Chapter I

Introduction and Design
of the Study

CHAPTER 1

INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

India is predominantly a rural country. As per 2011 Census, 68.8 per cent of the country's population and 72.4 per cent of the workforce reside in rural areas. The share of total workforce is high in agricultural sector. The volatility in agriculture has resulted in migration of people from rural areas to rapid growing urban areas in search of better employment and income opportunities to improve their standard of living. To control this rural-urban migration and to improve the socio economic conditions of rural population in the country, there is a need to empower the rural economy by creating rural employment opportunities. In this context, as a catalyst of socio-economic transformation, Rural Entrepreneurship plays an imperative role in exploiting the productive resources and promoting regionally dispersed industrial development in the economy. The development of industrial units in rural areas has thus gained considerable importance as an alternative strategy for generating employment, reducing poverty, achieving higher rate of growth and development of rural areas. The rural industry consists of traditional sector and modern sector. Initially, Khadi and Village industries, Handloom, Sericulture, Handicraft and Coir industries have contributed to the development of rural economy. Later, Power looms, Manufacturing and Service sectors have also been added. In rural areas, the Micro, Small and Medium manufacturing enterprises have created a pedestal to improve the socio-economic conditions of rural households. Around 60 per cent of Micro, Small and Medium manufacturing enterprises are located in rural areas producing more than 8000 products, thereby contributing 45 per cent to total manufacturing output and 40 per cent to exports. The Micro, Small and Medium manufacturing enterprises gains the highest share by contributing 69 per cent to employment in India next to agricultural sector (Last all India MSME census 2006-2007).

The success of any business firm or a manufacturing enterprise depends upon the adaptability of the environmental factors within which it functions and the extent to which the environmental factors contribute for the development of manufacturing enterprises. Thus, the environmental factors also enable the firms' survival and smooth functioning of manufacturing enterprises. The development of manufacturing enterprises

is influenced by two main factors, namely, internal environmental and external environmental factors. The internal environmental factors are the key resources of a firm such as financial, human resources, production and marketing which have a direct influence on firms' performance and also play a vital role in determining the success of a firm. The external environmental factors, namely, micro environmental and macro environmental factors consist of customers, suppliers, competitors, intermediaries, political, legal, socio-cultural, technological etc., have a direct or indirect bearing on the functioning of manufacturing enterprises. In this context, an understanding of the prevailing business environment within which the rural Micro, Small and Medium manufacturing enterprises operate and the factors influencing their performance is highly significant.

1.2 STATEMENT OF THE PROBLEM

The transition in the rural economy in the last four decades has taken place due to reduction in the share of agriculture and employment. An impressive growth of non-agricultural sector in rural India has brought a significant livelihood opportunity to millions of people. As an engine of growth, the rural Micro, Small and Medium manufacturing sector plays a vital role in the economic and social development of the rural community. It helps in industrialization of rural and backward areas, reduces regional imbalances and assures more equitable distribution of national income and wealth. The rural Micro, Small and Medium manufacturing enterprises have contributed to the overall growth in terms of Gross Domestic Product (GDP), employment generation, total manufacturing output, and exports. Inspite of all these contributions, the rural Micro, Small and Medium manufacturing enterprises are always exposed to high risks in their business environment due to the dynamic changes that take place in internal and external environmental factors, which in turn influence their performance. According to the National Credit Regulator (2011), approximately eight in every ten new businesses have failed within their first five years of operation. There are many challenges faced by rural Micro, Small and Medium manufacturing enterprises which impede their growth and development. A few among them are, limited access to financial resources, lack of infrastructure, inadequate linkages to domestic and global market which make these manufacturing enterprises vulnerable. The lack of sustainability affects the process of job creation and the profitability of rural manufacturing enterprises in the long run.

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The number of rural Micro, Small and Medium manufacturing enterprises has been increasing over the years but their performance has followed a decreasing trend. The poor performance and the low investment climate are attributed to the unfavourable business environment. Nevertheless, the survival and growth of rural Micro, Small and Medium manufacturing enterprises greatly depend on the dynamic operating environment.

Earlier studies conducted by various researchers on the concepts "Entrepreneurial motivation", "Internal factors", and "External factors", have examined the constructs individually and their relationship with "Business Performance" confined to specific industries. There are barely a few studies which have combined the aspects of both financial and non-financial indicators measuring the firms' performance. This has resulted in eliciting the need for examining the comprehensive factors such as entrepreneurial motivation, internal environmental and external environmental factors influencing the performance of rural Micro, Small and Medium manufacturing enterprises. A constant and consistent research in Rural Entrepreneurship assists the rural Micro, Small and Medium manufacturing enterprises to improve their productivity and in turn to enhance their performance.

1.3 OBJECTIVES OF THE STUDY

The study focuses on the following objectives:

- To understand the rural firms' characteristics and to assess the motivational factors that inspired the entrepreneurs to incept their Micro, Small and Medium Manufacturing enterprises in rural areas.
- To assess the internal environmental factors, external environmental factors and to analyse the performance of rural Micro, Small and Medium Manufacturing enterprises.
- To examine the extent of influence of motivational, internal and external environmental factors on firms' performance, to propose a Structural Equation Model to analyze their relationship *inter se* and to study the major problems faced by rural Micro, Small and Medium Manufacturing enterprises.

1.4 HYPOTHESES

Based on the objectives, the following null hypotheses have been framed and tested:

1. Motivational factors, Internal environmental factors, External environmental factors and Business performance do not have a significant variation with rural enterprise characteristics.

2. Motivational factors, Internal environmental factors and External environmental factors do not have a significant influence on the performance of rural Micro, Small and Medium manufacturing enterprises.

3. Motivational factors, Internal environmental factors and Business Performance do not depend on External environmental factors (Micro and Macro environment).

1.5 SCOPE OF THE STUDY

The study aims to analyse the factors influencing the performance of rural Micro, Small and Medium manufacturing enterprises in Coimbatore District. Motivation is an important factor in the start-up and success of a business. The factors such as need for independence, need for achievement, social recognition and financial rewards as prescribed by "Four Forces of Entrepreneurial Motivation Model" (Christoph Ernst Wilken Kisker, 2016) have been considered to measure their impact on the performance of rural Micro, Small and Medium manufacturing enterprises. Similarly, the internal environmental factors comprising of production, finance, marketing, human resources and the external environmental factors, namely, Micro and Macro environmental factors have been considered to examine their impact on the performance of rural Micro, Small and Medium manufacturing enterprises. The lack of resources is bound to affect the direction of firms' performance either positively or negatively. The problems faced by the rural entrepreneurs due to the deficiency in their internal functional areas of business such as production, finance, marketing and human resources are given attention in the study. The major factors relating to the performance of rural Micro, Small and Medium manufacturing enterprises in their business such as cost of production, profit, return on investment, sales volume, employees strength, customer satisfaction, customer retention, business image, market share, expansion and diversification have also been considered as they are important parameters to measure the level of business performance. Thus, the study has focused on the performance of rural Micro, Small and Medium manufacturing enterprises of Coimbatore district in general.

1.6 RESEARCH METHODOLOGY

i) Period of Study

The study has been undertaken from 2016 to 2017

ii) Area of the Study

Coimbatore district is a major commercial and business hub in the state of Tamil Nadu. The business tradition of Coimbatore district has evolved over a period of last two hundred decades. At present, there are more than 50,000 Micro, Small and Medium enterprises in various fields of manufacturing sector such as general engineering, textiles, textile spares, auto spares, machine tools, motor and pumps, foundry, home appliances, software, farm equipments etc. Hence, the study has been carried out considering twelve blocks in Coimbatore District to analyse the factors influencing the performance of rural Micro, Small and Medium manufacturing enterprises established in rural areas.

iii) Sampling and sample design

Stratified Random sampling technique and Census have been applied for the selection of rural Micro, Small and Medium manufacturing enterprises from twelve blocks of Coimbatore District. As per the definition given in Micro, Small and Medium Enterprises Development Act 2006 (MSMED Act), the enterprises have been selected based on the investment level in plant and machinery as prescribed during the study period.

Table 1.1: Classification of Micro, Small and Medium Enterprises (MSME)

Type of Enterprises	Manufacturing Enterprises (in terms of gross investment in plant and machinery)	Service Enterprises (in terms of gross investment in equipment)
Micro Enterprises	Does not exceed twenty five lakh rupees	Does not exceed ten lakh rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees	More than ten lakh rupees but does not exceed two crore rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees	More than two crore rupees but does not exceed five core rupees

(Source: dcmsme.gov.in)

Criteria for sample size determination

- The population of the study constitutes rural Micro, Small and Medium manufacturing enterprises incepted in rural blocks of Coimbatore district. As on March 2017, there are 42,380 Micro, Small and Medium manufacturing enterprises in Coimbatore district which have filed EM II (Entrepreneur Memorandum) and registered with District Industries Centre as per Factories Act 1948 section 2m (i) and 2m (ii). Out of this, 28,532 Micro, Small and Medium manufacturing enterprises are located in rural blocks.

- The rural Micro, Small and Medium manufacturing enterprises having business survival of minimum five years, irrespective of their nature of business have been taken for the study. As on March 2017, there are 13,843 rural Micro, Small and Medium manufacturing enterprises which are located in rural blocks of Coimbatore District.

- The sample size has been determined by applying the Krejcie and Morgan's (1970) formula as follows:

$$S = \frac{\chi^2 NP(1-P)}{d^2(N-1) + \chi^2 P(1-P)} \qquad S = \frac{3.841*13,843*0.5(1-0.5)}{0.05^2(13,843-1) + 3.841*0.5(1-0.5)} = 373.75$$

Where,

S= required sample size, χ^2 = chi-square value at 1 degree of freedom (3.841)

N = the population size, P = the population proportion

d = degree of accuracy expressed as a proportion (.05)

Accordingly, the sample size has been found to be 373.75 rounded off to 375 for arithmetic convenience. **Thus, the sample size of the study is 375 rural Micro, Small and Medium manufacturing enterprises established in rural blocks of Coimbatore District.**

The selection of sample units is presented in the table 1.2

Table 1.2: Selection of sample units

S. No.	Blocks	Rural Micro (A)	Rural Small (B)	Rural Medium (C)	Total rural Micro, Small and Medium manufacturing enterprises $D= (A + B + C)$	Proportionate for Micro and Small $E = \dfrac{D-C}{\text{Total of } (D-C)}*327$	Micro $\dfrac{A}{D-C}* E$	Small $\dfrac{B}{D-C}*E$	Medium as per census (F)	Total Sample Size (E+F)
		Population Distribution				**Sample distribution**	**Stratified random sampling**			
1	Karamadai	1016	247	2	1265	30	24	6	2	32
2	Madukkarai	681	57	5	743	17	16	1	5	22
3	S.S.Kulam	445	91	2	538	13	11	2	2	15
4	Thondamuthur	522	51	1	574	13	12	1	1	14
5	Periyanaicken Palayam	632	162	2	796	19	15	4	2	21
6	Anaimalai	313	93	2	408	10	8	2	2	12
7	Kinathukadavu	475	116	1	592	14	11	3	1	15
8	Pollachi North	770	203	4	977	23	18	5	4	27
9	Pollachi South	525	129	2	656	15	12	3	2	17
10	Sulthanpet	1509	338	12	1859	44	36	8	12	56
11	Annur	1238	359	6	1603	38	29	9	6	44
12	Sulur	3087	736	9	3832	91	73	18	9	100
	Total	**11,213**	**2,582**	**48**	**13,843**	**327**			**48**	**375**

(Source: Computed)

- The proportion of medium enterprises on total rural MSMEs has been very low. Hence, all medium (N=48) enterprises have been considered as a sample units.

- By using systematic random sampling formula,

$$= \frac{\text{Total of D} - \text{C}}{\text{Total of E}} = \frac{13,843 - 48}{327} \qquad = 42$$

- every 42nd unit of rural Micro and Small manufacturing enterprise has been taken randomly as sample respondents from each block. When selecting the respondents, if there exists any inadequacy in the block wise population in any block, in such cases the last unit of the population has been considered as a sample respondent to satisfy the proportionate criteria. As a result, out of 375 rural Micro, Small and Medium manufacturing enterprises, 48 rural Medium manufacturing enterprises have been taken based on census and 327 rural Micro and Small manufacturing enterprises have been selected by using systematic random sampling technique.

iv) Source of data

The study is mainly based on primary data. A structured interview schedule has been designed for the rural entrepreneurs to express their opinion on factors influencing their performance. A pilot study has been conducted by collecting the data from 30 rural entrepreneurs through an interview schedule. The results of the survey have necessitated certain changes for final structuring of the instrument based on the reliability and validity test. For the purpose, cronbach's alpha test has been performed to test the reliability of the research instrument. The alpha coefficient has been found ranging from 0.74 to .89 which is above the standard value (proposed by Nunnally, 1978) of 0.70. This shows that the instrument is reliable. The validity of the instrument is ensured in consultation with subject experts, academicians and entrepreneurs. The relevant secondary sources have been obtained from the websites, journals, magazines, published books, unpublished research works and from various annual reports of MSMEs.

v) Framework of Analysis

The following statistical tools have been applied for analysis of data and structural Equation Model has been proposed to analyse the relationship *inter se* of

Motivational, Internal environmental, External environmental factors and the Performance of rural Micro, Small and Medium manufacturing enterprises.

- Percentage analysis

- Descriptive Statistics (Mean and Standard Deviation)

- Friedman Ranks test

- ANOVA and Post-hoc analysis

- t test

- Correlation and

- Multiple regression analysis

1.7 IMPORTANCE OF THE STUDY

The findings of the study would bring out the facts of rural Micro, Small and Medium manufacturing enterprises in the study region. The study will help to reduce the high failure rate of rural Micro, Small and Medium manufacturing enterprises and facilitate their growth. This study will be definitely useful to the Government of India to improve the investment climate, employment generation, profitability, and export share of rural Micro, Small and Medium manufacturing enterprises. Moreover, the study will also assist them in the formulation of liberalized policies which will bring an appropriate environment for the growth and expansion of rural Micro, Small and Medium manufacturing enterprises thus, contributing to "Make in India" programme. The study will also enable the Ministries and Industrial associations working for the development of rural Micro, Small and Medium manufacturing enterprises to identify their strengths and weaknesses to implement future programs, and the financial and non-financial institutions to know about the financial and non-financial requirements of rural Micro, Small and Medium manufacturing enterprises. The researchers can also use the outcome of the study as a source of information for their research references. This study will also motivate potential entrepreneurs to improve their knowledge on the Government supportive actions on the performance of rural Micro, Small and Medium manufacturing enterprises and also contribute to the societal development by providing value added information.

1.8 LIMITATIONS OF THE STUDY

The study is subject to the following limitations:

- Geographical variations such as business culture, infrastructure and entrepreneurial talent may influence the results of the study.

- The union cabinet accepted proposal (February, 2018) to change the definition of Micro, Small and Medium manufacturing sector from investment in plant and machinery base to revenue base (annual sales turnover) and if implemented, may influence the findings.

- The study entirely depends on the response of the rural entrepreneurs about their business performance. Hence, there is a possibility of personal bias with regard to their opinion. Also, their opinion may vary after the implementation of (Goods and Service Tax) GST.

1.9 CHAPTER SCHEME

The study has been presented in seven chapters.

- **Chapter I** deals with the introduction and design of the study.

- **Chapter II** presents the "Review of Literature". It discusses the research work of the different authors related to the area of the study.

- **Chapter III** narrates the theoretical overview of Growth and performance of rural Micro, Small and Medium manufacturing enterprises and the factors influencing their performance.

- **Chapter IV** understands the firms' characteristics and to assess the motivational factors that inspired the entrepreneurs to incept their Micro, Small and Medium manufacturing enterprises in rural areas.

- **Chapter V** analyses the internal environmental factors, external environmental factors and the performance of rural Micro, Small and Medium manufacturing enterprises.

- **Chapter VI** examines the extent of influence of motivational, internal and external environmental factors on firms' performance, demonstrates a Structural Equation Model to analyse their relationship *inter se* and presents the problems faced by rural Micro, Small and Medium manufacturing enterprises.

- **Chapter VII** summarizes the findings, offers suggestions, and presents the conclusion and scope for further research.