CHAPTER 1
INTRODUCTION

Introduction

This chapter deals with the basic information about small and medium enterprises (SMEs) of Bangladesh. The information have been linked to general and specific objectives of the study. Also, it delineates the scope of the study to enable the readers to understand and figure out what this report is all about. Finally, the chapter spells out the organization of the whole report.

1.1 Background

Small and Medium Enterprises (SMEs) are a proven pre-requisite for national economic success of any economy throughout the world. It is not surprising that SMEs are seen as "the engine of growth" as well as a catalyst for achieving national economic objectives. SMEs are characterized by dynamism, innovations, efficiency, and their small-scale form which allows for faster decision-making process. Being a labor-intensive sector, SMEs can create huge employment opportunities at low capital cost and promoting rapid industrialization. According to the Economic Census 2013 of Bangladesh Bureau of Statistics (published in December 2015), in Bangladesh number of wage earning employees is 24500850 and of them over 84% belong to SMEs. This will not only create a basis for industrial expansion gradually but also improve both forward and backward linkages through development of appropriate technology in the manufacturing sector. In Bangladesh, SMEs accounted for 69.9% of total manufacturing value addition. In the lower income and rural brackets of Bangladesh, especially in agriculture, trading and service, SMEs are reducing income inequality by developing unskilled and semi-skilled workers into a skilled one. The standard of living in rural areas will be improved as it can reduce urban migration. The Private Sector Survey (2003) estimates that around 6 million micro, small and medium enterprises exist in Bangladesh having employees fewer than 100 and around 60-65% SMEs are located outside metropolitan area of Dhaka and Chattogram. SMEs have been playing significant role in the contribution of industry sector to GDP. SMEs can boost local innovation and competition in diverse economic sectors through promoting local entrepreneurs and increase the use of local raw-materials using simple technology by serving as a substitute for import of goods, which in turn also promote export.

In Bangladesh, 70% to 80% of industrial workers work in SMEs and also 95% of total SME businesses are labor intensive and informal. The development and growth of SMEs require policy support to reach its full potential. Although, contribution of SMEs in the country's economic progress are recognized in the Industrial Policy-2005, the government of Bangladesh is yet to highlight the contribution of SMEs. The establishment of SME Foundation in the year 2007 was a timely move. However, more steps are to be taken. Public and private policy do not

provide sufficient support in this regard. Although due attention to SMEs is being paid, the sector is still facing serious obstacles. Policymakers need to prioritize SMEs because of its multidimensional contribution to the society and the economy of the country. The heterogeneity of SMEs, insufficient infrastructure and utility services, inadequate access to finance, lack of skilled labor force and technology, lack of adequate business services etc. make it difficult for the SME entrepreneurs to thrive on. SMEs are also not provided with adequate funds. The main sources of cash and credit availability to SMEs can be the most effective support strategy. SMEs usually have no access to capital markets. As a result, they rely mostly on informal source of lending or bank loans, which increases their cost of capital. What makes it even worse, is that shocks in banking system can heavily impact supply of credits to the SMEs. In addition, financial institutions are risk-averse in funding SMEs. This affects the performance of monetary policy and financial stability within the system. Government alone can't improve SME performance, thus more coordinated efforts are required by both public and private sector. Though a number of research studies have identified "financial barriers" as the major problem faced by SME entrepreneurs, non-financial issues, too, impede the rise of SME entrepreneurs. For example, entrepreneurship, skills, innovation and technology, poor infrastructure, business enabling environment, business development services and market access are common problems in the SME sector.

Considering such growth potential, the SMEs are at the heart of development strategy for Bangladesh. Particularly, when the economy of Bangladesh needs to achieve 8% GDP growth rate to become a middle-income country by 2021, suggests that the country need to ensure inclusive and sustainable economic growth over the next few years. Development of potential SME sector can be an answer to guide country's economic transition and achieve strong and inclusive growth. SMEs may as well be an effective mechanism through contribution to reducing rural-urban income gap and supporting all-inclusive growth. Moreover, there are few challenges underlying creation of more jobs that policymakers are facing today. A comprehensive SME policy framework can provide the opportunity to facilitate employment generation and income opportunities.

Hence, SMEs in Bangladesh need to be analysed critically. Despite such impressive growth of the country, industry sector hasn't reached a strong base yet. Lack of proper infrastructure and absence of enabling business environment are some of the major reasons for which industry sector is yet to build a strong base. Proper strategies are required in order to overcome these constraints so as to create sound environment for the growth of SMEs. However, its contribution to GDP and other economic indicators can't be measured all the time due to lack of institutional arrangements for reporting and monitoring SME activities. This study aims to assess the current situation of SMEs in Bangladesh and suggest policy prescription to boost the sector through overcoming existing constraints by formulating proper policy and strategy. This study will help to facilitate development of SMEs as a thrust sector to contribute effectively to the ambitious development objectives of the country.

1.2 Objectives

General Objective:

The purpose of the study is to assess the current situation of SMEs in Bangladesh economy and evaluate the means to integrate the SMEs as a dynamic sector in the economy by overcoming the existing constraints and by articulating proper strategy for facilitating the development of SME as a thrust sector to contribute effectively to the objective of growth and equity in Vision 2021.

Specific Objectives:

The specific objectives of the study on SME are:

- To scan the present situation of SME subsector in Bangladesh and express in measurable form SMEs as source of employment, poverty alleviation and it's contribution to national economy;
- To investigate the sources of funding of SMEs and also the cost of fund should be expressed in measurable term.
- To estimate the volume of foreign exchange earnings through export of SME generated products and services;
- To find out the existing constraints and challenges of SMEs in Bangladesh;
- To forecast the growth of SME subsector for the years 2019 to 2030;
- To develop strategies to make SME as a thrust sector towards sustainable development of the country;
- To delineate and suggest relevant policy measures to promote SMEs in Bangladesh;
- To determine impact of SMEs in the regional and national development.

1.3 Scope of the Study

The study has covered the following issues:

- Identifying different types of resources available in various parts of the country and assessing needs to develop small and medium scale enterprises based on comparative advantages of each area.
- Making use of SME clusters identified by SME foundation in different parts of the country and gathering facts about their operation, management, manpower, HR development needs, marketing of products, promotional activities and sources of finance.
- Identifying entrepreneurial potentials to develop SME based entrepreneurial capacity development of women, collecting data on needs of women entrepreneurs. The study should adequately cover the trends in involvement of women entrepreneurs in development of SME subsector in Bangladesh.
- ICT based entrepreneurial development potentials among young women and men.
- Mobile phone utilization based application systems to provide services in different day to day activities.
- Agro-processing based small and medium scale industries to produce food items for household consumption.
- Reviewing the existing sources of financing of SMEs and to find out ways for widening the financing sources.
- As the SMEs were developed on the availability of resources and skills in different locations, the study tried to identify the areas of comparative advantage for development of SMEs.

- Formulating a stepwise strategy for development of the SME sector of the country. The first step relates to the consolidation of naturally developed capabilities mainly serving the domestic market, the second step focuses on making the entry of SMEs into the export market easier and the third step emphasizes the enhancement of capacities to thrive into the global market.
- The research study has given special focus on enumerating women entrepreneurs engaged in manufacturing enterprises classified as SMEs.
- The suggested approaches for creating an enabling environment for private investment in SME sector.

1.4 Overview of the SME Sector in Bangladesh

According to the latest available Survey of Manufacturing Industry (SMI) (BBS 2012), there were about 43 thousand manufacturing enterprises in the country with 10 or more workers, employing a total of nearly 5 million workers. Of these about 41% belonged to micro enterprise category while the shares of small and medium enterprises in the total number of enterprises were 36.6% and 14.3% respectively. In contrast, the shares of these three size groups micro, small and medium enterprises in manufacturing employment with 10 or more workers were 5.4%, 14.7% and 20.8% respectively, and the share in gross value added were 5.9%, 23.7% and 23.3% respectively. Thus, SME comes out as a significant component of the manufacturing sector (with 10 or more workers) in Bangladesh accounting for 50.9% of the establishments, 35.5% of employment and 47% of gross value added. The industry sector has been growing around 7% during the last decade (BBS, Bangladesh Bank, 2019). The contribution to GDP for manufacturing sector increased to 31% from 21% in 1990. Table 2 shows the changing sectoral contribution to GDP for the period 1972 – 73 to 2014 – 15. On the other hand, the service sector represents almost half of the GDP of Bangladesh and its average growth rate was 7% in the same period. Though Bangladesh is an agrarian country, the contribution of agriculture in GDP declined substantially to 16% in 2014-15 from 29% in 1990. Despite such decline, agriculture remains the main employer of the country as it accounts for around 48% of total employment. In recent years, industry sector has become locomotive of growth by contributing around 30% to the GDP. As can be seen from Figure 1, the industry sector hasn't been able to absorb surplus labor from the agricultural sector. Thus, if SME sector is properly developed, the sector has the potential to create employment opportunity for the surplus labor from agriculture and it will boost the growth of the manufacturing sector.

Of late, in 2015, Bangladesh has earned the lower-middle income status. The country witnessed steady GDP growth rate of around 6% in the last decade. By the end of Seventh Five Year Plan in 2019, the country has targeted to achieve 8% GDP growth rate. Growth rates by Broad sectors is given in Table 1. By 2021, Bangladesh aims to become a middle income country. For that, all inclusive, resilient and sustainable growth and development must be ensured by fostering smooth economic environment. Industrialisation is perceived to be the key in achieving higher growth and employment. Non-farm economic activities are often

attributed for this impressive GDP growth by many experts. In recent years, the ready-made garment (RMG) sector has emerged as the backbone of the industrial sector as it contributes over 80% of total exports. Historical export data of Bangladesh is presented in Table- 3. An interesting characteristic of RMG sector is that around 10% of total RMG factories sub-contract their works to smaller firms (Bakht and Hossain, 2013). It is perceived that good number of SMEs provide backward support to RMG factories through various ancillary accessories such as button, plastics, packages etc. Steady garment export growth contributes highly to build an effective supply chain network between RMG sector and SMEs in Bangladesh. With more manufacturing activity, Bangladesh has now developed as a significant manufacturing base for textile products, pharmaceuticals, finished leather, light engineering, plastic, furniture, agro-processing and shipbuilding industries. In spite of the fact that Bangladesh has all the earmarks of being the second biggest exporter in the world apparel market, it just accounts for 5% of global apparel exports. To build its worldwide export share, the nation has set an objective of apparel exports worth US$ 54.1 billion before the end of Seventh FYP (2019), which relies upon numerous elements including diversification of export basket, outfitting new potential markets and so forth. In this specific circumstance, advancement of SMEs and access to potential global markets for SME products could be a significant strategy to meet the export focus of the Seventh FYP.

Moreover, remittances can play a significant role in fostering investments in SMEs. In 2015, Bangladesh witnessed substantial growth of remittances from overseas Bangladeshis totalling over $15 billion which is also 13% of GDP. There exist around 8-10 million migrant workers hailing from rural areas who are looking for productive investments. Despite the fact, there lies much concern how remittances can be transformed into productive investments. If good policies and incentives can be put into place, remittances can be good source of investment for SMEs.

Table 1: Growth Rates of GDP by Broad Sectors (%)

Years	**Total**	**Sectoral GDP Growth**		
	GDP Growth	Agriculture	Industry	Service
1972-73 to 1979-80	3.68	1.86	5.26	5.17
1980-81 to 1989-90	3.90	1.84	3.16	5.43
1990-91 to 1999-00	4.90	3.03	7.37	4.56
2000-01 to 2009-10	6.03	3.66	7.74	7.0
2010-11 to 2014-15	6.31	4.46	8.30	6.37

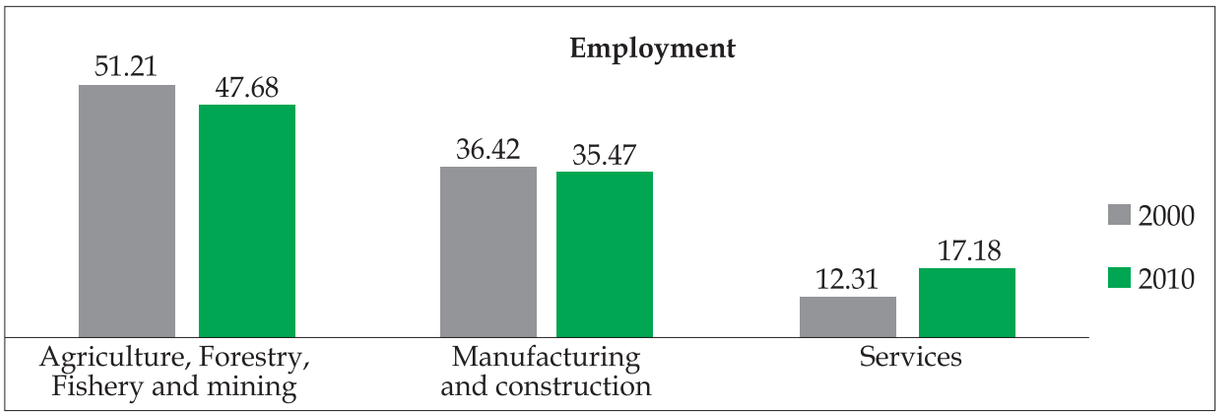
Source: BBS, Bangladesh Bank

Table 2: Sectoral Contribution to GDP (%)

Year	Agriculture	Industry	Service
1972-73	54.54	9.00	36.46
1980-81	46.58	11.08	42.34
1990-91	29.23	21.04	49.72
2000-01	25.03	26.20	48.77
2010-11	18	27.38	54.62
2011-12	17.38	28.08	54.54
2012-13	16.78	29.00	54.22
2013-14	16.50	29.55	53.95
2014-15	15.96	30.42	53.62

Source: BBS

Figure 1: Employment across three broad sectors in Bangladesh 2000 and 2010



Source: Bangladesh Bank Time Series Data (2013)

Table 3: Exports of Bangladesh

Indicators	2007-08	2009-10	2011-12	2013-14	2015-16
Total merchandise export (million US$)	14,111	16,597	24,302	27,229	28,424
Total service export (million US$)	1,874	2,233	2,786	2,948	2,749
Total export (goods & services) (million US$)	15,985	18,830	27,088	30,177	31,173
Service exports as% of total export (million US$)	11.73	11.86	10.29	9.77	8.82
Merchandise export as% of total export (million US$)	88.27	88.14	89.71	90.23	91.18

Note: Services include construction services which are usually categorized in national accounts of Bangladesh.

1.5 Definition of SMEs

For a long time, the definition of SMEs created much confusion as there was no consensus regarding definition by different organizations. The term "SME" encompasses a broad spectrum of definitions. As a general guideline, the World Bank defines SMEs as those enterprises with a maximum of 300 employees, $15 million in annual revenue, and $15 million in assets. Dalberg (2011) defines SMEs as having more than 5 and fewer than 50 employees. In Vietnam SMEs have 10 and 300 employees. However, the Inter-American Development Bank defines SMEs as having a maximum of 100 employees and less than $3 million in revenue. In Europe, they are defined as units having manpower of fewer than 250 employees and in the United States SMEs are organizations that have less than 500 employees (Natarajan & Wyrick, 2011). The definition of SMEs and other related concepts in Bangladesh has been detailed in the National Industrial Policy 2010, where enterprises are divided into three categories: micro, small and medium enterprises. In order to properly assess the performance of SMEs in the economy, unified definition is a requirement. In the manufacturing sector, units having either fixed assets (excluding land and building) worth anything between Tk. 100 million and Tk. 300 million or have workers between 100 and 250 are regarded as medium industries. For service sector, enterprises having fixed assets (excluding land and building) worth anything between Tk. 10 million and Tk. 150 million or having workers between 50 and 100 are regarded as medium industry. If either of the two criterion is fulfilled, the organization will fall into the 'medium' category. The National Industrial Policy 2016 was formulated by expanding the factors mentioned in the definition of National Industrial Policy 2010. The industry policy has given the following definition of small and medium SMEs:

In manufacturing sector, enterprises which have fixed assets (excluding land and building) worth anything between Tk. 7.5 million and Tk. 150 million or have workers between 31 and 120 is defined as small enterprises. In services sector, small industry is defined as those enterprises which either have fixed asset (excluding land and building) worth anything between Tk. 1 million and Tk. 20 million or have workers between 16 and 50. If one criterion is fulfilled, the organization will fall into small industry.

In manufacturing sector, medium enterprises are defined as those enterprises that have either fixed assets (excluding land and buildings) worth Tk. 150 million to Tk. 500 millions or manpower between 121 to 300 with the exception of Garment Industry where the number of workers may be upto 1,000. For services sector, medium enterprises are those that have fixed assets worth Tk. 20 million to Tk. 300 million or employed manpower of 51 to 120.

Table 4(A): Characteristics of SMEs (Small)

Sl. No.	Sector	Fixed asset other than land and building (Tk.)	Employed manpower (not above)
1.	Manufacturing	75,00,000-150,00,0000	31-120
2.	Service	10,00,000-2,00,00,000	16-50

Table 4(B): Characteristics of SMEs (Medium)

Sl. No.	Sector	Fixed asset other than land and building (Tk.)	Employed manpower (count / number)
1.	Manufacturing	15,00,00,000-50,00,00,000	121-300
2.	Service	2,00,00,000-30,00,00,000	51-120

Table 4(C): Characteristics of SMEs (Micro)

Sl. No.	Sector	Fixed asset other than land and building (Tk.)	Employed manpower (not above, count)
1.	Manufacturing	Tk.10,00,000 to Tk.75,00,000	16-30
2.	Service	Less than Tk. 10,00,000	15

As per the National Industrial Policy 2016, different characteristics of SMEs and Micro enterprises are presented in Tables 4(A) through Table 4(C).

Table 4(D): Characteristics of SMEs (Trading)

Sl. No.	Type of Business / Trade	Fixed asset other than land and building (Tk.)	Employed manpower (not above count)
1.	Small	10,00,000-2,00,00,000	16-50
2.	Micro	Less than Tk. 10,00,000	15

Bangladesh Bank through its circular dated June 29, 2017 included trading organizations in SME subsector for the purpose of providing loans by the scheduled banks. The trading organizations included only small and micro enterprise. The definitions of SME relating to trading are given in Table- 4(D).

1.6 Existing Institutional and Policy Support Structure for SMEs

The government of Bangladesh prioritises SMEs through Industrial Policy and Five-Year Plan so that SMEs can be main driver of economic growth in the years to come. The government believes that SMEs can help the country reach middle income status. The government is trying to remove market and policy obstacles in order to aid the naturally growing SMEs. Moreover, the government also created a National Taskforce on SME Development back in the year 2003 in order to build a realistic strategy so that SMEs can grow rapidly and gain competitiveness. The government perceives SMEs as the driver to accelerate growth and reduce poverty from the country. The task force made few recommendations to set up a new institution to promote SMEs through identifying numbers of common obstacles. Later on, SME Foundation was formed which serves as the central authority to make policies and to take actions to promote SMEs. However, the task

force has remained inactive for a long period and now it has become important to make the task force active in order to monitor the overall implementation of SME strategies.

The government of Bangladesh prioritises private sector at the centre of the development agenda as it drafts a pro-market, liberal development plan. Both the SFYP and Industrial Policy 2016, incorporates broad objectives for pending SME Development Policy and Strategy, with the last report giving extensive detail. These two documents, thus could be treated as the two 'core' documents of the SME Development Strategy 2016. The Seventh Five Year Plan investigates SME situation of Bangladesh and has drawn up plans for the development of the segment.

The SME Foundation (SMEF) was created under Ministry of Industries (MoI) through a gazette notification back in the year 2007. Since then, The SME Foundation has been working as the apex organization to ensure SME development. The major activities of the foundation include: (i) execution of SME Policy Strategies embraced by the Bangladesh Government, (ii) policy promotion and intervention for the development of SMEs, (iii) encouraging budgetary help for SMEs, giving skill development and capacity building training, (iv) encouraging adjustment with fitting advancements and access to ICT, and (v) giving business bolster services, and so forth. The Foundation is planned to fill in as a one-stop service delivery window for SMEs.

Different organizations are working to develop SMEs in Bangladesh under Ministry of Industries. The overall support systems for SMEs in Bangladesh have become a multi-dimensional approach with the establishment of The SME Foundation. Each of the organizations work in specific areas though there are few overlaps. Bangladesh Small and Cottage Industries Corporation (BSCIC) works for the development of Small and Cottage industry under Ministry of Industry. BSCIC also facilitates small and medium industry in the country. Bangladesh Bank, the central Bank of Bangladesh, also facilitates SMEs through ensuring access to finance through different policies. However, there is very little or no coordination with the different agencies including the SME Foundation. Moreover, few private organizations have come forward as they too are working for the development of SMEs. These private organizations also lack coordination with SMEF. In addition, some private sector organizations such as Micro Industries Development Assistance and Service (MIDAS), Chambers of Commerce and Industries, trade bodies and some domestic micro credit organizations such as BRAC, ASA and PKSF and international NGOs and donors are also working for SMEs.

1.7 Organization of the Report

This report is organized as follows: Chapter-2 focuses on the methodology and sampling strategy, Chapter-3 includes Spatial Analysis of SME Data, Chapter-4 about the Literature Review. Chapter-5 concentrates on Results and Discussions. It contains five sections: Basic Profile of SMEs, Employment Generation and Human Resources of SMEs, SME access to Finance, Production Process and Marketing, ICT based SME development. Chapter-6 contains Present Status, contribution of SMEs to GDP, export earnings by SMEs and growth of number of SMEs during 2019 to 2030. Chapter-7 includes Challenges and Policy Guidelines and Action Plan. Other relevant information like pictorial presentation of the survey, tables, graphs and bibliography etc. are presented. Annexures at the back of the report contain some tables, KIIs, FGDs, case studies, questionnaires and Terms of Reference of the study.

CHAPTER 2
METHODOLOGY

2.0 Introduction

The present chapter deals with the methodology of the study which includes issues such as identification of samples, sample size determination and sample coverage. These are presented in tabular form. Also, description of administration of the survey including the number of respondents, procedures for data collection, recruitment & training of enumerators & supervisors, pretesting of different instruments, field monitoring, editing & processing of data, etc. have been incorporated.

2.1 Approaches to the Study

A mix method of both qualitative and quantitative approaches is adopted for the study. The standard tools of statistics is followed for determining the sample size and the instruments for the survey have been developed keeping the overall scope and objectives of the study in mind. This has been done in several stages- (i) desk review of the existing resources (ii) analysis of secondary data, (iii) determining statistically validated sample size, (iv) determining the sample selection procedure, (v) component wise questionnaire designing, (vi) finalizing the list of stakeholders for conducting KIIs and FGDs, (vii) preparing the check list of questions for KIIs and FGDs, (viii) selection and hiring of the field team, (ix) training on the questionnaire, (x) field team mobilization and monitoring, (xi) questionnaire checking, (xii) data editing, cleaning and coding, (xiii) data entry and verification, (xiv) data processing, (xv) data analysis, and (xvi) report writing.

2.2 Sample Size Determination

Over the years SME has emerged as a potential sector in the economic development of Bangladesh. This subsector, on one hand, meets the growing demands for consumer goods and services and on the other hand, it generates employment for a large number of people. The industries and enterprises of SME subsector need comparatively low volume of financial support. The SMEs are developed on the basis of entrepreneurial capacity of individuals. Since SMEs involve low investment and low level of manpower, women entrepreneurs are also attracted to develop micro and small scale enterprises. SMEs are mostly dependent on utilization of locally produced inputs and locally available manpower.

In determining a representative sample for this thrusting sub-sector of the economy, the consultants use the methodology widely used by the World Bank and other reputed organizations for enterprise surveys which is different from the sample selection technique followed for household surveys. The objective of using the method is to generate large enough samples of enterprises to generate statistically robust estimates. The sampling method considered for determining the required minimum sample size of SMEs is as follows:

$$n = \left[\frac{1}{N} + \frac{(N-1}{N} \times \frac{1}{PQ} \times \left(\frac{K}{Z_{1-\alpha/2}}\right)^2\right]^{-1}$$

where N = population
P = Proportion of small, medium and micro firms
Q = 1 – P
K = level of desired precision
Z = Standard Normal Variate at 95% confidence interval.

The study considers the levels of precision at 2.5% (k=0.025) with 95% confidence intervals (Z = 1.96) to obtain a representative sample of enterprises. Here, the population is the total number of SMEs operating throughout the country, which is about 868,000 according to the Economic Census 2013 of BBS. The proportion of firms is about 88% (P=0.88) and therefore Q is 0.12. Assuming these parameters, the estimated sample size using the above formula becomes 4000. Therefore, surveying 4000 firms will fulfill the necessary conditions for obtaining representative estimates of parameters.

Assume k=0.01, Z = 1.96, p=0.88

n	=	4000
Medium	=	500
Small	=	3000
Micro	=	500

2.3 Sample Coverage

In total 4021 enterprises were interviewed through the questionnaire survey. The enterprises were spread across all 8 divisions and 64 districts of Bangladesh. Based on the level of concentration, the districts were categorized in three broad groups. Category-1 consists of districts having huge number of SMEs, category 2 comprises of districts having moderate number of SMEs and category-3 entails districts having fewer concentration of SMEs. The enterprises were classified in three categories-manufacturing enterprises, service enterprises and trading enterprises. The number of medium enterprises surveyed stood at 434 (11%), the number of small enterprises were 2293 (57%) and micro enterprises were 1294 (32%) making the total sample size of 4021

Category-1 :	Districts having large number of SMEs
Category-2 :	Districts having moderate number of SMEs
Category -3 :	Districts having few number of SMEs

Number of SMEs from each type of districts will be selected as per following scheme:

Table 5(A): Maximum Number of SMEs Surveyed from Each District

Type of Districts	Number of SMEs from one District
Group-1:	500
Group-2:	200
Group-3:	30

The specific number of SMEs surveyed from each district is provided in Table-5(B) in Annex-1.

The enterprises interviewed through the survey are drawn from all three sub-sectors i.e. manufacturing, service and trade. From the manufacturing sector the greatest numbers (2647) of enterprises are surveyed, followed by service sector enterprises (834) and the least number of enterprises belong to the trading sector (540). These enterprises are involved in producing varieties of goods and services starting from manufacturing agro- processing to providing health care services. The distribution of different types of enterprises interviewed through the survey is as follows-

Table 6: Sample distribution by types of enterprise

SMEs from Manufacturing Sector	SMEs from Service Sector	SMEs from Trading Sector
Agro-processing & food	Healthcare and diagnostics	Agro and Food
Light engineering and metal works	Hospitality and tourism	Electric and Electronic
Knitwear and readymade garments	Skills Development services	Printing and Publishing
Design, aesthetically challenging, personal wear and effects	ICT based services	Sanitary and Construction
Leather making and leather goods Plastic and other synthetics'	Day Care Centers	Wearing & Clothing
Electronics and electrical	Utility Services	Computer Hardware and Accessories
Handloom and specialized textile	Clearing and Forwarding	Hotel & Restaurant
Handicrafts		
Printing and packaging		
Jute products		
Small scale Cement industries		

2.4 Administration of the Survey

According to the ToR of the study the sample have been drawn from all districts of the country. To ensure smooth implementation of the survey the consultants established four offices, each in charge of managing the survey of two divisions. The offices are located in Dhaka, Cumilla, Bogura and Jashore. The Dhaka office served as the head office with the responsibility of managing the whole study. Other three offices are located in three SME hubs of the country. The administrative divisions covered through these offices are as follows:

Table 7: Administration of the Survey

Office Location	Division to be covered
Dhaka	Dhaka and Mymensingh
Cumilla	Chattogram and Sylhet
Bogura	Rajshahi and Rangpur
Jashore	Khulna and Barishal

2.5 Number of Respondents by SME Size

Number of respondents at an SME for interview was determined by its size. Seven respondents were selected from a medium size SME, three from a small size SME and two from a micro SME.

Table-8 (A): Number of Respondents by SME size (Medium)

Entrepreneurs / owner	1
Manager / Workers	1
Employees / Workers (1 Female)	3
Local People	2
Total :	7

Three respondents were selected from a small SME based on the following scheme:

Table-8 (B): Number of Respondents by SME size (Small)

Entrepreneurs / owner	1
Worker	1
Local People	1
Total :	3

Thus, total number of respondents interviewed through structured questionnaires are (434 x 7 + 2239 x 3 + 1294 x 2) = 12505.

2.6 Procedures for Data Collection

The study collected both quantitative and qualitative data. The survey interviewed different categories of respondents- owners, managers and employees etc. Opinion of different industry associations at national and district level, Bangladesh Bank and other banks and non-banking financial institutions were also collected. Considering the variation in involvement of the different group of respondents, different types of data collection instruments were developed. The methods applied for collecting data were:

- Structured questionnaire for entrepreneurs of SMEs
- Checklist for Key Informants Interviews (KII)
- Checklist for Focus Group Discussions (FGD)
- Detailed discussion for preparation of Case Studies (success stories as well as failure stories)

2.7 Recruitment and Training of Enumerators and Supervisors

The enumerators were recruited on the basis of their experiences on data collection in similar issues. Minimum educational qualification for both supervisors and enumerators were graduation from social sciences or any other relevant subjects. The supervisors were recruited earlier so that they get more time to be familiar with the survey instruments as they were in charge of leading a group of enumerators. They were trained up rigorously by the research team about the procedures of collecting both the quantitative and qualitative data. A total of 84 enumerators and 9 supervisors were recruited and trained up by the research team.

A two day-long extensive training program was conducted with the preliminarily selected enumerators on the use of questionnaires. They were trained up by the research team. The questionnaires were discussed thoroughly. They were given adequate knowledge about project as well as selection of the sampling units. Moreover, they were provided instructions on how to conduct FGDs and KIIs. They participated in mock interviews. Training program was conducted on 5th and 6th February, 2019.

2.8 Pre-testing of Instruments

After the rigorously development of questionnaire training session, field-testing of the questionnaires were arranged in Dhaka and Tangail. A short discussion session was held after the field test where the enumerators were notified and rectified by the research team if they noticed any mistake in conducting the survey. The minor mistakes/confusion regarding the survey instruments were also corrected based on the feedback of the field team.

2.9 Focus Group Discussion (FGD)

There were sixteen (16) FGDs throughout the country. The participants of the FGD targeted were beneficiaries, local elites and community members and officials involved at different stage of operation of SMEs.

2.10 Case Studies

Ten (10) case studies on the success of entrepreneurs were developed from the districts of Jashore, Dinajpur, Bogura, Gazipur, Jamalpur, Kishoreganj, Cumilla, Pirojepur and Sylhet. They covered the success stories of entrepreneurs of the following product and services: Aesthetic, Handicraft, Agricultural Machineries, Light Engineering, Process industry, PVC Pipe industry, etc. In addition to that five (5) case studies of unsuccessful enterprises were developed covering the districts of Narayanganj, Manikganj, Noakhali, Tangail and Jashore.

2.11 Field Monitoring

Members of the research team were regularly in touch with the supervisors and also the team monitored the survey activities as well as provided specific feedback to supervisors and enumerators regarding interviews as and when required (e.g., rapport establishment, questioning style, use of probing questions and approach to respondents). Supervisors of the enumerators checked all completed interview schedules regularly to identify missing information, ambiguous answers, numerical errors, and provided feedback to the enumerators.

To ensure collection of quality data each supervisor re-interviewed one SME per day using the questionnaire and checked if the filled-in questionnaire was in accordance with the one prepared by the respective enumerator. Officials from the Planning Division had also made occasional field visits. Planning Division formed a monitoring team for this study. In addition, the Technical Advisory Committee (TAC) and Project Steering Committee (PSC) of this poject met several times during the study and gave valuable suggestions and instructions. All of the suggestions and instructions given by TAC, PSC and monitoring team of planning division were taken carefully an addressed in time accordingly during the whole study period. The Project Director (PD) of the project had extensive field visit and monitored all the acitivities of the study.

2.12 Editing and Processing of Data

The Consultants used computer systems for processing data. Dummy output tables were designed. Data collected were edited and corrected. Those were recorded in computer. Computer software STATA was used to process data.

2.13 Data Analysis

The results from the data analysis was based on appropriate techniques, interpretation, and implications of analysis were presented in both tabular and graphical forms.

Data were analyzed to forecast the trends of growth of SMEs for future. Linear projection method was used to forecast the situation of SMEs in Bangladesh for the years from 2019 to 2030.

CHAPTER 3

SPATIAL ANALYSIS OF SME DATA

3.0 Introduction

Geographical distribution and concentration of SMEs in Bangladesh are not the same all over the country. The present chapter figures out spatial analysis of SME data. This spatial analysis was done to show space, place & location of existing SMEs in Bangladesh.

3.1 Spatial Analysis of SME Data

In course of conducting the field investigations and fact finding it became clear that SMEs do not grow just on availability of land spaces or even on raw-materials. Their growth density depends on availability of specific characteristics like factors conducive to production, availability entrepreneurs, supply of raw-materials, marketing opportunities, availability of fuel, transportation facilities etc. As a result SMEs have developed unevenly in different parts of the country. Spatial data were partially being explored to show the spatial situation of SMEs of different sub-sectors and classes.

Nine different types of maps have been developed to show the spatial situations of SMEs. The maps have been developed based on the data collected for the study. The software used is ARC GIS. The 9 maps are as under:

MAP-1 : Situation of SMEs in Bangladesh
MAP-2 : SMEs in districts of Dhaka Division
MAP-3 : SMEs in districts of Chattogram Division
MAP-4 : SMEs in districts of Khulna Division
MAP-5 : SMEs in districts of Rajshahi Division
MAP-6 : SMEs in districts of Rangpur Division
MAP-7 : SMEs in districts of Mymensingh Division
MAP-8 : SMEs in districts of Barishal Division
MAP-9 : SMEs in districts of Mymensingh Division

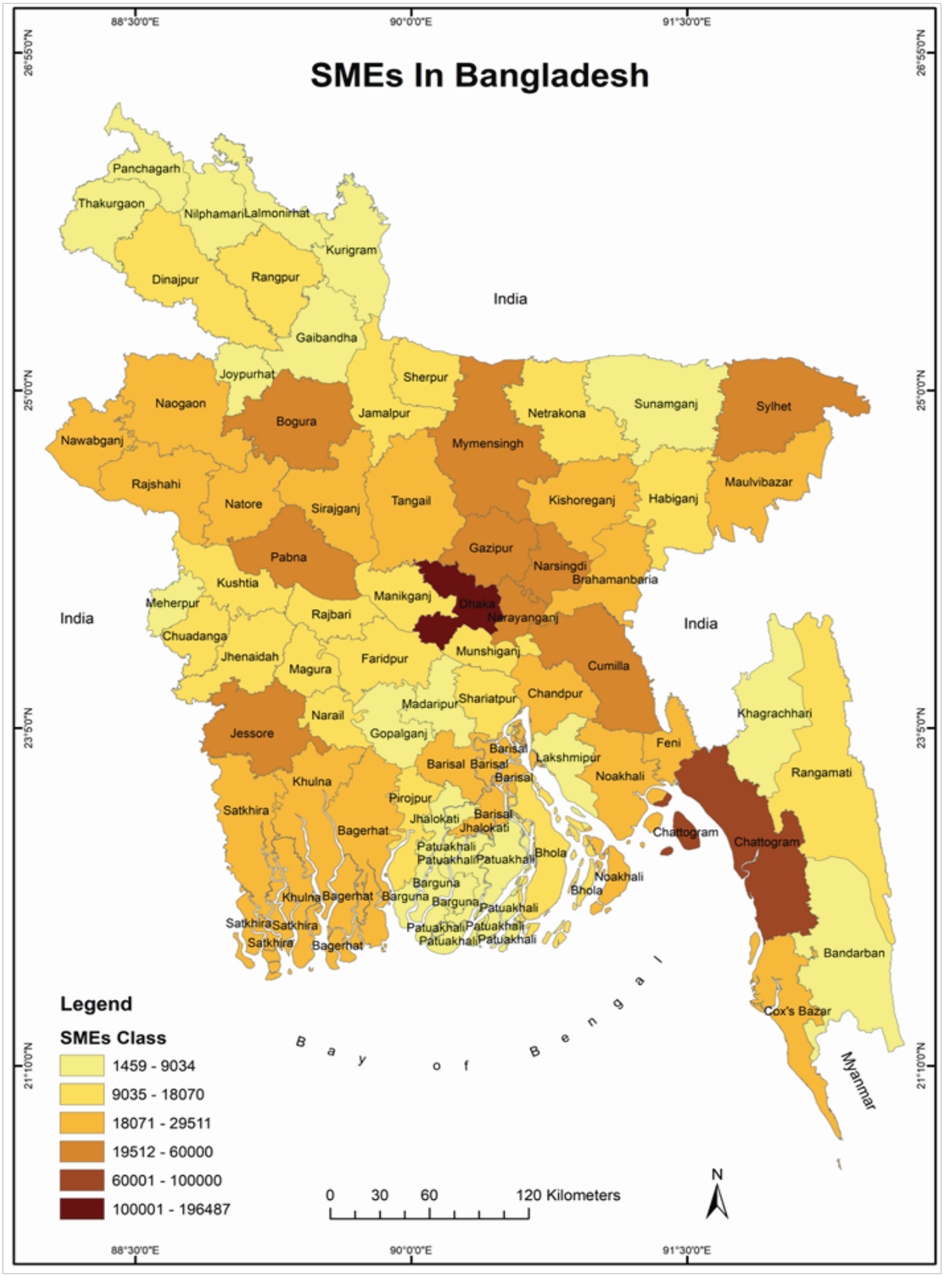
The background and field based knowledge and ideas that have been gained so far provides a basis from which to start spatial analysis of SMEs in different areas of the country. Spatial review or analysis involves anything pertaining to the concept of space, place and location. The broad principles of data management and analysis procedures are same as the system investigation and data analysis of any other development application systems.

3.2 Map showing SMEs in Bangladesh

In any mapping exercise a Geographical Information System (GIS) is used. All GISs are computer representations of some aspect of the real world. A GIS software presents a simplified view of the real world as it would be impossible to present reality in its entirety in a computer. In this study, ARC GIS software has been used.

The data used for preparing the spatial maps are the ones on SMEs that were generated by Economic Census-2013. The definitions of SMEs used in the Industrial Policy-2016 have been used in generation of the maps. The data fed into the ARC GIS software were already entered into computer. These digital data were used to generate the maps. Below is presented the map showing SMEs in Bangladesh.

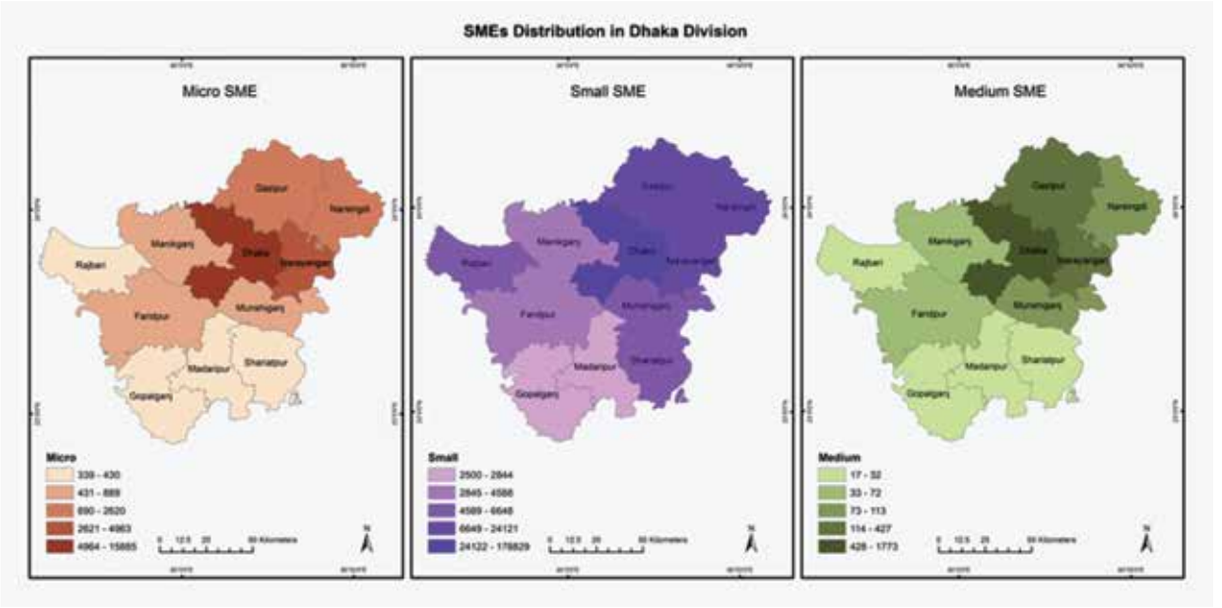
Map showing SMEs in Bangladesh



3.3 Maps showing SMEs in the eight Divisions

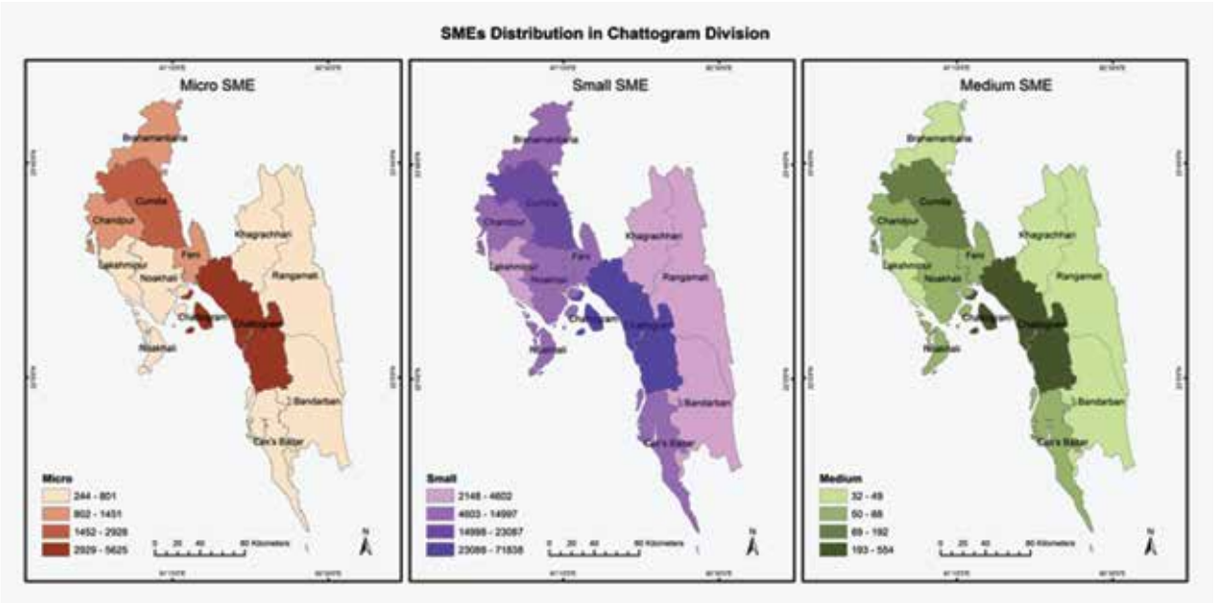
3.3.1 Map showing SMEs in Dhaka Division

There are eleven districts in Dhaka Division. In course of conducting the field survey data were collected from all the districts of Dhaka Division. The situation of presence of SMEs in districts of Dhaka Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



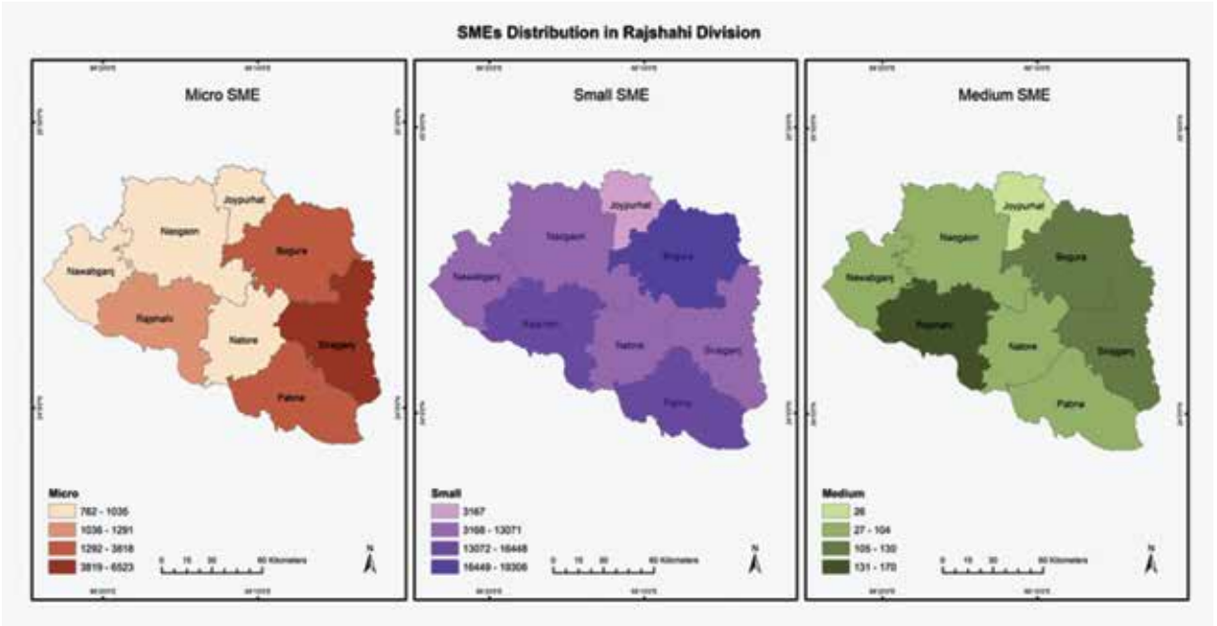
3.3.2 Map showing SMEs in Chattogram Division

There are eleven districts in Chattogram Division. Of these three are hilly district. In course of conducting the field survey data were collected from all the districts of Chattogram Division. The situation of presence of SMEs in districts of Chattogram Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



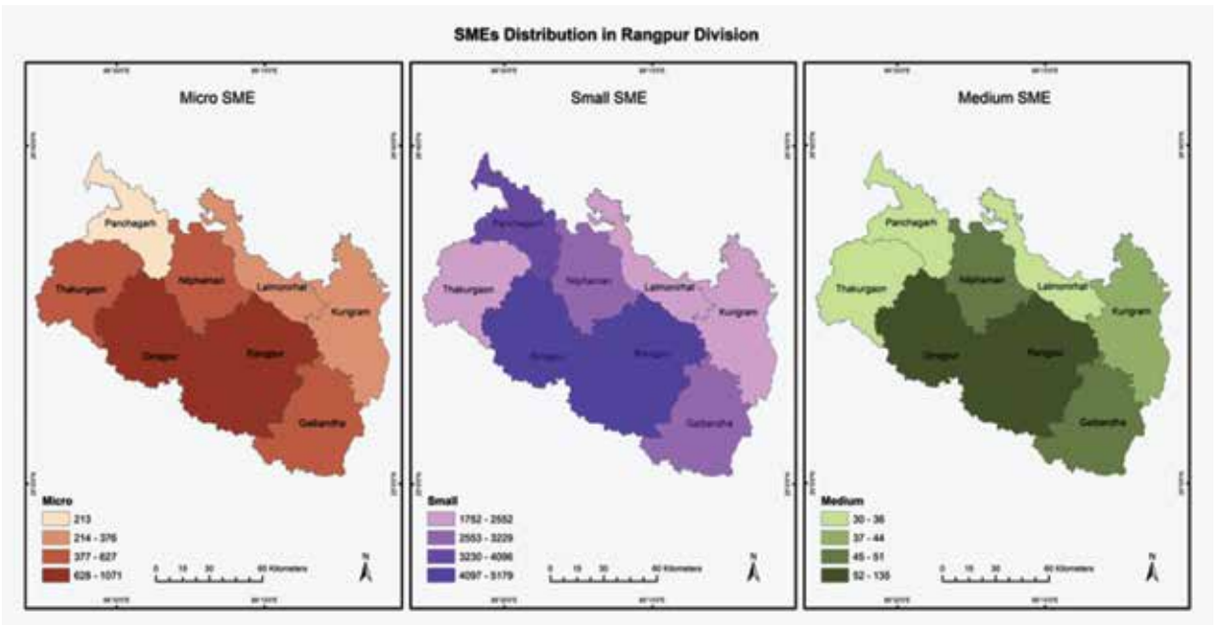
3.3.3 Map showing SMEs in Rajshahi Division

There are eight districts in Rajshahi Division. In course of conducting the field survey data were collected from all the districts of Rajshahi Division. The situation of presence of SMEs in districts of Rajshahi Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



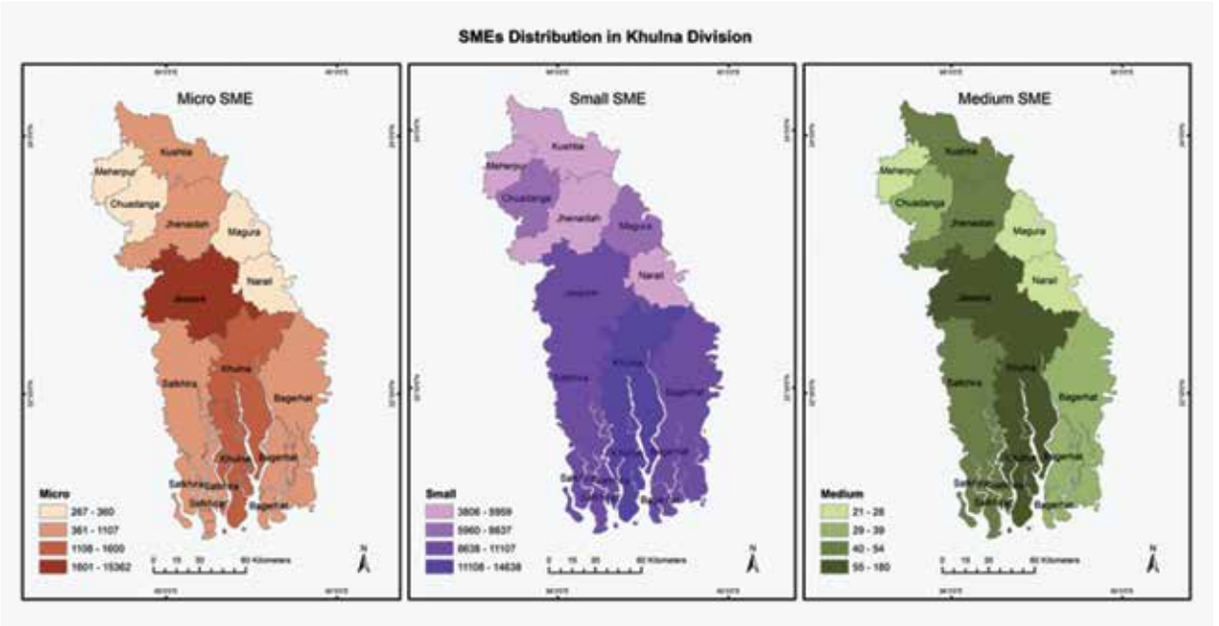
3.3.4 Map showing SMEs in Rangpur Division

There are eight districts in Rangpur Division. In course of conducting the field survey data were collected from all the districts of Rangpur Division. The situation of presence of SMEs in districts of Rangpur Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



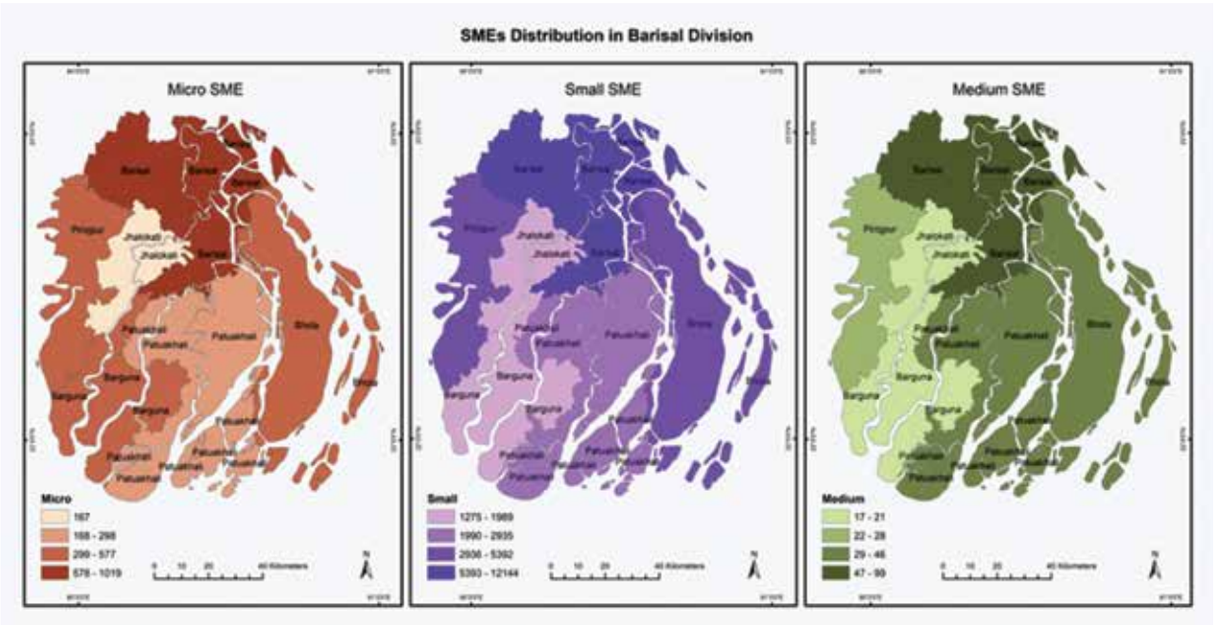
3.3.5 Map showing SMEs in Khulna Division

There are ten districts in Khulna Division. In course of conducting the field survey data were collected from all the districts of Khulna Division. The situation of presence of SMEs in districts of Khulna Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



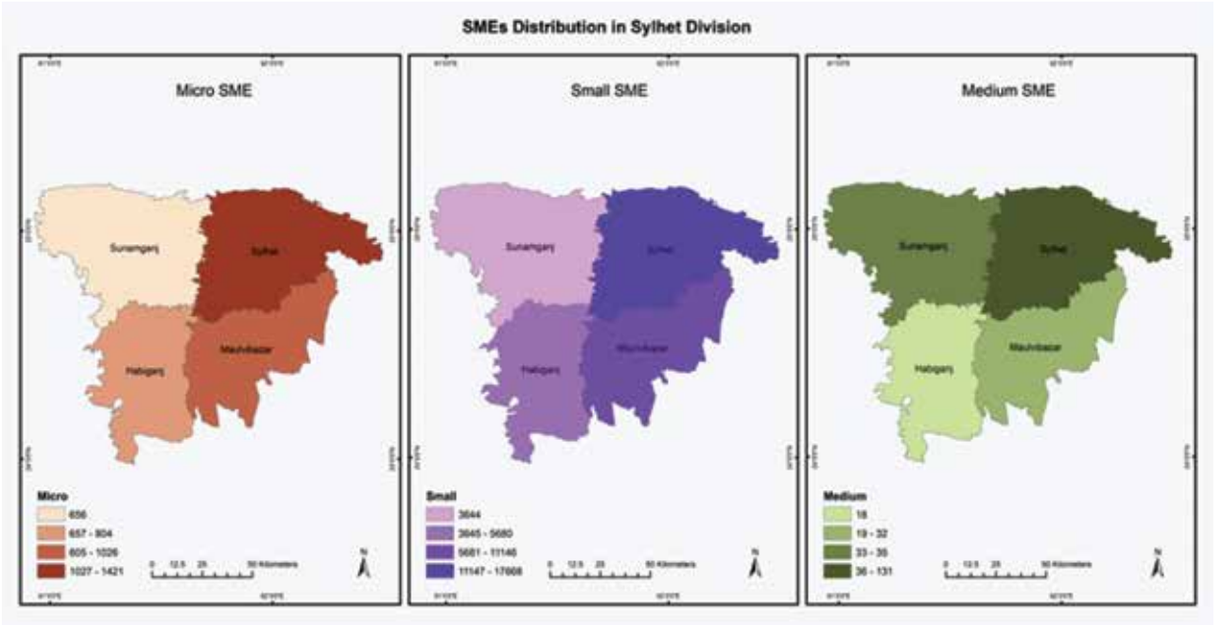
3.3.6 Map showing SMEs in Barishal Division

There are six districts in Barishal Division. In course of conducting the field survey data were collected from all the districts of Barishal Division. The situation of presence of SMEs in districts of Barishal Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



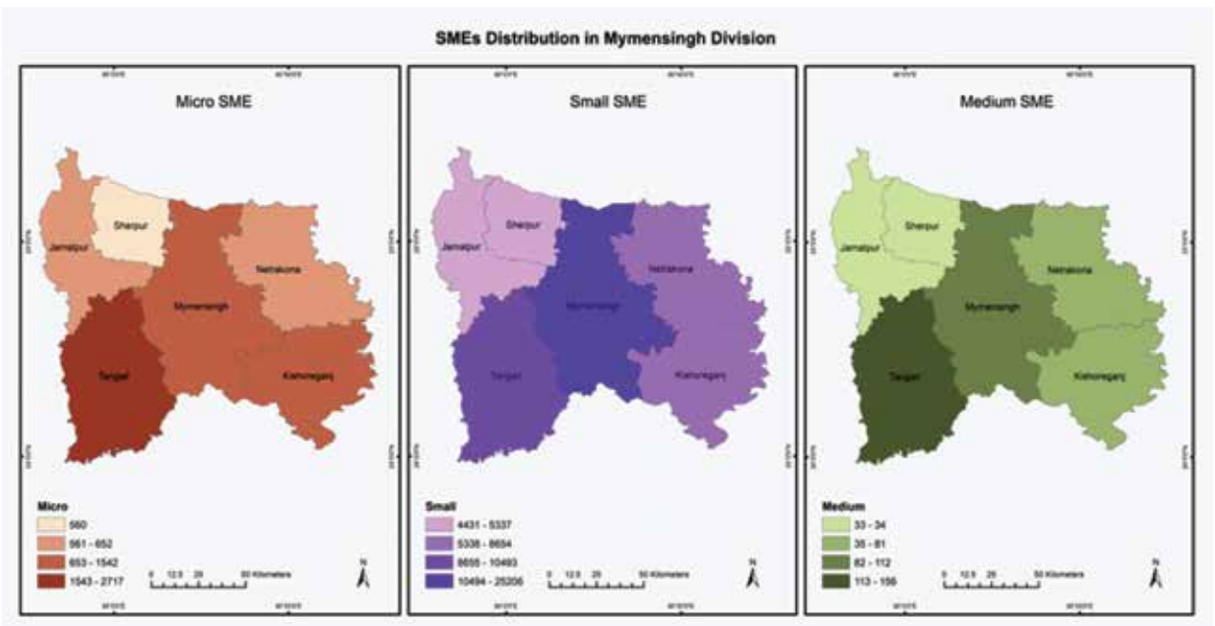
3.3.7 Map showing SMEs in Sylhet Division

There are four districts in Sylhet Division. In course of conducting the field survey data were collected from all the districts of Sylhet Division. The situation of presence of SMEs in districts of Sylhet Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



3.3.8 Map showing SMEs in Mymensingh Division

There are six districts in Mymensingh Division. In course of conducting the field survey data were collected from all the districts of Mymensingh Division. The situation of presence of SMEs in districts of Mymensingh Division is shown in the three maps presented below. These maps show the presence of micro SMEs, Small SMEs and Medium SMEs.



The maps presented above show that the SMEs are not evenly distributed in the 64 districts of Bangladesh. Among the districts large number of SMEs exist in six districts. Of these six districts two are in Dhaka division two in Chattogram division, one in Rajshahi division and one in Khulna division. The districts are Dhaka, Narayanganj, Chattogram, Cumilla, Bogura and Jashore. The SMEs in these districts vary widely in terms of manufacture of products. There are three other districts that have also large concentration of SMEs but these all are one type of industries i.e weaving. These districts are Tangail, Sirajganj and Pabna.

The maps in sections 3.3.4, 3.3.6 and 3.3.7 and 3.3.8 show that four divisions namely Rangpur, Barishal, Sylhet and Mymensingh do not have heavy concentration of SMEs like the other four divisions. Again among these latter four divisions in Rangpur and Barishal divisions no district has mentionable number of SMEs. Because of uneven distribution of SMEs scales used to demonstrate concentration of SMEs in the maps of different divisions are also variable.

This chapter presents the main characteristics of spatial data and provides maps that can be used to develop policy options for the districts that have sparse distribution of SMEs.