, which implies a causal order. Based on the arguments discussed in the previous chapters and this chapter the researcher formulated the following hypotheses.

**Figure 3.2: Proposed Hypothetical Model of “Entrepreneurship Development”**

- The dimensions of Entrepreneurship Development through Micro & Small Enterprises were influenced by the mediating factor Financial Problems.
- The dimensions of Entrepreneurship Development through Micro & Small Enterprises were positively influenced by the Entrepreneurship Development.
A mediator hypothesis is supported if the interaction path (GP, SP, MP and FP) are significant. There may also be significant main effects for the predictor (ED) and mediator (Financial Problems). Therefore, this research seeks to explore whether the relationship between ED and GP, SP, MP are fully or partially Mediated by FP.

**Hypothesis 1:** The Entrepreneurship Development through Micro & Small Enterprises dimension General Problems is mediated by Financial Problems towards attainment of Entrepreneurship Development to the Development of Micro & Small Enterprises.

**Hypothesis 2:** The Entrepreneurship Development through Micro & Small Enterprises dimension Specific Problems is mediated by Financial Problems towards attainment of Entrepreneurship Development to the Development of Micro & Small Enterprises.

**Hypothesis 3:** The Entrepreneurship Development through Micro & Small Enterprises dimension Marketing Problems is mediated by Financial Problems towards attainment of Entrepreneurship Development to the Development of Micro & Small Enterprises.

**Hypothesis 4:** The Entrepreneurship Development through Micro & Small Enterprises dimension General Problems positively influences the Development of Entrepreneurship Development to the Micro & Small Enterprises.


Hypothesis 8: Including the interaction between dimensions of the Entrepreneurship Development and Financial Problems will explain more of the variance in Entrepreneurship Development through Micro & Small Enterprises than the direct influence of dimensions of Entrepreneurship Development on their own.

3.12. Research Design

The research employed a cross sectional methodological approach. Methodology described as cross sectional “is one used to collect data on all relevant variables at one time” (O’Sullivan and Rassel, 1999). This approach is particularly useful for studies designed to collect information on
attitudes and behaviours of large geographically diverse populations (O’Sullivan and Rassel, 1999). The survey design is regarded as the most appropriate research design to measure the perceptions of the respondents in this study. A survey is the most appropriate research design as it can enable the researcher to collect information from a large population. The information obtained from the sample can then be generalized to an entire population (Kerlinger and Lee, 2000). Survey research is usually a qualitative method that requires standardized information in order to define or describe variables or to study the relationships between variables.

Surveys generally fall into one of two categories, descriptive or relational. Descriptive surveys are designed to provide a snapshot of the current state of affairs while relational surveys are designed to empirically examine relationships among two or more constructs either in an exploratory or in a confirmatory manner. The current study is a relational survey that seeks to explore the relationship between the 1) Reason (RE), (2) Facilitate (FA), (3) Motivation (MO), (4) Location (LO), (5) Production (PR), (6) Self Confidence (SC) (7) Hard Work (HW), (8) Leadership (LE) (9) Decision Making (DM), (10) Innovation (IN) Management Skills (MS) and (11) Entrepreneurship Development (ED) on Entrepreneurship Development through Micro and Small Enterprises. (1) General Problems (GP), (2) Specific Problems (SP), (3) Marketing Problems (MP), (4) Financial
Problems (FP), (5) Entrepreneurship Development (ED) on Entrepreneurship Development through Micro and Small Enterprises.

3.12.1. Pilot Study

Prior to beginning actual data collection with the procedure described above, the researcher utilized similar procedures to conduct a pilot study to ensure that the survey materials and procedure were clear and did not provoke any confusion or problems for participants. The draft questionnaire was eventually subjected to pilot testing with a total of 50 Women Entrepreneurs spread across the different regions and they were asked to comment on any perceived ambiguities, omissions or errors concerning the draft questionnaire. The feedback received was rather ambiguous thus only minor changes were made. For instance, technical jargon was rephrased to ensure clarity and simplicity. The revised questionnaire was subsequently submitted to three experts (an academician, a researcher and a consultant) for feedback before being administered for a full-scale survey. These experts indicated that the draft questionnaire was rather lengthy, which in fact coincided with the preliminary feedback from Women Entrepreneurs. Nevertheless, in terms of number of items in the questionnaire, the current study conforms broadly with similar research work (Cronin and Taylor, 1992; Teas, 1993a; Lassar et., al., 2000; Mehta et., al., 2000) that attempted to compare various instruments for measuring moderating factor of Entrepreneurs in Tamil Nadu.
3.12.2. Construct Measures and Data Collection

Data were collected by means of a structured questionnaire comprising eight dimensions namely (1) Reason (RE), (2) Facilitate (FA), (3) Motivation (MO), (4) Location (LO), (5) Production (PR), (6) Self Confidence (SC) (7) Hard Work (HW), (8) Leadership (LE) (9) Decision Making (DM) , (10) Innovation (IN) Management Skills (MS) and (11) Entrepreneurship Development (ED), Reason (RE) consists of Nine Questions, Facilitate (FA) consists of Seven Questions, Motivation (MO) consists of Eight Questions, Location (LO) consists of Eight Questions, Production (PR) consists of Six Questions, Self Confidence (SC) consists of Five Questions, Hard Work (HW) consists of Five Questions, Leadership (LE) consists of Five Questions, Decision Making (DM) consists of Five Questions, Innovation (IN) consists of Five Questions, Management Skills (MS) consists of Six Questions and Entrepreneurship Development (ED) consists of Nine Questions. (1) General Problems (GP), (2) Specific Problems (SP), (3) Marketing Problems (MP), (4) Financial Problems (FP), (5) Entrepreneurship Development (ED), General Problem (GP) consists of Nine Questions, Special Problems (SP) consists of Eight Questions, Marketing Problems (MP) consists of Six Questions, Financial Problems (FP) consists of Ten Questions and Entrepreneurship Development (ED) consists of Nine Questions. Finally in the Ten Questions pertaining to respondents demographic profile information was given. All the dimensions
were presented as statements on the questionnaire, with the same rating scale used throughout and measured on a five point, Likert-type scale that varied from 1 highly dissatisfied to 5 highly satisfied and Strongly Disagree to Strongly Agree. For conducting an empirical study, data were collected from respondents (entrepreneurs) in Pudhukkottai District of Tamilnadu.

A total of 350 nos. of questionnaire were circulated to Entrepreneurs in Pudhukkottai District of Tamilnadu of these 350 were collected. Hence, the sample size for the analysis is 350. The following table (table 3.2) gives a view of the sample size across the Pudhukkottai District of Tamilnadu and Development of Entrepreneurs.

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Pudukkottai Taluk</th>
<th>Aranthaig Taluk</th>
<th>Gandarvakottai Taluk</th>
<th>Ponnamaravathi Taluk</th>
<th>Thirumayam Taluk</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>18</td>
<td>23</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>89</td>
</tr>
<tr>
<td>East</td>
<td>21</td>
<td>17</td>
<td>19</td>
<td>13</td>
<td>17</td>
<td>87</td>
</tr>
<tr>
<td>West</td>
<td>19</td>
<td>19</td>
<td>16</td>
<td>18</td>
<td>16</td>
<td>88</td>
</tr>
<tr>
<td>North</td>
<td>18</td>
<td>22</td>
<td>18</td>
<td>12</td>
<td>16</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>81</td>
<td>71</td>
<td>58</td>
<td>64</td>
<td>350</td>
</tr>
</tbody>
</table>

Source: Primary Data

The sampling procedure used for the study was stratified random sampling. The stratification has been done based on the Taluks are Pudukkottai, Aranthaig, Gandarvakottai, Ponnamaravathi and Thirumayam for the nature of region south, east, west and north while selecting the groups from each category, non-probabilistic convenience and judgmental sampling technique was used. However, within such block, the respondents were
selected by stratified random sampling. The data collected were analyzed for the entire sample.

3.12.3. Respondent’s Characteristics

The demographical characteristics of the sample of respondents are presented in order to get a clear picture of the sample. Demographic variables that were measured from the respondents were as follows:

1. Age
2. Gender
3. Educational Qualification
4. Religion
5. Community
6. Marital Status
7. Nature of Family
8. Place of Residence
9. Reason of Leaving Previous Occupation
10. Nature of Organisation
11. Nature of Industrial Activity
12. Area of Location

The following table (table 3.3) & (table 3.4) gives the breakup of the sample size across the different demographic variables.
Table 3.3: The Sample Size Across the Different Demographic Profile

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Demographic Dimensions</th>
<th>No. of Respondents</th>
<th>Percentage of Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below 30 yrs.</td>
<td>47</td>
<td>13.44</td>
</tr>
<tr>
<td></td>
<td>31 yrs. to 40 yrs.</td>
<td>110</td>
<td>31.42</td>
</tr>
<tr>
<td></td>
<td>41 yrs. to 50 yrs.</td>
<td>128</td>
<td>36.57</td>
</tr>
<tr>
<td></td>
<td>51 yrs. and above</td>
<td>65</td>
<td>18.57</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>2)</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>217</td>
<td>62.00</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>133</td>
<td>38.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>3)</td>
<td>Educational Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>41</td>
<td>11.71</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>34</td>
<td>9.71</td>
</tr>
<tr>
<td></td>
<td>Higher Secondary</td>
<td>67</td>
<td>19.14</td>
</tr>
<tr>
<td></td>
<td>Under Graduate</td>
<td>79</td>
<td>22.57</td>
</tr>
<tr>
<td></td>
<td>Post Graduate</td>
<td>28</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>95</td>
<td>27.14</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>6</td>
<td>1.73</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>4)</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hindu</td>
<td>150</td>
<td>42.86</td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>102</td>
<td>29.14</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>98</td>
<td>28.00</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>5)</td>
<td>Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OC</td>
<td>61</td>
<td>17.43</td>
</tr>
<tr>
<td></td>
<td>OBC</td>
<td>126</td>
<td>36.00</td>
</tr>
<tr>
<td></td>
<td>SC/ST</td>
<td>97</td>
<td>27.72</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>66</td>
<td>18.85</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>6)</td>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unmarried</td>
<td>122</td>
<td>34.87</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>186</td>
<td>53.14</td>
</tr>
<tr>
<td></td>
<td>Widow</td>
<td>18</td>
<td>5.14</td>
</tr>
<tr>
<td></td>
<td>Divorce</td>
<td>24</td>
<td>6.85</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>7)</td>
<td>Nature of Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nuclear Family</td>
<td>187</td>
<td>53.43</td>
</tr>
<tr>
<td></td>
<td>Joint Family</td>
<td>163</td>
<td>46.57</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>8)</td>
<td>Place of Residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>106</td>
<td>30.28</td>
</tr>
<tr>
<td></td>
<td>Semi Urban</td>
<td>112</td>
<td>32.00</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>132</td>
<td>37.72</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td>9)</td>
<td>Reason of Leaving Previous Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To run a business on my own</td>
<td>91</td>
<td>26.00</td>
</tr>
<tr>
<td></td>
<td>Dissatisfaction with Performance</td>
<td>47</td>
<td>13.44</td>
</tr>
<tr>
<td></td>
<td>Not Suitable</td>
<td>81</td>
<td>23.14</td>
</tr>
<tr>
<td></td>
<td>Not Profitable</td>
<td>78</td>
<td>22.28</td>
</tr>
<tr>
<td></td>
<td>Any Others</td>
<td>53</td>
<td>15.14</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 3.4: The Sample Size Across the Difference Industries Profile

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Industries Dimensions</th>
<th>No. of Respondents</th>
<th>Percentage of Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Nature of Organisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sole Proprietorship</td>
<td>81</td>
<td>23.14</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
<td>139</td>
<td>39.72</td>
</tr>
<tr>
<td></td>
<td>Private Limited</td>
<td>130</td>
<td>37.14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>350</td>
<td>100.00</td>
</tr>
<tr>
<td>2.</td>
<td>Nature of Industrial Activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td>47</td>
<td>13.43</td>
</tr>
<tr>
<td></td>
<td>Sub-Contract</td>
<td>112</td>
<td>32.00</td>
</tr>
<tr>
<td></td>
<td>Service Units</td>
<td>191</td>
<td>54.57</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>350</td>
<td>100.00</td>
</tr>
<tr>
<td>3.</td>
<td>Area of Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>56</td>
<td>16.00</td>
</tr>
<tr>
<td></td>
<td>Semi Urban</td>
<td>112</td>
<td>32.00</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>182</td>
<td>52.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>350</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Primary Data

3.13. Procedure for Data Analysis

The data collected were analysed for the entire sample. Data analyses were performed with Statistical Package for Social Sciences (SPSS) using techniques that included descriptive statistics, Correlation analysis and Analysis of Moment Structures (AMOS) package for Structural Equation Modeling and Bayesian estimation and testing.

3.13.1. Structural Equation Modeling

The main study used Structural Equation Modeling because of two advantages: “(1) Estimation of Multiple and Interrelated Dependence Relationships, and (2) The Ability to Represent Unobserved Concepts in These Relationships and Account for Measurement Error in the Estimation Process” (Hair et al., 1998). Therefore simultaneously estimated multiple regressions; the direct and indirect effects were identified (Tate, 1998). However, a series of separate multiple regressions had to be established.
based on “theory, prior experience, and the research objectives to distinguish which independent variables predict each dependent variable” (Hair et al., 1998). In addition, because SEM considers a measurement error, the reliability of the predictor variable was improved. AMOS 7.0 (Arbuckle and Wothke, 2006), a computer program for formulating, fitting and testing Structural Equation Models (SEM) to observed data was used for SEM and the data preparation was conducted with SPSS 13.0.

Linear Structural Equation Models (SEMs) are widely used in sociology, econometrics, management, biology, and other sciences. A SEM (without free parameters) has two parts: a probability distribution (in the Normal case specified by a set of linear structural equations and a covariance matrix among the “error” or “disturbance” terms), and an associated path diagram corresponding to the causal relations among variables specified by the structural equations and the correlations among the error terms. It is often thought that the path diagram is nothing more than a heuristic device for illustrating the assumptions of the model. However, in this research, the researcher will show how path diagrams can be used to solve a number of important problems in structural equation modeling.

Structural Equation Models with latent variables (SEM) are more and more often used to analyse relationships among variables in marketing and consumer research (see for instance Bollen, 1989; Schumacker and Lomax,
1996, or Batista-Foguet and Coenders, 2000, for an introduction and Bagozzi, 1994 for applications to marketing research). Some reasons for the widespread use of these models are their parsimony (they belong to the family of linear models), their ability to model complex systems (where simultaneous and reciprocal relationships may be present, such as the relationship between quality and satisfaction), and their ability to model relationships among non-observable variables (such as the domains in the Entrepreneurship Development Model) while taking measurement errors into account (which are usually sizeable in questionnaire data and can result in biased estimates if ignored).

As is usually recommended, a Confirmatory Factor Analysis (CFA) model is first specified to account for the measurement relationships from latent to observable variables. In our case, the latent variables are the four perception dimensions and the observed variables the 30 perception items. The relationships among latent variables cannot be tested until a well-fitting CFA model has been reached. In our case, the relationships among Entrepreneurship Development (ED), the mediating impact of Entrepreneurship Development (ED) with the RE, FA, LO, PR, SC, HW, LP, DM, IN and MO dimensions are of interest. In our case, the relationships among Entrepreneurship Development (ED), the mediating impact of Entrepreneurship Development (ED) with the GP, SP, MP, and FP dimensions are of interest. This modeling sequence stresses the importance
of the goodness of fit assessment. As a combination of regression, path and factor analyses, in SEM, each predictor is used with its associated uncontrolled error and, unlike regression analyses; predictor multi-collinearity does not affect the model results.

### 3.13.2. Evaluation of Model Fit

According to the usual procedures, the goodness of fit is assessed by checking the statistical and substantive validity of estimates, the convergence of the estimation procedure, the empirical identification of the model, the statistical significance of the parameters, and the goodness of fit to the covariance matrix. Since complex models are inevitably misspecified to a certain extent, the standard $x^2$ test of the hypothesis of perfect fit to the population covariance matrix is given less importance than measures of the degree of approximation between the model and the population covariance matrix. The Root Mean Squared Error of Approximation (RMSEA) is selected as such a measure. Values equal to 0.05 or lower are generally considered to be acceptable (Browne and Cudeck, 1993). The sampling distribution for the RMSEA can be derived, which makes it possible to compute confidence intervals. These intervals allow researchers to test for close fit and not only for exact fit, as the $x^2$ statistics does. If both extremes of the confidence interval are below 0.05, then the hypothesis of close fit is rejected in favour of the hypothesis of better than close fit. If both extremes of the confidence interval are above 0.05, then the hypothesis of close fit is
rejected in favour of the hypothesis of bad fit. Several well-known goodness-of-fit indices were used to evaluate model fit: the chi-square, The Comparative Fit Index (CFI), The Unadjusted Goodness-of-Fit Indices (GFI), The Normal Fit Index (NFI), The Tucker-Lewis Index (TLI), The Root Mean Square Error of Approximation (RMSEA) and The Standardized Root Mean Square Error Residual (SRMR).

#### 3.13.3. Bayesian Estimation and Testing in SEM

With modern computers and software, a Bayesian approach to structural equation modeling (SEM) is now possible. Posterior distributions over the parameters of a structural equation model can be approximated to arbitrary precision with AMOS, even for small samples. Being able to compute the posterior over the parameters allows us to address several issues of practical interest. First, prior knowledge about the parameters may be incorporated into the modeling process in AMOS. Second, we need not rely on asymptotic theory when the sample size is small, a practice which has been shown to be misleading for inference and goodness-of-fit tests in SEM (Boomsma, 1983). Third, the class of models that can be handled is no longer restricted to just identified or over identified models. Whereas each identifying assumption must be taken as given in the classical approach, in a Bayesian approach some of these assumptions can be specified with perhaps more realistic uncertainty.
3.14. Conclusion

In this chapter the research methodology adopted for this research was explained with the research design followed by the explanation of the population and the sample, respondents’ characteristics, survey instruments and scoring procedures, data collection procedure and data analysis were briefed respectively. In the following chapter the developed hypotheses will be empirically tested.