NABARD RESEARCH STUDY – 53

Impact Evaluation of Credit Utilization and Outcome of Micro, Small and Medium Enterprises (MSMEs): A Study of Select States of India

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About NABARD Research Study Series

The NABARD Research Study Series has been started to enable wider dissemination of research conducted/ sponsored by NABARD on the thrust areas of Agriculture and Rural Development among researchers and stakeholders. The study titled 'Impact Evaluation of Credit Utilization and Outcome of Micro, Small and Medium Enterprises (MSMEs): A Study of Select States of India' completed by Symbiosis School of Economics, Pune is the fifty-third in the series.

Micro, Small and Medium Enterprises (MSMEs) are the backbone of the country's industrial and service sectors, contributing significantly to GDP, employment generation, and exports. MSMEs provide employment to a large section of the population, particularly in rural and semi-urban areas, thus reducing regional imbalances and promoting inclusive growth. They also foster entrepreneurship and innovation, driving the development of new technologies and business models by creating a robust supply chain.

However, MSMEs in India face several hurdles in obtaining formal credit due to their limited financial history high collateral requirements by banks and financial institutions and high interest rates on borrowing which ultimately hampers their growth and development .in some places. The formal credit uptake by MSMEs remain below expectations, and performance varies widely by region and across the financial institutions despite concerted efforts by central, state governments and banking industry. In this connection, this study undertakes an in-depth exploration covering rural and semi-urban areas across two states, namely, Maharashtra and Rajasthan s to identify the challenges and barriers faced by MSMEs in accessing formal credit and to assess their effects on sales, employment, technology, productivity, and exports.

Hope this report would make a good reading and help in generating debate on issues of policy relevance. Let us know your feedback.

Kuldeep Singh
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CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGEMENTS

The study “Impact Evaluation of Credit Utilisation and Outcome of Micro, Small and Medium Enterprises (MSMEs): A Study of Select States of India” was carried out by Symbiosis School of Economics (SSE), Pune. The objective to undertake this study was to identify the problems and challenges associated with MSMEs’ access to formal credit and to assess the impact of the credit availed by MSMEs. SSE takes the opportunity to express gratitude towards the Department of Economic Analysis and Research (DEAR) - National Bank for Agriculture and Rural Development (NABARD) for trusting our potential and extending financial support for the research conducted. We would like to express our profound gratitude to Mr. Kuldeep Singh, Chief General Manager, DEAR; Dr. K.J.S. Satyasai, Ex-Chief General Manager, DEAR for providing us with the opportunity to undertake the study. We would especially like to highlight the regular support and feedback provided by Dr. Ashutosh Kumar, General Manager, DEAR; Smt. Balwinder Kaur, Deputy General Manager, DEAR; Dr. Sohan Premi, Deputy General Manager, DEAR, and Ms. Anshumala, Assistant Manager, DEAR. Our gratitude also goes to Mr. Ramesh Kumar Ganta, General Manager, DOR; Dr. Aparna Kolte, Deputy General Manager, DOR and Mr. Nayan Parmar, Assistant Manager, DOR, NABARD for guiding us and providing us with access to data. We are grateful to Symbiosis International (Deemed University) for giving us the opportunity to undertake the project and giving us support with all infrastructure and tools.

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ABBREVIATIONS

ASPIRE	A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship
ATI	Assistance to Training Institutions
CIBIL	Credit Information Bureau (India) Limited
CFC	Common Facility Centers
CGTMSE	Credit Guarantee Scheme for Micro and Small Enterprises
CII	Confederation of Indian Industry
COVID	CoronaVirus Disease
CST	Central Sales Tax
CVY	Coir Vikas Yojana
DEAR	Department of Economic Analysis and Research
DOR	Department of Refinance
EBRD	European Bank for Reconstruction and Development
EDP	Entrepreneurship Development Program
EM	Entrepreneurs Memorandum
ESAF	Evangelical Social Action Forum
ESDP	Entrepreneurship and Skill Development Program
GDP	Gross Domestic Product
GIC	General Insurance Corporation
GOI	Government of India
GSDP	Gross State Domestic Product
GST	Goods and Services Tax
GSVA	Gross State Value Added
GVA	Gross Value Added
IBEF	India Brand Equity Foundation
IC	International Cooperation
ICICI	Industrial Credit and Investment Corporation of India
IFC	International Finance Corporation
IPS	Industrial Promotion Subsidy
IT	Information Technology
KPMG	Klynveld Peat Marwick Goerdeler

LDC	Least Developed Countries
MSE	Micro and Small Enterprises
MSE-CDP	Micro & Small Enterprises Cluster Development Programme
MSME	Micro, Small and Medium Enterprises
MSMED	Micro, Small and Medium Enterprises Development
MUDRA	Micro Units Development and Refinance Agency
NABARD	National Bank for Agriculture and Rural Development
NAMCABS	National Mission for Capacity Building of Bankers
NBFC	Non-Banking Financing Company
NER	North Eastern Region
NILERD	National Institute of Labour Economics Research and Development
NITI	National Institution for Transforming India
NPA	Non-Performing Asset
NSSO	National Sample Survey Office
OECD	Organization of Economic Cooperation and Development
PHDCCI	PHD Chamber of Commerce and Industry
PMEGP	Prime Minister's Employment Generation Program
PMJDY	Pradhan Mantri Jan Dhan Yojana
PMS	Procurement and Marketing Support
PwC	PricewaterhouseCoopers
RBI	Reserve Bank of India
REGP	Rural Employment Generation Programme
RIPS	Rajasthan Investment Promotion Scheme
RM	Relationship Manager
RRB	Regional Rural Banks
R&D	Research and Development
SC	Scheduled Castes
SCB	Scheduled Commercial Bank
SEBI	Securities and Exchange Board of India
SFURTI	Scheme of Fund for Regeneration of Traditional Industries
SGST	State Goods and Services Tax
SME	Small and Medium Enterprises
SSI	Small Scale Industry

ST	Scheduled Tribes
TF-IDF	Term Frequency - Inverse Document Frequency
TReDS	Trade Receivables Discounting System
UA	Udyog Aadhaar
UAM	Udyog Aadhaar Memorandum
VAT	Value Added Tax
ZED	Zero Defect Zero Effect

EXECUTIVE SUMMARY

Background

Micro, Small, and Medium Enterprises (MSMEs) are indispensable to global economies, representing approximately 95 per cent of all companies and generating around 60 per cent of employment worldwide. India has the highest number of MSMEs worldwide, amounting to over 64 million and their role in India is far more important, given their size and contribution to the economy. Employing 111 million individuals, the sector is not only the second-largest contributor to employment in the country but also pivotal in fostering inclusive growth and creating sustainable livelihoods in semi-urban and rural India (NSSO, 2015-16). The role of MSMEs in industrial development is vital as MSMEs are complementary to large industries and play a pivotal role in supply chain management. In addition, the role of MSMEs is crucial for the development of rural and backward areas, helping to reduce regional imbalances.

As per the Annual report of the Ministry of MSME, 2022-23, there are a total of 63.39 million MSMEs in India, and over 99 percent belong to micro-enterprises. Only 0.35 million are categorised as small and medium enterprises. The rural-urban distribution of MSMEs indicates that around 51 per cent of MSMEs are located in rural areas, and 49 per cent in urban areas. In terms of industrial distribution, manufacturing constitutes 31 per cent, trade constitutes 36 per cent, and other services account for 33 per cent. Notably, the micro sector accounts for the bulk of this employment (97 per cent), and is indispensable to rural India. These small-scale units play a significant role in supporting large industries, accounting for approximately 45 per cent of total manufactured output and contributing 29.15 per cent of Gross Value Added (GVA) in the year 2021-22.

Despite the importance of the MSME sector for the Indian economy, this sector is facing numerous difficulties and challenges. The challenges highlighted in the existing literature can be broadly categorised into demand-side factors (the problems that MSMEs encounter in obtaining financing from official sources), supply-side factors (the obstacles encountered by financial intermediaries in extending credit to MSMEs), and the government's role in promoting MSMEs in India. Research indicates that India has the largest financial gap in South Asia, estimated at $230 billion.

Multiple factors have been identified as contributing to the inaccessibility of loans for MSMEs, which are also the primary reasons MSMEs refrain from borrowing from banks. These include difficulties in securing collateral, elevated interest rates, technological intricacies, protracted processing times for loan applications, complications in completing documentation, inadequate record keeping, and the absence of audited financial statements in informal enterprises. Consequently, the unorganised sector persistently relies on lending from the informal financial sector, which is expensive yet readily accessible. Granting financial access to entrepreneurs is crucial in facilitating the expansion of firms and accelerating rural industrialisation. The estimated credit gap for the MSME sector in India is roughly 380 billion USD (World Bank, 2021).

Moreover, banks deem this area insufficiently profitable; the smaller the firm, the greater the financing risk associated with this sector. Particularly, companies in the service sector encounter more rigorous financing restrictions than their manufacturing counterparts, possibly owing to the difficulty in valuing intangible assets relative to

tangible ones. Modernisation of financial structures, technological incorporation in credit lending, greater concentration of banks to facilitate increased availability of credit choices for MSMEs through formal channels and a robust legal and regulatory framework have been shown to enhance access to credit. Initiatives by the Government of India and by respective state governments to enhance access to credit via tailored policies and credit subsidies have significantly enhanced access to formal finance for MSMEs.

While significant efforts have been undertaken, 92.77 per cent of the units still have not secured access to institutional financing options (MSME Annual Report, 2020-21). Over the years, problems like the high cost of credit and collateral requirements have posed hurdles for MSMEs in accessing credit. Moreover, there is a limited study that has assessed the credit utilisation pattern and its impact on employment generation, productivity improvements, exports, technology upgradation, and infrastructure development at the firm level. Further, the existing research tends to be region-specific rather than broad-based. As the majority of these MSMEs operate in different sectors, varied enterprise sizes, a single policy cannot adequately address the diverse challenges faced by the enterprises. Therefore, a detailed study covering multiple states is necessary to understand the current situation regarding the availability of formal credit and challenges and their impact assessment covering semi-urban and rural areas. Therefore, this study fills this gap by undertaking an in-depth analysis covering rural and semi-urban areas across two states, namely, Maharashtra and Rajasthan. Further, MSMEs in rural areas face different challenges compared to urban areas, and a study covering rural areas will contribute significantly to the existing literature.

Objectives & Methodology

The study aims to ascertain the obstacles and difficulties related to MSMEs' ability to obtain formal credit and their impact on sales, employment, technology, productivity, and exports. The study relies on an exploratory primary survey in the two states, i.e., Maharashtra and Rajasthan, as well as secondary sources of data. Maharashtra was selected for the study given that Maharashtra is a highly urbanised and industrialised state in India with 4th largest MSMEs number. Rajasthan was selected due to its location (central India), and MSMEs are growing faster compared to other states, which provides a new dimension to the study.

The study uses a structured questionnaire to collect information from the MSMEs, covering varied aspects and challenges in accessing formal credit, utilisation of credit, and impact on employment generation, technology upgradation, export performance, etc. We conducted surveys on 63 samples from five districts in Maharashtra, namely Raigad, Palghar, Parbhani, Pune, Thane; and 58 samples from four districts in Rajasthan, namely Ajmer, Bhilwara, Bikaner, Jaipur. Districts from the states are selected based on the presence of MSMEs in rural areas.

Maharashtra is one of India's most industrialised states, hub of India's financial centre and a major port. Maharashtra, ranked second in productivity, is one of the top ten states in India known for its robust MSME sector, closely trailing Uttar Pradesh and West Bengal. This sector employs 24 percent of the state's total workforce. It spans diverse industries such as agriculture, food processing, manufacturing, services, and exports. Maharashtra's 4.76 million MSME units represent 7.5 per cent of the total MSME distribution within India. Maharashtra's vibrant MSME sector is a fundamental pillar of its economic vigour, fostering innovation and growth. The largest state in India,

Rajasthan, has one of the fastest rates of economic growth in the nation, with MSMEs accounting for more than one-third of the GSDP. In addition to housing sectors such as tourism, textiles, and handicrafts, Rajasthan is India's foremost mineral-producing region, generating mineral outputs valued at Rs.2,14,50,217 in 2023-24. The capital city Jaipur, has the highest concentration of MSMEs. Small enterprises are the primary contributors to MSMEs in Rajasthan, accounting for 43 per cent of the total across the four districts studied. Small businesses are expanding significantly, particularly in Bhilwara. The textile industry has expanded from producing yarn to manufacturing ready-made garments, further spurring the growth of the chemical industry, particularly in dye manufacturing. During the survey, we discussed how Bhilwara, one of the most industrialised districts, will become Rajasthan's industrial hub in the upcoming years.

Study Findings

The majority of MSMEs in Rajasthan reported using both internal and institutional financial sources. Interestingly, an inverse relationship is observed between the number of enterprises securing loans and the credit size. Even though they receive the greatest number of loans, small and micro businesses are more likely to be denied larger loans, so in order to lessen their reliance on outside funding, they frequently turn to group lending or crowdsourcing. On the other hand, medium-sized enterprises find it easier to obtain larger loans. Furthermore, the manufacturing and services sectors are more successful in obtaining substantial loans, whereas agriculture typically receives smaller amounts. High collateral requirements emerged as a major barrier across all categories, with small enterprises being particularly vulnerable in the credit procurement process and facing several additional hurdles. Their role in Rajasthan's service industry, heavily influenced by client payment cycles and cash flows, exacerbates their difficulties in obtaining credit. However, despite securing smaller credit, small enterprises report most improvements in sales, production, procurement, technology and infrastructure after receiving credit, but fewer micro enterprises noted these benefits. Hardly any units, especially in the micro sector, reported an increase in exports. Close to 50 per cent of the sample use loans primarily for working capital. In comparison to Maharashtra, Rajasthan relied less on banks to meet its working capital needs.

Despite having the fourth-highest density of small businesses in the country and a high credit-to-GDP ratio, micro-enterprises in Maharashtra face more pronounced credit availability challenges than small and medium enterprises. The high percentage (64.9 per cent) of micro units found in the MSMEs surveyed in five aforementioned districts has highlighted how little credit these businesses are able to obtain. Observed disparities in the size of the credit availed by micro units range from Rs. 1.36 million to Rs. 12.44 million, the latter figure being applicable to only a few businesses. It was observed that micro-enterprises established since 2011 have developed stronger credit histories, allowing them to secure better credit facilities. Demands for audited financial statements and drawn-out documentation procedures were cited as major obstacles by nearly half of the businesses surveyed. These challenges have led many MSMEs, particularly micro units, to turn to NBFCs, which account for 31 per cent of the sample. In contrast, 60 percent of medium enterprises surveyed reported loans exceeding Rs. 5 million, primarily in the auto ancillary sector in Pune and textiles in Thane. As a result, medium and small enterprises experience more favourable outcomes, such as increased sales and job creation, after securing credit. In comparison, only two micro enterprises reported an uptick in exports. While most micro-enterprises have utilised the credit for its intended purpose, small and medium enterprises

often allocate it for working capital management, which is crucial for their survival.

The sample in Rajasthan had a higher number of small enterprises (43.4 per cent) compared to Maharashtra (13 per cent). In contrast, micro enterprises were more prevalent in Maharashtra (64.8 percent) compared to Rajasthan (27.3 percent). These enterprises have a diverse range of businesses. 53 enterprises were involved in services, 38 enterprises in manufacturing, 30 enterprises in agro-processing, and mixed.

MSMEs reported using a combination of internal and institutional sources to meet their capital needs in Rajasthan and Maharashtra. Small and medium-sized businesses in both states reported using intermediaries to help them obtain loans. While medium enterprises in Maharashtra are able to access credit, micro and small enterprises have difficulty accessing formal credit, and their credit size is smaller when compared to their counterparts in Rajasthan. Consequently, they often turn to NBFCs for funding, who charge higher interest rates.

Despite receiving less credit, micro-enterprises in Maharashtra have seen a more substantial impact on sales, production, and employment from the funding they do obtain, compared to those in Rajasthan. The higher export levels in Maharashtra may be linked to the presence of auto-ancillary enterprises in the region. However, businesses in Rajasthan have benefitted from technological upgrades and infrastructure improvements more than those in Maharashtra. In Maharashtra, micro enterprises tend to use credit for their intended purpose. However, the medium enterprises surveyed often use the credit for working capital requirements, despite having been in business for a longer period of time and having a working capital agreement with commercial banks. In contrast, enterprises in Rajasthan utilise credit for working capital needs, irrespective of their size.

The study finds a significant credit gap in the MSME sector. The credit gap is estimated to be around $685 billion in 2024-25 and is expected to rise to around $1 trillion by the end of 2030-31. In the case of Maharashtra, the credit gap is estimated to be around $137 billion in 2024-25 and expected to rise to $200 billion in 2030-31. The challenges faced by MSMEs in procuring credit were collateral requirements of the banks, audited financial statements, and lengthy documentation. Thus, the study recommends collateral-free lending to the MSME sector should be increased to Rs. 30 lakhs as most of the micro sector borrows within the range of Rs.10 to 30 lakhs. Banks are apprehensive in extending credit to MSMEs due to low credit size, and the risk of default. Thus, creation of a credit guarantee agency specific to the MSME sector could be established. This credit agency should be refinanced at a concession rate with minimum requirements to mitigate credit constraints. Despite the refinance facilities by NABARD and MUDRA, the refinance amount is very small compared to the credit required. This study recommends increasing the refinance amount substantially. Therefore, the refinance amount should be increased to reduce the credit gap. A risk mitigation mechanism should be created to reduce the risk of lending to the MSME sector, given that MSME lending is perceived as high risk. In this context, credit to the MSME sector must be insured in partnership with insurance companies. This will encourage banks and NBFC to provide more credit to unbankable MSMEs. Although a large number of clusters are being created, the system of clustered financing is missing in India. Banks and NBFC must tie up with clusters for financing. Further, clustered should be created product-wise rather than place-wise. As the nodal agency of MSME, SIDBI should work to develop a capital market for the MSME sector in partnership with SEBI.

CHAPTER 1.

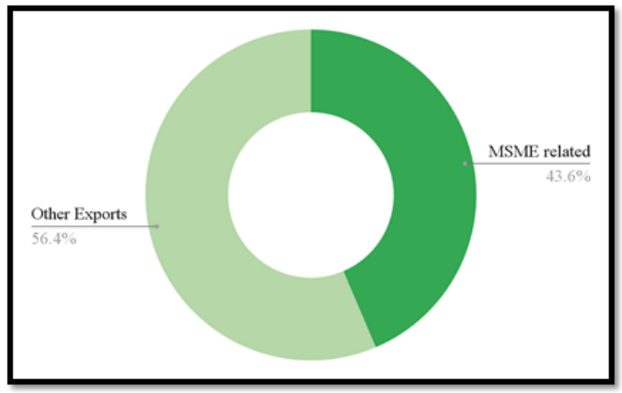
INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are indispensable to global economies, representing approximately 95 per cent of all companies and generating around 60 per cent of employment worldwide. In developing nations, MSMEs contribute about 35 per cent to GDP, while in developed countries, this contribution escalates to nearly 50 per cent. These figures underscore the critical role MSMEs play in economic development and stability across diverse national contexts.

MSMEs are the backbone of the Indian economy, driving innovation, employment, and economic growth. Small-scale and village industries have historically laid the foundation for India's developmental trajectory, significantly shaping the nation's economic landscape. In this context, parameters such as size, capital investment, labour employment, and working capital requirements were often not well defined. However, over the past five decades, MSMEs have solidified their role as dynamic engines of growth, significantly shaping the economic landscape with their innovation, employment generation, and contribution to the nation's prosperity.

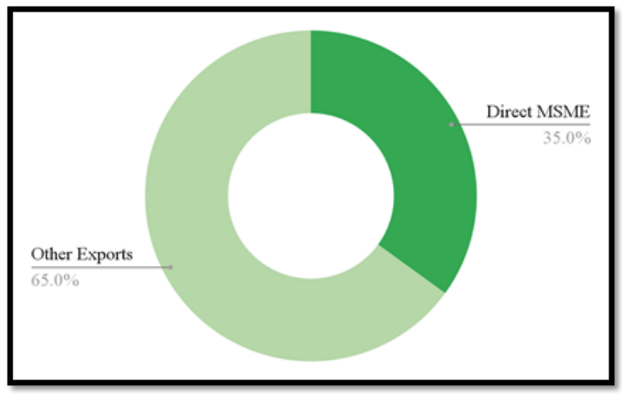
MSMEs have been not only the second-largest contributor to employment in the country but also pivotal in fostering inclusive growth and creating sustainable livelihoods in semi-urban and rural India. The NSSO 73rd round report in 2015-16 reported that MSMEs in India employed 111 million individuals, with projections suggesting an increase to 150 million in the near future. Notably, bulk of the employment comes from the Micro sector. The Micro sector comprises approximately 63 million enterprises, providing employment to 107 million persons, which accounts for around 97 per cent of total employment in the sector.

MSMEs have played a significant role in supporting the large industries, accounting for approximately 45 per cent of total manufactured output. Consequently, they broaden their impact across various industries and participate in a diverse array of goods and services. This expansion has been instrumental in addressing global demand. According to the Ministry of Micro, Small & Medium Enterprises, the MSME sector contributed 29.15 per cent Gross Value Added (GVA) in the year 2021-22. In comparison, the contribution of MSMEs to the GDP of major developed economies ranges from 22 per cent to as high as 85 per cent, highlighting significant potential for further growth (OECD, 2022). The Ministry of Micro, Small, and Medium Enterprises in India anticipates that this share could rise to 50 percent of GDP in the coming years. Furthermore, MSME-related products constituted 43.59 percent of India's total exports in 2022-23 (Ministry of MSME, 2023), with direct MSME exports making up nearly 35 percent of the total. In addition, small-scale industrial units contribute an estimated 15 percent to exports indirectly through merchant exporters, trading houses, and export houses (Ministry of MSME, 2023). However, very few micro-enterprises can export; the majority of exporters are SMEs.



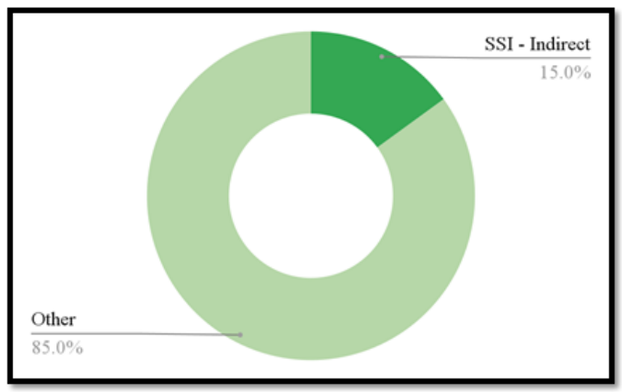
Source: Ministry of MSME, 2023

Figure 1. MSME-Related Product's Share in Exports



Source: Ministry of MSME, 2023

Figure 2. MSME Direct Share in Exports



Source: Ministry of MSME, 2023

Figure 3. MSME Indirect Product's Share in Exports

The MSME sector primarily consists of locally operated industries that can function efficiently in small spaces with minimal personnel. It is categorised into types such as manufacturing, agriculture, services, mixed to name a few. The varied activities performed by MSMEs in any economy is its backbone for production.

1.1 Importance of the MSME and Role of the Government

The role of the Government in promoting the MSME sector has been crucial. The Government of India has established a ministry dedicated to MSMEs, recognizing their crucial role in generating employment, fostering entrepreneurial skills, and promoting balanced regional growth, which are all vital for the country's development.

The MSMED Act 2006 was enacted to address the policy issues faced by these enterprises. The Act defined the three tiers of industries i.e. Micro, Small and Medium Enterprises. It also distinguished between manufacturing units and service units. These distinctions were essential for enabling the government to develop targeted policies that cater to the specific needs of each industry type, recognizing that a single policy could not adequately address the diverse challenges faced by these enterprises.

Definition of Micro, Small and Medium Enterprises – International Classification

There have been many discussions worldwide about the definition of MSMEs and the criteria for classifying them as micro, small, or medium enterprises. On the global stage, the IFC defines MSMEs as follows:

An enterprise qualifies as a micro, small, or medium enterprise if it meets two out of three criteria of the IFC MSME Definition (employees, assets, and sales) or if the loan to it falls within the relevant MSME loan size proxy.

Table 1. IFC MSME Definition

IFC MSME Definition				MSME Loan Size Proxy
Indicator	Employees	Total assets US$	Annual Sales US$	Loan size at origination
Micro enterprise	< 10	<$100,000	<$100,000	<$10,000
		<Rs.8.3 million	<Rs.8.3 million	<Rs.83,000
Small enterprise	10-49	$100,000 - < $3 million	$100,000 - < $3 million	<$100,000
		Rs.8.3 million - < Rs.249 million	Rs.8.3 million - < Rs.249 million	<Rs.8.3 million
Medium enterprise	50-300	$3 million -$15 million	$3 million -$15 million	<$1 or $2 million[1]
		Rs.249 million - Rs.1.245 billion	Rs.249 million - Rs.1.245 billion	<Rs.83 or 166 million

Source: Various reports of International Finance Corporation
(https://www.ifc.org/en/what-we-do/sector-expertise/financial-institutions/definitions-of-targeted-sectors)

Furthermore, different countries have established their own definitions based on the specific characteristics of their MSME sectors. Micro enterprises predominantly comprise the MSME landscape in India, accounting for the majority of employment.

Definition of Micro, Small and Medium Enterprises - in India

In India, Micro, Small, and Medium Enterprises, as per the MSMED Act, 2006, are defined based on their investment in plant and machinery for manufacturing enterprises and in equipment for service-providing enterprises. The present ceilings on investment for enterprises to be classified as Micro, Small, and Medium Enterprises are as follows:

Table 2. Classification of MSME (MSMED Act 2006)

Classification		Manufacturing Enterprises (Investment limit in Plant and Machinery)		Service Enterprises (Investment limit in Equipment)	
		Before 2020	After 2020	Before 2020	After 2020
Micro	INR	Rs. 2.5 million	Rs. 10 million	Rs. 1 million	Rs. 10 million
	USD	USD 30,120	USD 120,482	USD 12,048	USD 120,482
Small	INR	Rs. 50 million	Rs. 100 million	Rs. 20 million	Rs. 100 million
	USD	USD 602,410	USD 1,204,819	USD 240,964	USD 1,204,819
Medium	INR	Rs. 100 million	Rs. 500 million	Rs. 50 million	Rs. 500 million
	USD	USD 1,204,819	USD 6,024,096	USD 602,410	USD 6,024,096

Source: Ministry of MSME, GoI

In 2018, the central government updated the MSME classification based on annual turnover. The rationale was to identify industries by their turnover rather than their size. The updated definition, effective from 2018, is as follows:

- **Micro Enterprises:** Industries with an annual turnover of less than Rs. 50 million.
- **Small Enterprises:** Industries with an annual turnover between Rs. 50 million and Rs. 750 million.
- **Medium Enterprises:** Industries with an annual turnover between Rs. 750 million and Rs. 2500 million.

In India, a new classification of MSMEs came into force on July 1, 2020. In accordance with the provision of the Micro, Small & Medium Enterprises Development (MSMED) Act, 2006, the Micro, Small and Medium Enterprises (MSME) are classified as below:

- a micro enterprise, where the investment in Plant and Machinery or Equipment does not exceed one crore rupees, and turnover does not exceed five crore rupees;
- a small enterprise, where the investment in Plant and Machinery or Equipment does not exceed ten crore rupees, and turnover does not exceed fifty crore rupees;
- a medium enterprise, where the investment in Plant and Machinery or Equipment does not exceed fifty crore rupees, and turnover does not exceed two hundred and fifty crore rupees.

This new definition eliminates the distinction between manufacturing and service-based units, aligning more closely with the IFC definition.

MSMEs play a pivotal role in the overall economic development of a country, driving GDP growth through increased output, value addition, and profits. Their influence extends well beyond direct contributions,

significantly shaping broader economic activity and production. MSMEs have a substantial impact on GDP across various regions, even without taking into account their multiplier effects. For example, Indian dairy units exemplify this impact by processing over 25,000 litres of milk daily from local farmers into cheese and whey products, generating substantial export revenues and contributing over USD 1.1 million annually to GDP, with net profits ranging between 20-25 per cent. Moreover, the International Labour Organization highlights that approximately 80 per cent of MSMEs globally operate within informal economies, further underscoring their significance and the need for targeted economic policies.

1.2 Importance of MSME at the International Level

MSMEs contribute to the GDP significantly in various regions of the world. Table 3 illustrates the contribution of MSME in various regions. East Asia (China, South Korea, Japan) and South Asia (covering countries like India, Bangladesh, Myanmar) see a very high contribution from MSME to their output.

Table 3. MSME Contribution to GDP in Various Regions of the World

Region	GDP Contribution (% of GDP)
East Asia	55
South Asia	47
Sub-Saharan Africa	37
Middle East and North Africa	27
Latin America	23
Central Asia and Eastern Europe	19
High Income OECD	32

Source: Small and Medium Enterprises across the Globe: A New Database, World Bank

Furthermore, we look at the various countries in these regions that see a significant contribution from MSMEs to their output. Countries like China and the Republic of South Korea in the East Asian region have close to 50 percent of their output being contributed by MSMEs. In developed countries like the US, Germany MSMEs are contributing more than 50 percent of their GDP (see the Table 4).

Table 4. MSME contribution in GDP in countries

Country	MSME Contribution in GDP (Percentage)
China	60
Korea, Rep.	60
Germany	55
Turkey	55
United States	50
Japan	41
France	40
Thailand	35
South Africa	34
India	30

Source: SME Finance Forum

https://www.smefinanceforum.org/data-sites/msme-country-indicators

1.2.1 Region-wise MSME Employment Contribution

In East Asia, MSMEs are responsible for the highest employment generation, accounting for 73 percent of employment in the region. This includes countries such as China, Japan, South Korea, and North Korea, where the MSME sector is also the most prominent, with a very high number of MSME units. In contrast, South Asian countries have seen the lowest employment generation from MSMEs compared to

other regions. Within South East Asia, India stands out as having the highest level of employment in the MSME sector.

Table 5. Region-wise MSMEs Employment Generated

Region	MSME Employment to Total Employment (percentage)
East Asia	73
South Asia	15
Sub-Saharan Africa	56
Latin America	40
Central Asia and Eastern Europe	44
Middle East and North Africa	67
High Income OECD	33

Source: Small and Medium Enterprises across the Globe: A New Database, World Bank

1.2.2 Total Enterprises Across Select Countries

The data presented here has been sourced from the SME Finance Forum, which has compiled information from official national websites. The Table 6 highlights the substantial presence of MSME industries in each of these countries.

Table 6. Number of Enterprises (Countries)

Country	Year	Number of Enterprises (in million)				
		Micro	Small	Medium	SMEs	MSMEs
China	2017					23.28
France	2016	2.91	0.13	0.02	0.14	3.05
Germany	2016	2.02	0.18	0.06	0.24	2.27
India	2015	63.05	0.33	0.005	0.33	63.69
Japan	2014	4.32	1.04	0.15	1.19	5.51
Korea, Rep.	2015				3.60	
South Africa	2017	0.30	0.51	0.131	0.64	0.94
Thailand	2016		2.99	0.02		3.00
Turkey	2016	2.36	0.05	0.02	0.07	2.43
United States	2016	31.44	0.94	0.17	1.11	32.55

Source: SME Finance Forum

https://www.smefinanceforum.org/data-sites/msme-country-indicators

1.3 Profile of MSME in India

Until 2015, the primary regulatory framework for MSMEs in India was the Entrepreneurs Memorandum (EM Part-I and II). Administered at the State and Union Territory levels, the registration process was often cumbersome and inconsistent, with varying

regulations even within the same State. While some States and Union Territories had transitioned to an online filing system, many continued to rely on manual submission, resulting in delays and inefficiencies. On September 18, 2015, the Ministry of Micro, Small, and Medium Enterprises (MSMEs) introduced the Udyog Aadhaar Memorandum (UAM), marking a significant advancement in the regulatory framework for MSMEs, as stipulated under Section 8 of the Micro, Small and Medium Enterprises Development Act, 2006. This initiative aims to enhance the ease of doing business for MSMEs across the nation by replacing the previously utilised EM system.

The UAM addresses these challenges by providing a centralised online registration system accessible to enterprises nationwide, thereby standardising the registration process and eliminating regional disparities. The UAM features a streamlined one-page registration form that requires only essential self-declared information from MSMEs. Upon submission, enterprises receive a unique identifier known as the Udyog Aadhaar Number. To facilitate this process, the Ministry of MSME has established the Udyog Aadhaar (UA) Portal, enabling efficient online registration. The Udyog Aadhaar registration process is notable for its free nature, complete paperless instantaneous registration, and mobile device accessibility. Furthermore, it empowers enterprises to obtain information and apply online for various services offered by different ministries and departments. We anticipate that the implementation of the UAM will unlock the full potential of MSMEs in India, thereby positively contributing to the country's ranking in the Doing Business Index. Additionally, it is expected to encourage formalisation within the unorganised sector, thereby fostering a more organised and resilient economy.

In India, MSMEs generate 62 percent of employment as per McKinsey Global Institute report (June 2024). The number of MSMEs in India are concentrated in trade and other services. Together, they comprise 69 percent of the total MSMEs in India.

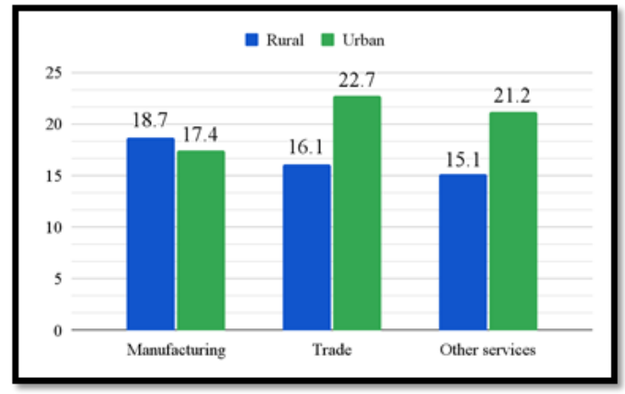


Figure 4. Employment in MSME Sector (in Millions) by Industry

Source: Annual report 2022-23, MSME, GoI

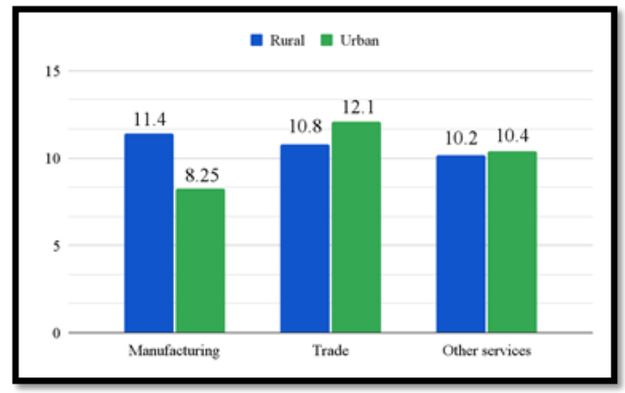


Figure 5. Number of MSME by Sector (in Millions) in India

Source: Annual report 2022-23, MSME, GoI

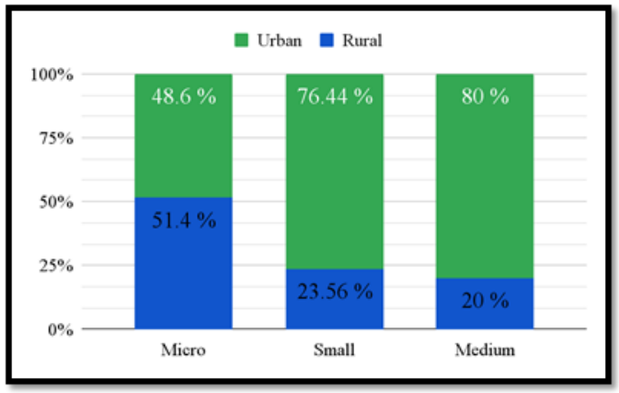


Figure 6. Distribution of Enterprises in India- Rural and Urban Areas

Source: Annual report 2023-24, MSME, GoI

1.3.1 Number of Enterprises

The number of Micro-enterprises is more in rural areas compared to urban areas (see Figure 6). The employment generation in urban areas is more in trade and other services in urban areas. Small enterprises dominate the urban areas.

1.3.2 Start-ups in Indian States

To foster the growth of MSMEs, there has been a notable emergence of startups. Start-ups play a crucial role in the Indian economy by generating employment opportunities, driving economic participation and development, and fostering innovation. According to the Annual Report of 2018-19 published by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India, Maharashtra ranks highest in the number of start-ups, as indicated in the accompanying Table 7. The report reveals that Maharashtra is home to 2,587 start-ups, accounting for 17.7 per cent of the total entries from all states. Following Maharashtra, Karnataka ranks second, and Delhi is in third place. The study finds that Rajasthan occupies the 12th position with 371 start-ups.

Table 7. Ranking of States - Numbers (in Thousand)

Rank	States	Numbers of Start-ups (2019)
1	Maharashtra	2587
2	Karnataka	1973
3	Delhi	1833
4	Uttar Pradesh	1129
5	Telangana	748
6	Gujrat	712
7	Haryana	710
8	Tamil Nadu	709
9	Kerala	461
10	West Bengal	417
11	Madhya Pradesh	384
12	Rajasthan	371
13	Andhra Pradesh	259
14	Odisha	251
15	Bihar	178

Source: Department of Promotion of Industries and Internal Trade, Annual Report 2018-19

1.3.3 State Profile - MSME

According to the MSME Annual Report 2022-23, Maharashtra ranks 4th and Rajasthan 9th in terms of the number of MSME units. Since 2015-16, Rajasthan has shown a consistent increase in its number of MSME units.

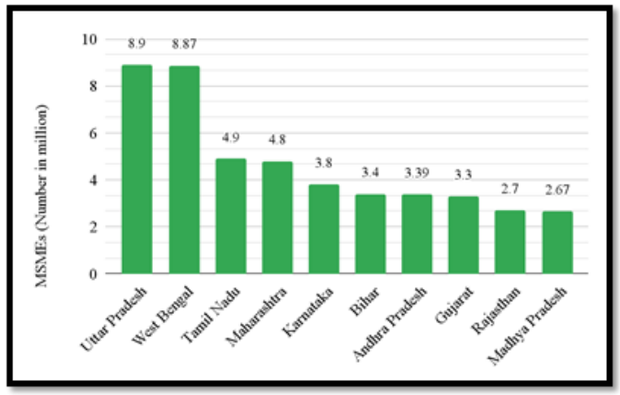


Figure 7. Distribution of MSMEs in Top 10 States (2023)

Source: Annual Report, 2022-23, MSME, GoI

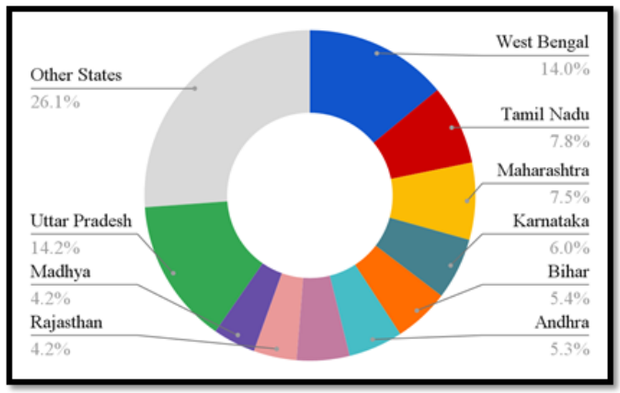


Figure 8. Share of MSME (Top 10 States)

Source: Annual Report, 2022-23, MSME, GoI

Among the two states that have been covered in this study, Maharashtra has remained in the fourth position in terms of the number of MSME units. On the other hand, MSMEs in Rajasthan have been growing at a faster pace, helping the state improve its ranking. Despite a high ranking, the leading states have not registered rapid growth in the number of MSMEs over the past five years. This study has focused on understanding the challenges faced by MSMEs in Maharashtra and Rajasthan. Maharashtra and Rajasthan cover up to around 12 per cent of MSMEs in India. In these states, a few districts like Thane, Pune, Palghar in Maharashtra, Bikaner, Bhilwara and Jaipur in Rajasthan are dominated by MSMEs.

1.4 Statement of the Problem and Rationale of the Study

Besides credit availability challenges, MSMEs also encounter issues such as high cost of credit, collateral requirements, liquidity and supply of credit. According to the fourth All India MSME Census (2006-07) only 5.18 per cent of the units (both registered and unregistered) had availed finance from institutional sources, 2.05 per cent units availed finance from non-institutional sources, and 92.77 per cent of the units had no access to institutional finance, i.e. they depend on self-finance. According to the World Bank (2021) estimates, there is a huge credit gap (roughly around $380 billion) for the MSME sector in India. The credit gap has increased in the last five years due to COVID-19 and other factors that impact credit supply and demand.

Moreover, there is limited study that has assessed the credit utilisation pattern and impact of credit on employment generation, productivity improvements, technology upgradation etc., and the existing research tends to be region-specific rather than broad-based. Therefore, a detailed study is necessary to understand the current situation regarding the availability of formal credit and to assess the impact of credit utilisation in MSMEs operating in rural areas. Therefore, this study fills this gap by undertaking an in-depth study covering rural and semi-urban areas across two states, namely, Maharashtra & Rajasthan. This study aims to identify the challenges faced by MSMEs in procuring

credit facilities from institutional sources. MSMEs who have been able to access are utilizing the credit for the business expansion, procurement, increasing sales etc.

1.5 Research Objectives

- To identify the problems and challenges associated with MSMEs' access to formal[2] credit
- To assess the impact of the credit availed and its impact on sales, production, technology, employment, and exports in the MSME sector.
- Estimation of Credit Gap for Maharashtra and Rajasthan.

Rajasthan and Maharashtra have been selected for analysis based on their geographical positioning—Rajasthan is situated in Central India, while Maharashtra lies in Western India. The MSME Annual Report 2022-23 indicates that Maharashtra ranks 4th, and Rajasthan ranks 9th in terms of the number of MSME units. Maharashtra and Rajasthan cover up to around 12 per cent of MSMEs in India. Notably, since 2015-16, Rajasthan has exhibited a consistent upward trend in the establishment of MSME units and in contrast Maharashtra is considered to be an industrialised state in the country. This selection facilitates a comparative examination of a developed state (Maharashtra) alongside one that is in the developmental phase (Rajasthan).

1.6. Methodology

The study relies on an exploratory primary survey in the two states i.e. Maharashtra and Rajasthan and secondary sources of data. The study used a structured questionnaire to collect information from the surveyed MSMEs. The questionnaire covered the varied aspects or challenges in accessing formal credit, utilisation of credit, and impact on employment generation, technology upgradation, export performance etc. Cross-tabulation is employed to examine the relationship between the variables of credit availability and the challenges associated with credit utilisation. This method reveals the associations between categorical variables. The detailed data collection method and the tools used are explained in Chapter 3.

1.7 Organization of Chapters

Chapter 2 discusses the empirical work undertaken by researchers on MSMEs in India and in other countries. Chapter 3 discusses the data and methodology used in conducting this study. It describes the sample design, data collection and the parameters used to measure the credit challenges, utilisation and performance indicators. Chapters 4 and 5 provide a comprehensive analysis of the impact of credit in the states of Rajasthan and Maharashtra respectively. After analysing profiles of MSMEs in the state and selected districts and providing observations and findings from primary surveys, the chapters analyse the profile of credit availed, the credit utilisation pattern, the impact assessment of credit. The chapters discuss the various challenges faced by MSMEs in these states. Chapter 6 addresses the combined impact of credit utilisation in Rajasthan and Maharashtra. It provides a comparative analysis of the attributes of samples, the extent of credit availability and credit size, the credit utilisation patterns, impact assessment, the sources of finance and challenges of availing credit in Maharashtra and Rajasthan. Chapter 7 provides an insight into the credit gap in India and the two states i.e. Maharashtra and Rajasthan. Chapter 8 discusses the various MSME schemes offered by state and central governments in India. The chapter delves into the similarities and dissimilarities between schemes offered by state and central government. Chapter 9 presents the summary and recommendations.

[2] Formal credit - Loans provided by formal banking institutions, regulated by government law.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introductory

In India, MSMEs are crucial in leveraging the potential of the nation's vast population, offering employment to a significant portion of young workers and contributing significantly to development. Nonetheless, various difficulties impede the advancement of MSMEs. Micro, Small, and Medium Enterprises encounter many challenges while competing against larger industries (Patil and Chaudhari, 2014). Indian MSMEs face insufficient funding and timely bank financing, inadequate technology, ineffective marketing strategies, limited resources, a shortage of skilled labour, and obstacles in establishing and accessing competitive markets (Mathiraj et al., 2019; Nishanth and Zakkariya, 2014). Throughout the years, MSME units have encountered numerous problems. This literature study seeks to clarify these concerns comprehensively.

We categorise the literature review into the following subsections.

- Demand-side factors: These encompass the problems that MSMEs encounter in obtaining financing from both official and informal sources of finance.
- Supply-side factors: These factors represent the obstacles encountered by financial intermediaries in extending credit to MSMEs.

2.1.1 Demand Side - Access to Credit and Financial Institutions

MSMEs require funding to advance their business operations. Empirical studies have emphasised the role of financing in the development of MSMEs. The accessibility of funding will positively influence MSME entrepreneurs, leading to enhancements in factors such as infrastructure, machines, vehicles, raw materials, finished products, working capital, capacity utilisation, production, sales, and profitability. The profits of the industries have demonstrated a rise following support from financial institutions (Bai, 2014). Numerous studies concerning India (Petersen and Rajan, 2002; Srinivas, 2005; Beck and Demirguc-Kunt, 2006; Sheshasayee, 2006; Beck, 2007; Ayyagari et al., 2008; Dogra and Gupta, 2009; Thampy, 2010; Allen et al., 2012; Zaidi, 2013) have established that the success of MSMEs is reliant on the availability of credit, a sufficient amount at an affordable interest rate, and the timely disbursement of credit to MSMEs. They face challenges with establishment, access to competitive markets, availability of bank financing, access to a competent staff, and other issues (Nishanth and Zakkariya, 2014).

The funding for the MSME sector is emerging as a topic of interest among experts worldwide. Scholars have conducted research on the accessibility of funding for MSMEs in both developed and developing nations since the early 2000s. He and Baker (2007) in the United States, Wu et al. (2008) in China, Haileselasie Gebru in Tigray (2009), Bhaird and Lucey (2011) in Ireland, Demirbas et al. (2011) in Turkey, Lappalainen and Niskanen (2012) in Finland, Klonowski (2012) in Poland, Borgia and Newman (2012) in China, Daskalakis et al. (2013) in Greece, and Zabri (2013) in Malaysia have concentrated on the importance of funding for MSMEs.

The SME group of the World Bank (2017) examined

the financing needs of Micro, Small, and Medium firms in emerging nations. In developing markets around the world, approximately 180 to 220 million SMEs—roughly half of all such businesses—still face unmet credit needs amounting to between $2.1 trillion and $2.6 trillion. In South Asia, 54 per cent of firms faced financial constraints, followed by those in Sub-Saharan Africa. Small businesses in the least developed countries (LDCs) have a harder time getting access to finance than SMEs in middle-income countries (30 percent) or high-income countries (15 percent) (World Bank, 2017). In fact, 41 per cent of SMEs in LDCs say that access to finance is a big problem for their growth and development, compared to 30 percent of SMEs in MICs and 15 per cent of SMEs in HICs. Research conducted by the World Bank in 2017 indicated that India had the largest financial gap in South Asia, estimated at $230 billion. Consequently, the availability of financing from formal sources such as banks and other financial institutions is a difficulty for the MSME sector in developing economies like India. The MSME Act of 2006 has established stability in investments within MSMEs. The Act has made it easier for entrepreneurs to access financing.

2.1.2 Demand Side - Informal Financial Sources

The unorganised sector primarily recognises MSMEs as its components. The unorganised sector persistently relies on lending from the informal[3] financial sector (Bose, 2013). Stevenson and Botzung (2012) assert that SMEs rely on informal lending sources and self-financing for about 78 per cent of their financial requirements. Banks and Non-Banking Financial Companies (NBFCs) fulfil the remaining 22 per cent of their finance requirements. The informal sources referenced include personal resources, particularly savings and reinvested profits, loans and grants from familial and social networks, liquidation of family assets, reciprocal asset utilisation agreements, informal operating leases, rotating savings and credit associations, and money lenders (NILERD, 2016).

Banks and Non-Banking Financial Companies have restricted financing due to a number of factors. The reliance of SMEs on informal financing sources may stem from the constraints imposed by formal lenders. Issues related to finance, marketing, and subpar quality continue to impede small and medium-sized enterprises (Venkatesh and Muthiah, 2012). Numerous SMEs encounter challenges in securing sufficient and inexpensive loans from banks due to their failure to satisfy credit requirements such as sufficient documentation and the provision of collateral, among other factors GIC, 2022. They encounter numerous barriers and impediments in obtaining investment from banks and other financial institutions (Biswas, 2014). Multiple factors have been identified as contributing to the inaccessibility of loans for MSMEs, including difficulties in securing collateral, elevated interest rates, technological intricacies, protracted processing times for loan applications, complications in completing documentation (Singh and Wadsani, 2016), and other associated hurdles. Additionally, the substantial collateral prerequisites for loan approval significantly contribute to the financing challenges faced by small enterprises (Gupta et al., 2018). The registration status affects preferences for bank loans, while the necessity for security is a significant issue faced by borrowers, with challenges related to the application process, pre- and post-sanction procedures, and repayment processes. The primary reasons MSMEs refrain from borrowing from banks are insufficient collateral assets, repayment obligations, elevated interest rates, and stringent security requirements (Choudhury and Goswami, 2019). A prevalent reason identified in academic literature is inadequate

[2] Informal credit - includes personal resources, particularly savings and reinvested profits, loans and grants from familial and social networks, liquidation of family assets, reciprocal asset utilisation agreements, informal operating leases, rotating savings and credit associations, and money lenders (NILERD, 2016)

record keeping and the absence of audited financial statements (Liu and Yu, 2008; Storey, 1994). Additional aspects encompass information asymmetries, elevated transaction costs, external influences, and frequently, substandard project quality (Vasilescu, 2014). Small and medium-sized enterprises (SMEs) are regarded as high-risk lending proposals by financial institutions, resulting in limited access to formal financing options (Ambrose, 2012). In emerging and developing economies, existing policies sometimes lack the flexibility to meet the financial requirements of small enterprises (Owusu et al., 2021).

While large corporations have access to formal financing, it is critical for MSMEs to obtain convenient financing and access to a variety of funding sources under suitable terms and circumstances. This is essential for the growth and development of SMEs (Osano and Languitone, 2016; Shikumo and Mwangi, 2016). Crucially, granting financial access to entrepreneurs will facilitate the transition from micro to small and subsequently to medium firms, accelerating the rural industrialisation of the economy (Laha, 2014).

It is well-known that industrialised countries offer numerous avenues for accessing money and pertinent information through highly efficient platforms, in contrast to emerging countries such as India, which are in the nascent stages of MSME financing. The lack of adequate and satisfying studies on the financing of MSMEs in India is mostly due to the unavailability of credible and published data. This is due to the sector's lack of obligation to provide information to the public, resulting in ambiguity and hindering future study. Aggarwal and Sahithi (2017) assert that a startup firm can attain substantial profits within a short timeframe, as the site of the manufacturing facility significantly influences the company's growth. A higher interest coverage ratio is advantageous for the company since it indicates superior performance. Banks and financial institutions significantly enhance their laws and regulations to offer favourable interest rates on loans to MSMEs, thereby facilitating their access to cash and contributing to the nation's economy (Borad and Patel, 2020).

Katait (2016) examined the influence of internal vs external environmental factors on the success and failure of small-scale industries (SSI). The study indicates that a small-scale industry must implement effective management of time, finances, production, and labour to avert failure, and that government backing is essential for the seamless operation of the SSI. Micro, Small, and Medium Enterprises encounter difficulties in obtaining financing from formal institutions and thus depend on informal loan sources. Informal financing is expensive yet readily accessible. This section examines the obstacles encountered by financial institutions in providing loans to MSMEs.

2.2. Obstacles Encountered by Financial Intermediaries in Extending Loans to MSMEs

Banks have had significant challenges in providing loans to MSMEs due to their operation in the unorganised sector, which results in the absence of proper balance sheets (Chaudhary, 2014). The banking sector lacks sufficient information about MSME borrowers (Frame et al., 2001). This diminishes the bank's dependence on providing support or modifies their decisions regarding the request for more collateral (Berger et al., 2007). Banks deem this area insufficiently profitable; the smaller the firm, the greater the financing risk associated with this sector. The banking sector favours extending loans to larger enterprises with established track records, comprehensive financial documents, and sufficient collateral. These enterprises encounter difficulties in

supplying the necessary collateral, hence hindering their access to financing (Hashi and Krasniqi, 2011).

Moreover, companies in the service sector encounter more rigorous financing restrictions than their manufacturing counterparts. One issue may be the considerable difficulty lending institutions face in valuing intangible assets relative to tangible ones (Serrasqueiro, 2011). The primary elements influencing lending decisions include size, competition, legal structure, credit policies, information asymmetry, collateral, and firm age.

The current banking sector in India lacks the necessary technology and infrastructure to effectively meet the needs of MSME borrowers regarding low amounts, high volumes, and elevated transaction costs (RBI, 2019). Due to the varied character of small firms and their deficiency in delivering consistent information and reports, banks face a significant challenge in establishing standards for assessing loan eligibility. The reliance on manual data entry and standard Excel sheets often results in inadequate information management and prolongs the communication of decisions to borrowers. The lack of effective integration of inadequate information management with a disorganised loan evaluation and disbursement system renders the credit process onerous. Furthermore, the banking sector appears to have implemented “credit rationing” for this domain due to the lack of sufficient financial information, inadequate asset collateral, insufficient guarantees, absence of proper accounting records, and a deficiency in business vision, mission, and plans, ultimately resulting in heightened constraints on credit availability. Financial institutions ought to regard this industry as if it were their own progeny. They ought to implement new strategies to expedite the development of this sector (Vegholm and Silver, 2008).

Literature has proven that nations with modernised financial structures provide enterprises with easier and more accessible access to foreign capital. Therefore, it is essential to establish a correlation between the modernization of financial structures, the accessibility of funding, and the viability of SME success (Cull et al., 2006). Furthermore, the researchers assert that the technology employed in credit lending significantly influences the effective execution of government policies and the robustness of the nation’s financial framework (Berger and Udell, 2006). The government should prioritise identifying the issues affecting access to adequate financing and develop a policy to enhance this access (Gbandi and Amissah, 2014).

Various theoretical frameworks have recognised competition as a significant factor affecting banks’ lending behaviour. A study done across 74 countries yielded compelling evidence to examine the effects of competition. An approach was developed and employed utilising the concentration ratio. It indicated that a greater concentration of banks in a specific location or country correlates with an increased availability of credit choices for MSME through formal channels (Berger et al., 2004). An increase in competitiveness results in enhanced accessibility to a greater variety of services offered by banks (Mudd, 2013). It also helps to avert the implementation of malpractices like “credit rationing,” commonly employed in monopoly and oligopoly contexts (Berger et al. 2001).

The legal context significantly impacts MSME depending on the size of the enterprise or the ownership of the bank (Beck et al., 2008). A study indicates that smaller businesses encounter greater restrictions imposed by the legal environment, such as the consistency of regulations, efficacy of contract enforcement, and behaviour in courts. The ethics of the European Bank for Reconstruction

and Development (EBRD) facilitate straightforward registration, collateral management, legal clarity regarding insolvency, and operational efficiency (Skosples, 2012). The Government facilitates credit accessibility through credit policies (Berger & Udell, 2006). The regulations pertaining to credit policies facilitate the alleviation of stringent requirements imposed by financial institutions through incentives such as interest subsidies and credit guarantee schemes (Harvie et al., 2010).

Saini and others (2018) determined that the propensity of banks and financial institutions to aid MSMEs has risen in recent years, leading to augmented financial support for the MSME sector. The requirement for sufficient collateral security poses a significant obstacle for MSMEs in obtaining financial assistance, which can be addressed through the Government of India's credit guarantee plan, serving as a guarantor for the loan. Notwithstanding several initiatives, the credit flow to MSMEs has not risen to the anticipated level; rather, the disparity between credit demand and banking sector availability is widening (IFC, 2018). According to a study, the majority of borrowers perceive no substantial change in their employment, income, or asset status while receiving adequate bank credit. Government, banks, and other financial institutions ought to advance the MSME sector by offering policy assistance, efficient financing, and strategies for poverty alleviation, employment generation, financial inclusion, and comprehensive economic growth (Kushalakshi and Raghurama, 2014). Furthermore, it is essential to assess and acknowledge the requirements of MSMEs for sustainable business success. Initiatives by banks, financial institutions, and the government will address the obstacles encountered by MSMEs and offer support to this sector.

Digital SME lending is emerging as a global trend. Every time SMEs and their customers utilise cloud services, perform digital transactions, receive online ratings, buy or sell electronically, they enhance their digital footprints. The real-time, verified data generated by SMEs provides more information for credit decisions. Many SMEs are willing to share this data in exchange for access to credit. Tech-driven SME lenders are leveraging digital data and advanced analytics to position themselves between banks and their SME clients. However, the rise of digital lending introduces challenges, including data privacy and consumer protection concerns that need to be addressed swiftly. Governments play a crucial role in establishing a framework that allows for efficient utilisation of this trend while minimising potential risks (World Bank, 2017).

The examined literature brings out the following:

In India, there is a significant demand for official financial resources for MSMEs. The MSMEs depend on informal credit sources due to a lack of information regarding procedures, documentation, and the substantial collateral demands imposed by banking institutions for credit provision. The government's role is crucial, as its policies can facilitate MSMEs in obtaining accessible loans from banking institutions. Numerous initiatives by the Government of India have enhanced access to formal finance for MSMEs. This is discussed later in Chapter 8 in detail.

CHAPTER 3

DATA AND METHODOLOGY

The current study examines the challenges faced by MSMEs in obtaining formal credit holistically by concentrating on a few states and districts—Rajasthan and Maharashtra. Although some studies have been conducted on the accessibility of credit for MSMEs in India, they do not specifically focus on the various states, particularly covering semi-rural and rural areas. This study serves as a basis for understanding the aforementioned states' position in the country, taking into account that scheduled commercial bank disbursements gauge credit availability. A primary survey was conducted in these states (Rajasthan and Maharashtra) by approaching the private commercial banks, namely ICICI Bank, Axis Bank, UNITY Small Finance Bank, and YES Bank. NABARD has refinanced to the MSME sector through these private banks.

We have collected secondary data from various government publications. Secondary data has been collated from annual reports published by the Ministry of MSMEs, the Handbook of Statistics on Indian States published by RBI, district reports published by NABARD, the Economic Survey of Maharashtra, the Economic Survey of Rajasthan, etc.

The study used a structured questionnaire for the primary survey (attached in the Annexure). The questionnaire covered aspects of challenges in accessing formal credit, utilisation of credit, and awareness about the various government-offered schemes. The questions on challenges dwelled on the various sources used by MSMEs to procure credit and various requirements that hinder the accessibility of formal credit by MSMEs. The utilisation of credit availed focussed on the impact on employment generation, technology upgradation, export performance, etc. For employment generation, the questionnaire covered net addition of employment pursuant to accessing credit under the refinance facility of NABARD. The technology upgradation that has been possible due to the availability of credit.

A purposive sampling technique was employed to identify micro, small, and medium enterprises (MSMEs) that have benefitted from the refinance facility provided by the National Bank for Agriculture and Rural Development (NABARD) (see figure below). We collected primary data from entrepreneurs and bankers to explore the challenges associated with credit access. The study interviewed 121 MSMEs in Maharashtra and Rajasthan. In the case of Rajasthan, the region has been stratified into four districts, within which MSMEs that have received the refinance facility have been purposefully selected for the study. Similarly, in Maharashtra, the study conducted a survey of MSMEs primarily located in five districts.

The officials at the various banks assisted in planning the visits to the beneficiaries. We could get the response from ICICI Bank in Rajasthan; Axis bank and UNITY Small Finance Bank responded for Maharashtra.

The primary data was collected from the entrepreneurs on challenges faced in accessing credit and the benefits accrued due to credit. We covered 58 samples in Rajasthan and 63 samples in

Maharashtra. These samples have been from various districts in the two sample states covering rural, semi urban areas.

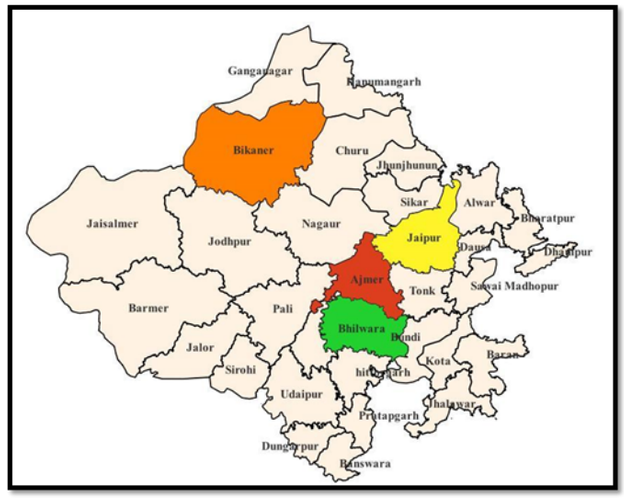


Figure 9. Map of Rajasthan - Districts Selected for the Study

Source: Author's own

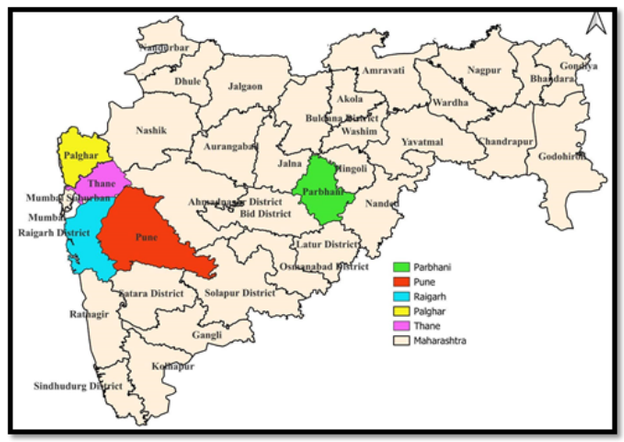


Figure 10. Map of Maharashtra - Districts Selected for the Study

Source: Author's own

3.1 Sample Design

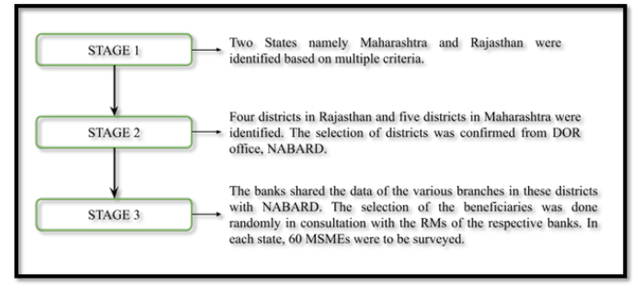


Figure 11. Sample Design

Source: Author's own

3.2. Data Collection

Primary data from respondents were collected using a structured questionnaire duly approved by NABARD. We derived the variables in the questionnaire from the research design and a comprehensive literature review. The purposive sampling method is applied to collect necessary information from the beneficiaries. To authenticate the questionnaire and response, first, a pilot survey was conducted in Pune covering 10 beneficiaries. Further, data was collected in the presence of the relationship manager to validate the beneficiaries' responses. A primary survey was conducted with business owners and bank officials across all four districts of Rajasthan and five districts in Maharashtra. Beneficiaries were identified by consulting with bank officials and examining the disbursement records of NABARD refinance to enterprises, all of which had their Udyog Aadhar Registration. Bank officials informed the beneficiaries of the survey since the study focused on financial investment information. The questionnaire was structured into five major sections:

a. Firm Profile

b. Credit availability and challenges

c. Credit Utilisation

d. Performance indicators

e. Awareness of Government Schemes for the MSME Sector

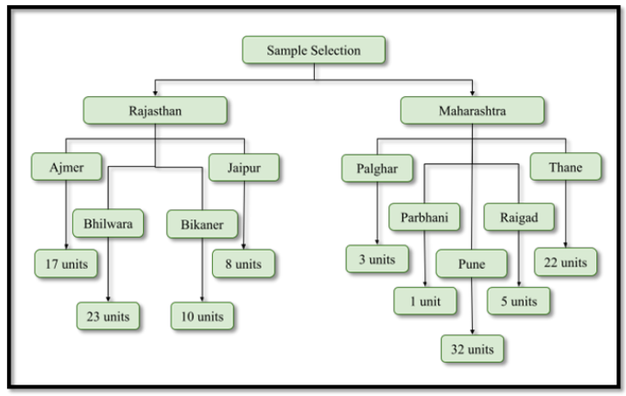


Figure 12. Sample Selection

Sample Selection[4]

3.3. Parameters used to Measure the Credit Challenges, Utilisation and Performance Indicators

We analyse the collected data using the framework given below:

Variables for the Credit Availability and Challenges	
Procuring Credit	High Collateral, audited financial statements, lengthy documentation, Long Time taken for approval, shorter repayment, insufficient amount.

Parameter used to Measure Credit Utilisation and Performance Indicators

Variables for the Utilisation of the Credit	
Purpose of NABARD Refinance	Production, Marketing, Procurement, Infrastructure Development, Import and Export
Investment of Refinance	Production, Marketing, Procurement, Import and Export

Variables for the Performance Parameter	
Credit Help	Business expansion, employment, infrastructure, export, production, technology, capacity expansion.
Upgrade activity	Sales, Production, Marketing, Procurement, exports, employment, Technology and Infrastructure

Statistical Tools

The study applies quantitative techniques such as descriptive statistics, tabulations, graphs and cross-tabulations using SPSS software. The data triangulation method was applied, which included findings from field notes, key interviews, observations and discussions with stakeholders, including firms and bank officials.

Impact Assessment Framework

In order to evaluate the impact assessment of long-term credit to MSME through refinance, the study use the Framework for impact evaluation as presented in Figure 13.

[4] For detailed district profiles, refer Chapter 4 and 5

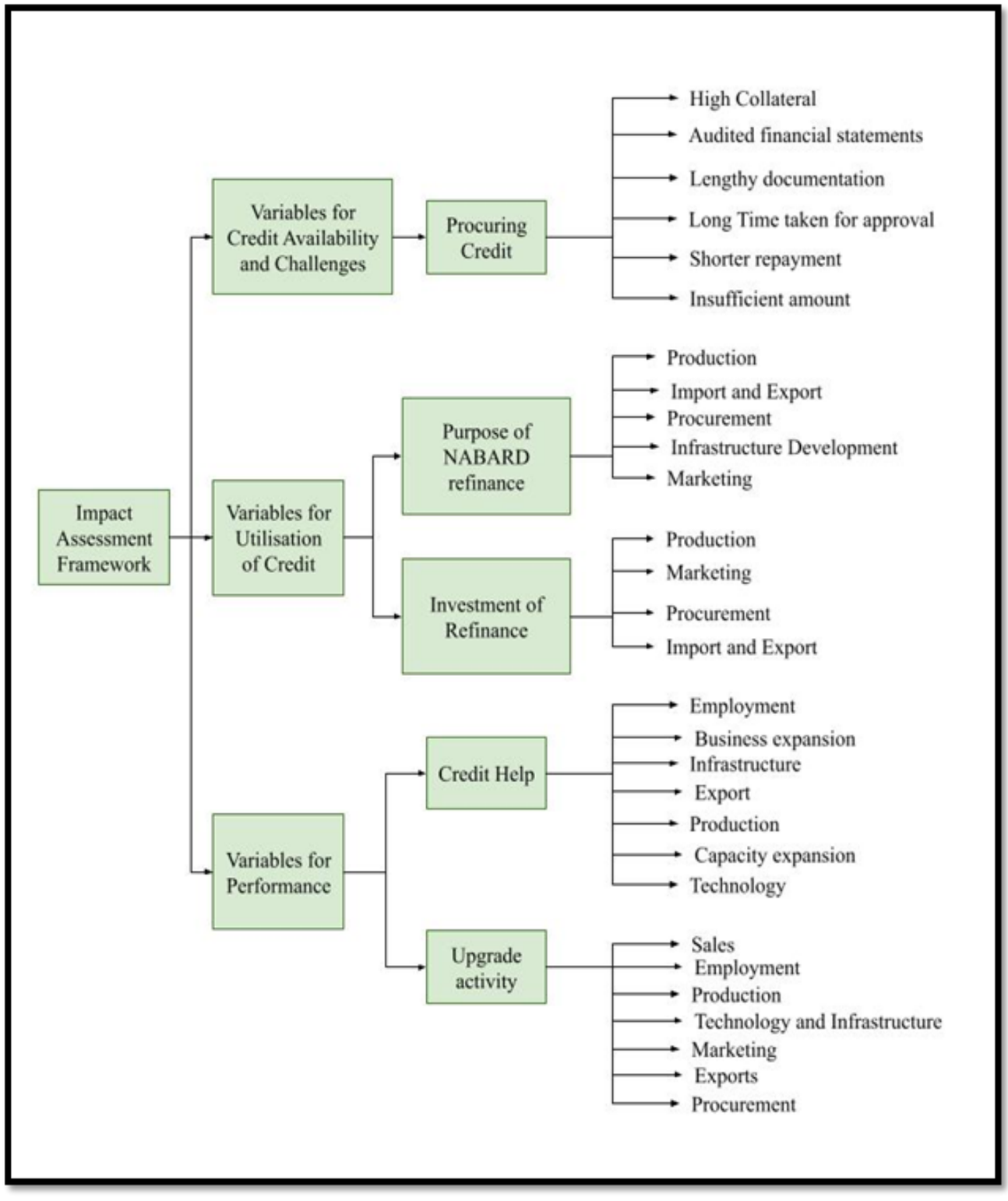


Figure 13. Impact Assessment Framework

Source: Author's own

The credit gap is calculated in section 7.4. The study has used the following steps

Step 1: Benchmarking MSME the prototypical financing environment where MSME credit market function with minimal imperfection

Step 2: MSME operating in various sectors have borrowing demands. We estimate a potential demand taking into account the share of MSME to GDP

Step 3: The supply of credit from various financial institutions is collated from RBI, and we arrive at the credit gap by looking the potential demand and supply of credit.

The State wise credit gap is presented in section 7.4.4.

A comprehensive evaluation of the various policies implemented by both central and state governments of Rajasthan and Maharashtra has been carried out in Chapter 8 using sentence embedding brings out the similarities and dissimilarities among the policies introduced by the central and state governments.

CHAPTER 4

IMPACT ASSESSMENT OF CREDIT — ANALYSIS OF THE STATE OF RAJASTHAN

4.1 Introduction

Rajasthan, the largest state in India, encompasses a geographical area of 342,239 square kilometres and is situated in the North Western region of the Indian subcontinent. The state is a natural corridor between the wealthy northern and the prosperous western states. As the 8th most populous state of the country, its 68.5 million population makes up about 5.6% of India's total population. Rajasthan, as one of the country's fastest-growing states, has experienced significant economic expansion in recent years. For the fiscal year 2023-24, the Gross State Domestic Product (GSDP) of Rajasthan is projected to reach Rs. 15.7 lakh crore at current prices, reflecting a growth rate of 11.5 per cent over the previous year (2022-23).

Although the contributions of agriculture and industry sectors to the state's economy have diminished, the tertiary sector has emerged as the most rapidly growing segment, accounting for 43.74 per cent of the Gross State Value Added (GSVA) in 2022–23. Notably, more than one-third of the GSDP is derived from over 670,000 MSMEs within the state, underscoring their critical role in both economic and social development. The consistent support and strategic growth initiatives implemented by the state government have facilitated a steady increase in the number of MSMEs over the past two decades.

Key industries in Rajasthan include cement, tourism, textiles, ceramics, handicrafts, chemicals, marble, and steel. The state ranks among India's leading mineral-producing regions, significantly contributing to the production of marble, sandstone, granite, and limestone. Rajasthan also ranks first in India in the production of oilseeds, rapeseed, and mustard and is the second largest producer of garlic, nutri-coarse cereals, coriander, and cumin. Furthermore, Rajasthan is a prominent tourist destination with historic palaces, particularly in Jaipur and Udaipur, enhancing the luxury tourism sector, which attracted over 179 million visitors in 2023.

The State's principal exports include engineering goods, gems, jewellery, and labour-intensive products like carpets, textiles, leather, and handicrafts (IBEF, 2024). Jaipur has the highest concentration of MSMEs, with 23 districts, including Jaipur, Bhilwara, and Ajmer, housing a significant number of small-scale industries focused on leather products (NABARD, 2019). Other important manufacturing sectors include wood, food products, and textiles. Rajasthan is home to several esteemed higher education institutions across various disciplines, producing thousands of skilled graduates annually and contributing to a literacy rate of 66.1 per cent (IBEF, 2024).

The relatively stable political climate in Rajasthan has fostered the establishment of a progressive business environment. The state is developing sector specific infrastructure, such as special purpose industrial parks and special economic zones for export of handicrafts, IT and electronic goods. In 2022, the Rajasthan State Government introduced the Rajasthan Investment Promotion Scheme (RIPS)

to position the state as a top choice for global investors seeking investment and innovation. This initiative aims to foster a dynamic environment that enhances economic growth and generates employment. RIPS is based on three key pillars: driving economic growth, generating employment opportunities, and establishing Rajasthan as a prime investment destination. It also seeks to encourage balanced and inclusive regional development by supporting underdeveloped industrial areas. The state's MSME Policy of 2015 emphasised the streamlining of procedures, provision of competitive fiscal incentives to attract investment, establishment of new industrial zones, marketing support for MSMEs, skill development programs to ensure a competent workforce, promotion of startups and emerging entrepreneurs, as well as encouragement for small, tiny, and cottage industries (PHDCCI, 2018). According to a study conducted by the World Bank and KPMG, Rajasthan ranks sixth among Indian states in terms of ease of doing business.

The State's abundant natural resources, supportive policy incentives, advantageous strategic location, and robust infrastructure all combine to create a highly favourable environment for investments across various sectors and the growth of the MSME sector.

4.2. MSME Profile in Rajasthan as per Udyog Aadhar Platform

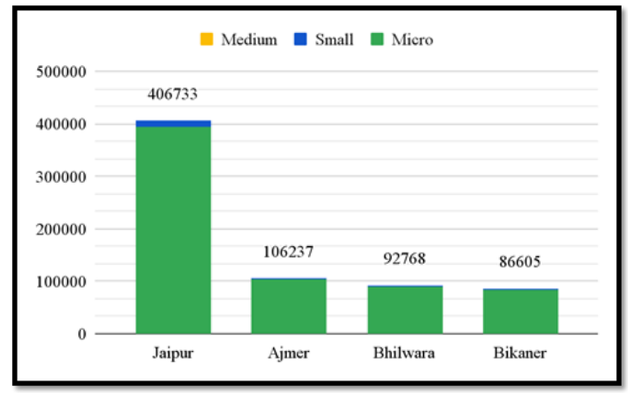


Figure 14. Udyog Aadhar Registration in Sample Districts (in Numbers)

Source: Compiled from https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=8

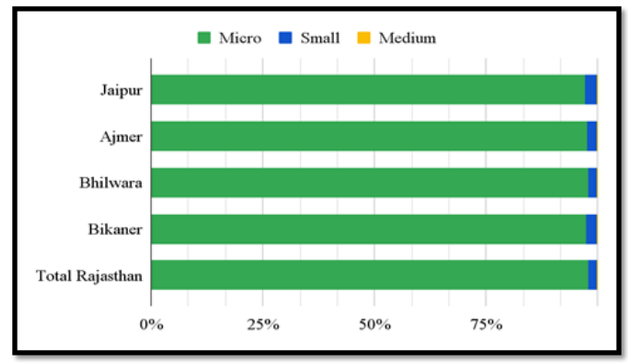


Figure 15. District-wise Share of MSMEs

Source: Compiled from https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=8

Table 8. District-wise Share of MSMEs

District Name	Total Udyog Aadhaar Regi strations	Micro	Small	Medium
Jaipur	406733	394504	11076	1153
Ajmer	106237	103755	2333	149
Bhilwara	92768	90747	1855	166
Bikaner	86605	84354	2102	149
Total Rajasthan	2086547	2041141	42016	3390

Figure 15 depicts the presence of micro enterprises and small enterprises in the districts surveyed in Rajasthan. Table 8 depicts that most of these enterprises have a presence in Jaipur district, followed by the others.

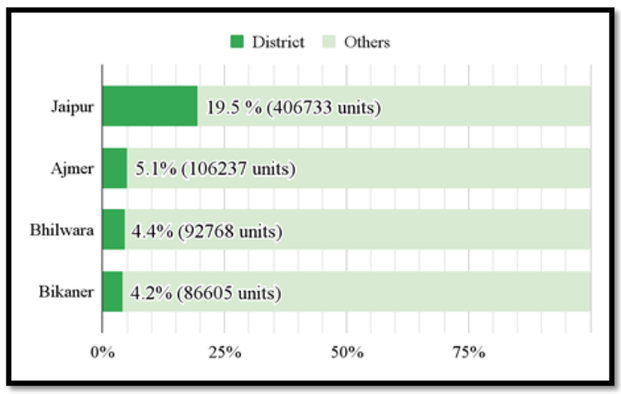


Figure 16. Total Enterprises - District wise share

Source: Compiled from https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=8

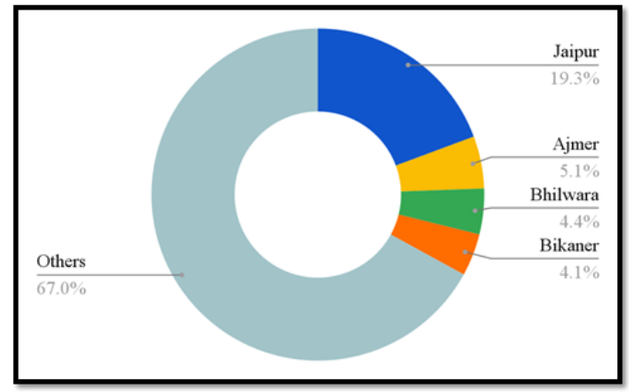


Figure 17. Micro Enterprises – District-wise share

Source: Compiled from https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=8

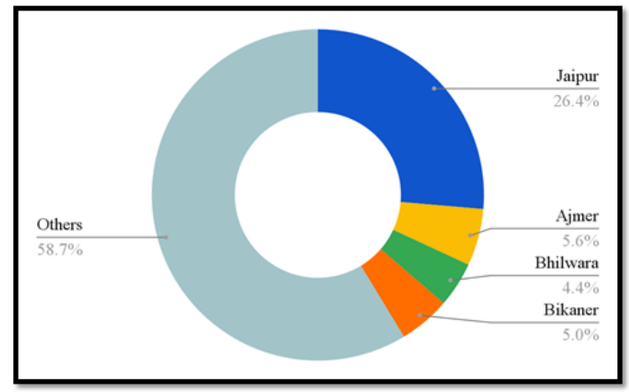


Figure 18. Small enterprises - District wise share

Source: Compiled from https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=8

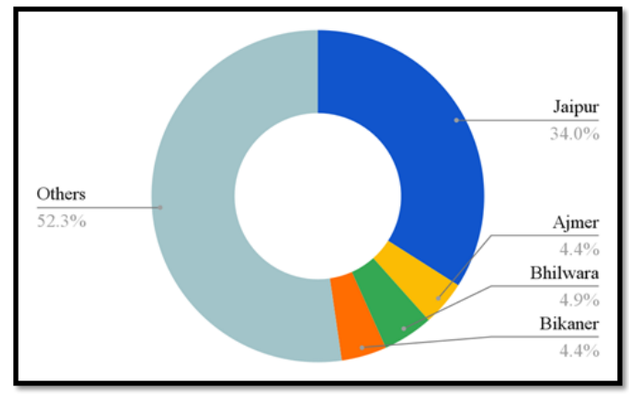


Figure 19. Medium enterprises – District-wise share

Source: Compiled from https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=8

Figure 17, Figure 18 and Figure 19 depict the presence of the MSMEs in the districts considered for the survey. We see that Jaipur leads in the number of MSMEs located in the district.

4.3 Selected District Profile

Below, we present a brief profile of districts surveyed in Rajasthan

Jaipur District

Situated in the eastern region of Rajasthan, Jaipur serves as the administrative centre and is the largest city within the district. Commonly referred to as the 'Pink City,' this designation arises from the distinctive pink-hued architecture prevalent in the old town area. According to the 2011 Census, the Jaipur district spans approximately 11,117 sq. km and is home to over 6.6 million inhabitants.

The region boasts 35 industrial areas and is particularly renowned for its production of textiles, jewellery, handicrafts, and minerals such as limestone and marble. MSMEs in the district employ around 188,680 workers across key manufacturing sectors, including engineering, cement, chemicals, and automobiles. Major exports from the region include readymade garments, gems and jewellery, handicrafts, wooden furniture, leather goods, and various marble and granite products. In terms of services, the district features diverse enterprises such as the information technology (IT) sector, automobile parts repair, beauty salons, coaching institutes, and tourism. Notably, Jaipur City has emerged as a pivotal hub for IT services, further enhancing the growth of the service sector, a critical component of the district's economic landscape.

Bikaner District

Covering an area of over 30,239 sq. km, Bikaner is the fourth-largest district in Rajasthan. It shares its eastern boundary with other districts and adjoins the Punjab region of Pakistan to the northwest. The city of Bikaner serves as both the major urban centre and the district's administrative headquarters. The district has a population of 2.38 million, with a literacy rate of 67.33 per cent, which falls below the national average. Due to extremely low rainfall and extreme temperatures, Bikaner experiences significant evaporation and moisture loss, characterising the area as predominantly arid. The geological landscape is largely devoid of rock exposures, resulting in extensive sandy terrains.

The MSME sector in Bikaner is notably diverse and plays a vital role in fostering regional economic development and employment generation, with an estimated average of 50,292 workers engaged in MSMEs. The turnover of small-scale industries is at Rs. 181 million, approximately 1.5 times greater than that of medium and large enterprises. The micro and small units primarily focus on textiles, wood, paper, leather, food processing, chemicals, and the production of machinery and industrial components. The district is home to numerous textile mills specialising in cotton, wool, silk, synthetic fibres, jute, and hemp. Artisan units in Bikaner primarily engage in the trade of woollen carpets and textiles, supplying local markets as well as those in Ahmedabad and Mumbai. Economic minerals produced in the district include Multani Mitti, clay lignite, and white clay, while sandstone and limestone serve as the primary building materials. Future growth potential exists in sectors such as hospitality, warehousing, real estate, and healthcare services. Nonetheless, the arid conditions, coupled with limited water resources and low agricultural yields, have impeded the pace of industrial development in the district. The MSME sector is essential for driving economic growth and promoting socio-economic advancement in Bikaner District. Challenges faced by the industry include insufficient raw material supplies, reliance on traditional technologies, underdeveloped infrastructure, and a lack of government-sponsored

entrepreneurship development programs.

Ajmer District

Located in the North-Eastern region of Rajasthan, Ajmer is nestled within the Aravalli Mountain range and spans an area of 8,481 sq. km. It shares its borders with several other districts within the state. The city of Ajmer, one of the largest urban centres in Rajasthan, serves as the district's administrative headquarters. With a population of approximately 2.5 million and a literacy rate of 70.48 per cent, the district surpasses the national average in educational attainment. The region is rich in mineral resources, including granite, marble, limestone, mica, and asbestos. However, the forest cover in Ajmer is limited, with commercial tree species such as teak, Sal, and Shisham struggling to attain significant growth.

Ajmer district is home to eight medium-scale industries and 17,663 small-scale and cottage industries, collectively attracting an investment of Rs. 9279.7 million and providing employment to around 87,420 individuals. The economy of the district is significantly enhanced by the Micro, Small, and Medium Enterprises (MSME) sector, which spans various industries including textiles, handicrafts, food products, leather and leather goods, wood products, rock grinding, marble processing, asbestos, and cement. Notably, the Kishangarh Marble Cluster, one of the largest marble processing facilities in the world, is situated within Ajmer. This cluster comprises over 1,000 marble processing units and employs more than 50,000 individuals. Another significant MSME cluster in the district is the Ajmer Handicrafts Cluster, renowned for producing a diverse array of handicraft items such as wooden furniture, pottery, and textiles. Additionally, Ajmer hosts numerous textile mills and garment manufacturing facilities, further contributing to the region's robust textile industry. The food processing sector in Ajmer is also on the rise, with various small-scale enterprises engaged in the production of sauces, pickles, jams, and other processed food items.

Bhilwara District

Bhilwara encompasses an area of 10,455 sq. km in the southeastern region of Rajasthan. It shares its borders with the districts of Ajmer, Chittorgarh, and Udaipur. Serving as the district headquarters, Bhilwara is the second-largest city in Rajasthan and a prominent centre for the textile industry. According to the 2011 Census, the district has a population of approximately 2.5 million, with a literacy rate of 61.79 per cent, which falls below the national average. The Bagor region within the district is notable for its archaeological significance, featuring remnants of Stone Age civilization and historic temples dating back to the 12th century. Bhilwara holds a significant position in Rajasthan's mineral landscape, with key minerals including lead, zinc, soapstone, china clay, quartz, mica, asbestos, and garnet. The district is one of the largest suppliers of raw materials necessary for the ceramics industry; however, it faces challenges in forest resource availability due to its arid climate.

The MSME sector is pivotal to Bhilwara's economic development and prosperity, encompassing industries such as textiles, handicrafts, engineering, and food processing. The textile industry, in particular, serves as the backbone of the MSME sector, featuring numerous textile mills and garment manufacturing facilities concentrated in and around the city, thereby earning Bhilwara the designation of the 'Textile City of Rajasthan'. The textile industry exhibits an annual growth rate of 8-10 per cent, driven by its strategic location and a strong export market. Bhilwara has emerged as a significant exporter of textile products, including polyester, viscose, woollen blankets, cotton fabric, cotton yarn, woollen shoddy yarn, and wool tops. Additionally, the handicrafts sector remains vital, with several small-scale enterprises engaged in the production of wooden furniture, pottery, and textiles.

4.4 Observations and Findings from Primary Survey in Rajasthan

The primary survey data indicate that, among the 58 MSMEs surveyed, micro enterprises account for 29.3 per cent, small enterprises for 43 per cent, and medium enterprises for 27.5 per cent. Small enterprises represent the largest proportion of MSMEs in four selected districts.

Table 9. Classification of sample surveyed by category

S.no.	Category	Numbers	Percentage
1.	Micro	17	29.3
2.	Small	25	43
3.	Medium	16	27.5
	Total	58	100

Source: Primary Survey

Figure 20. Distribution of MSMEs surveyed — District wise

Source: Primary Survey

In terms of the distribution of samples by districts, it is seen that almost 40% of the samples are from Bhilwara and 30% from Ajmer. Two districts, namely Bhilwara and Ajmer, covered over 70 per cent of the total sample. The remaining 30% of samples are from Bikaner and Jaipur.

Though the Udyog Aadhar registration of MSMEs was highest in Jaipur but most of them were in urban areas in Jaipur; thus, in this study, emphasis was given to Bhilwara, Ajmer, and Bikaner.

MSME by Type

Figure 21 below presents the MSME by type; Micro, Small and medium across sample districts. It is seen that there were fewer micro enterprises in Ajmer, Bikaner, and Bhilwara. The sample thus has a greater number of small enterprises than micro enterprises.

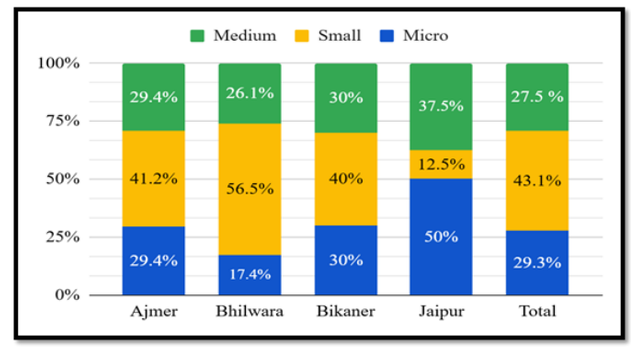


Figure 21. MSMEs Surveyed as per Districts

Source: Primary Survey

Micro enterprises were highest in the Jaipur district (See Figure 21), whereas samples from Bhilwara and Bikaner were dominated by small enterprises. Medium firms had equal presentation in all sample districts in Rajasthan. Small enterprises are the primary contributors to MSMEs in Rajasthan, accounting for 43 per cent of the total across the four districts studied. Bhilwara, one of the most industrialised districts, leads with a 52 per cent share. This district is characterised by a diverse industrial base, including manufacturing, textiles, transportation, and chemicals. Here are a few insights we observed during our interviews with the respondents. We anticipate Bhilwara to emerge as Rajasthan's industrial capital in the coming years, especially with the significant growth of small businesses following COVID-19. The textile industry, in particular, has expanded from producing

yarn to manufacturing ready-made garments, a development that has also spurred the growth of the chemical industry, particularly in dye manufacturing.

Ajmer ranks second, with the textile industry holding a 28 per cent share among small enterprises. Ajmer's textile sector primarily concentrates on cloth dyeing, sending a significant portion of its output to Bhilwara for further processing into ready-made garments. Medium enterprises constitute 27.5 per cent of the total market across the four surveyed districts, with the majority located in Jaipur, followed by Ajmer. These medium enterprises are predominantly service-oriented, focusing on the provision of textile goods and transportation services. In the Jaipur district, the majority of respondents worked in the logistics sector, specifically as owners of large trailers used for the transportation of vehicles and other materials.

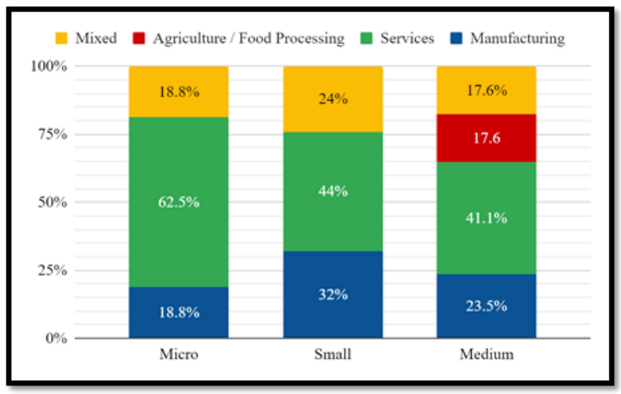


Figure 22. Classification and Type of Industry of the Sample Surveyed

Source: Author's own

Sources of Finance

The sources of finance of MSME for Rajasthan are presented in Figure 23. The majority of MSMEs (91%) in Rajasthan reported they used both internal (own savings, borrowing from friends and relatives, gold loan etc.) and institutional (institutional credit from banks, cooperative banks, NBFCs etc.). There was only one respondent in the Ajmer district, a medium-sized enterprise that started the business with institutional credit from banks.

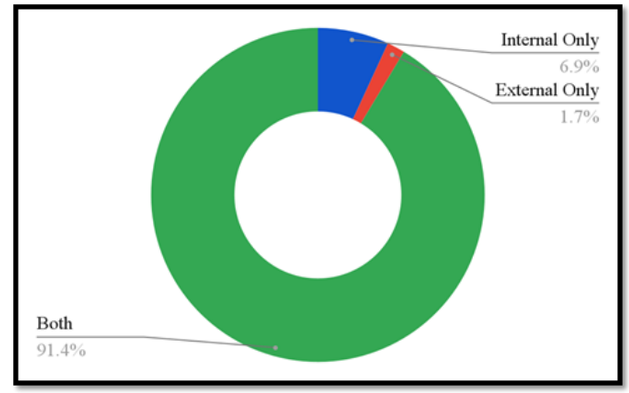


Figure 23. Sources of Finance

Source: Primary Survey

4.4.1 Profile of Credit Availed

Table 10 depicts the credit size of the MSMEs across types. It is seen that more than 50 per cent of MSMEs surveyed had taken loans up to Rs. 3 million. The majority of samples are from micro and small enterprises. Further, around 17% of micro enterprises have availed loans of Rs. 5 million or more. There were 11 small enterprises which took loans upto 3 million rupees. However, only 6 samples, or 35% of medium enterprises, took loans up to 3 million rupees. A larger number of MSMEs from small and medium enterprises have availed of loans of Rs. 5 million or above (see Figure 24)

Table 10. Profile of the Credit Availed by the Sample Surveyed (in Million Rupees)

Credit Size/ Category	Micro	Small	Medium	Total
Upto 3 million	14	11	6	31 (53.4%)
3 - 5 million	0	6	3	9 (15.5%)
5 million and above	3	8	7	18 (31%)
Total	17 (29.3%)	25 (43.1%)	16 (27.6%)	58

Source: Primary Survey

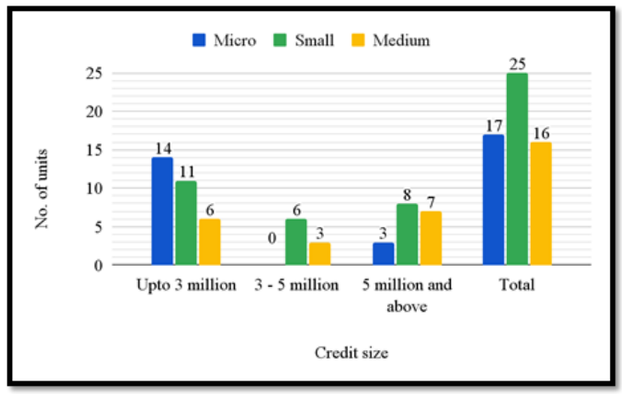


Figure 24. (a) Profile of Credit Availed by Sample

Source: Primary Survey

Therefore, the study results suggest that the average credit size of smaller and medium firms is higher than micro enterprises.

Distribution of Sample by Activities

Table 11 represents the distribution of MSMEs based on activities like manufacturing, services, agriculture, and others. The distribution shows that the majority of the firms are from the services sector, followed by manufacturing. For instance, services account for 48%, and manufacturing accounts for 26%. Only 5% of the sample are from agricultural activities. The sample distribution of the survey represents all of India's characteristics, where the services sector dominates the MSME sector.

Table 11. Distribution of Enterprises Based on Activities and Credit Size

Industry/ Credit Size	Up to 3 million	3- 5 million	5 million and above	Total
Manufacturing	6	2	7	15 (25.8%)
Service	13	4	11	28 (48.2%)
Agriculture	3	0	0	3 (5.1%)
Mixed	9	3	0	12 (20.6%)
Total	31 (53.4%)	9 (15.5%)	18 (31.0%)	58

Source: Primary Survey

Further, distribution enterprises by activities and credit size suggest that MSME is other categories dominate in the credit size of up to Rs.3 million. While the majority of service enterprises (13 out of 28) have received loans under 3 million rupees, a significant portion (11 enterprises) have secured loans exceeding 5 million rupees, demonstrating the capacity of certain service firms to secure substantial financial support.

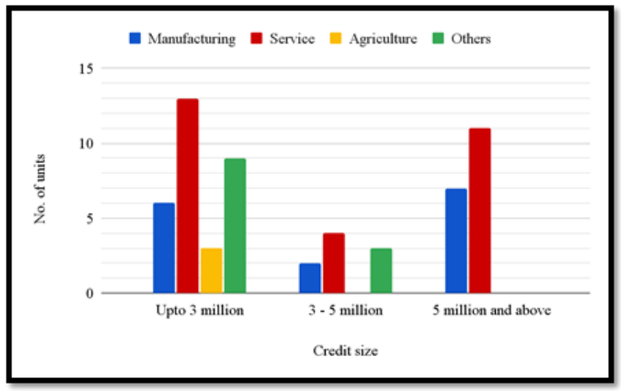


Figure 24. (b) Distribution of Enterprises Based on Activities and Credit Size

Source: Primary Survey

Manufacturing enterprises have a relatively stronger capacity to obtain larger loans, likely due to their operations' capital-intensive nature, the tangible and quantifiable assets they possess (such as machinery and equipment) and greater creditworthiness. Around 50 percent of the sample surveyed availed loans above 5 million rupees belonging to a manufacturing business. In contrast, the Agriculture and 'Others' categories exhibit a much lower amount of loan sanctions, with only 3 agricultural firms and 12 firms in the 'Others' category receiving credit. Furthermore, the lowest credit bracket, with amounts less than 3 million rupees, concentrates all loans in these sectors. This suggests that these sectors face greater constraints in accessing larger loans, potentially due to structural challenges, limited creditworthiness, or the small-scale nature of the enterprises.

Overall, the data underscores a disparity in credit access across industries, with manufacturing and service sectors showing greater ability to secure substantial loans. At the same time, agriculture and other categories remain limited to smaller credit amounts. This trend reflects the need for tailored financial interventions to address the specific credit needs and challenges that different sectors face.

Average Credit Size

The total credit allocation to micro enterprises is 795.3 million rupees (See Table 12), marginally lower than the 795.6 million rupees allocated to medium enterprises.

Table 12. Average Credit Size of enterprises, Category-wise (in million rupees)

Category	Credit Size	No. of Units	Average Credit Size
Micro	795.3	17	46.7
Small	576.7	25	23
Medium	795.6	16	49.7

Source: Primary Survey

Micro enterprises, comprising 17 units, receive an average credit size of Rs. 46.7 million per unit, whereas medium enterprises, with 16 units, have a higher average credit size of Rs. 49.7 million per unit. This difference in average credit size suggests that, even though getting loans can be hard, medium-sized businesses seem to have an easier time getting bigger loans than micro businesses. Further, 25 small enterprises (surveyed units) have received a total credit allocation of 576.7 million rupees. The average credit size per unit is 23 million rupees, significantly lower than that of micro and medium enterprises. This gap highlights that larger business units typically have greater financing needs, as evidenced by the higher average credit sizes allocated to them. The medium-sized firms availed of total loans amounting to Rs 795.6 million, and the average credit size per unit is Rs. 49.7 million, slightly higher than the micro-enterprises.

Presence of Outliers

Table 13 shows that though micro enterprises have a lesser capacity to absorb credit, three enterprises have availed credit above 5 million rupees. The enterprises were micro, nonetheless, their businesses were in coal mines and shipping. Consequently, they used the credit to enhance their capacity. One may note that the average credit size of the other micro enterprises was low at 1.8 million rupees.

Table 13. Average Credit Size for Micro Enterprises (in Million Rupees)

Credit Band	No. of Units	Credit Size	Average Credit Size
Up to 3 million	14	26.5	1.8
3 - 5 million	0	0	0
5 million and above	3	140	46.6

Source: Primary Survey

Table 14. Average Credit Size for Small Enterprises (in Million Rupees)

Credit Band	No. of Units	Credit size	Average credit size
Up to 3 million	11	22.9	2.08
3 - 5 million	6	23.7	3.9
5 million and above	8	137.9	17.2

Source: Primary Survey

Table 14 shows that approximately 50 percent of small enterprises have availed loans up to 3 million rupees. The average credit is as low as 2.08 million rupees. Interactions with these owners across Rajasthan districts revealed that they engage in crowdfunding to support the community. Collectively, all the businesses support each other by establishing informal credit lending organisations, thereby contributing to the process of fund-raising. Around 96 percent of businesses reported using both internal and institutional sources of financing. It is observed that small enterprises try to reduce the debt burden by using crowdfunding.

Table 15. Average Credit Size for Medium Enterprises (In Million Rupees)

Credit Band	No. of Units	Credit size	Average credit size
Up to 3 million	6	12.2	2.03
3 - 5 million	3	15	5
5 million and above	7	421.1	60.1

Source: Primary Survey

Table 15 shows the presence of outliers in terms of credit size in medium-sized enterprises. It is seen that the credit size varies starkly among medium-sized enterprises. However, there were an equal number of enterprises in the credit band of up to 3 million rupees and 5 million and above. The amount of loans has varied; the average credit size was 60.1 million rupees for these 7 medium enterprises. Among these 7 medium size enterprises, a beneficiary in Ajmer district is a big player in textiles. The firm has been successful in procuring a loan amount of 120 million rupees. Further, we discuss the various sections of business where credit is utilised

4.4.2 Credit Utilisation Pattern

Table 16 presents whether credits are utilised for the designated purpose or not. Most of the firms have reported that credit was utilised for the intended

purpose mentioned in the application. However, almost 40% of sample firms report they have used it for multiple purposes rather than the intended purpose. It is observed that these firms used credit for working capital. Small enterprises mostly use credit for their intended purpose. However, close to 50 per cent of the sample used it for their working capital requirements. Most enterprises prioritise credit for operational improvements.

Table 16. Credit Utilised for the Purpose Credit Was Availed (in Numbers)

Category	Credit utilised (Yes)	Credit utilised (No)	Total
Micro	10	7	17
Small	16	9	25
Medium	9	7	16
Total	35	23	58

Source: Primary Survey

Figure 25 presents the utilisation of credit for different business activities such as business expansion, production or investment, expanding marketing, procurement of raw materials and inputs, and technological upgradation. Results from Figure 25 suggest that most of the firms used credit for business expansion. However, there is a significant variation among micro, small and medium firms in terms of credit utilisation. Notably, small enterprises are the predominant users of credit for upgrading, despite having the lowest average credit size of 23 million rupees (See Figure 25). Small enterprises have reported business expansion, investment, procurement, and technological upgrades. The micro enterprises have also reported business expansion, production or investment, expanding marketing, and procurement of raw materials and inputs. Small firms did not use credit for marketing at all, as they manage informally.

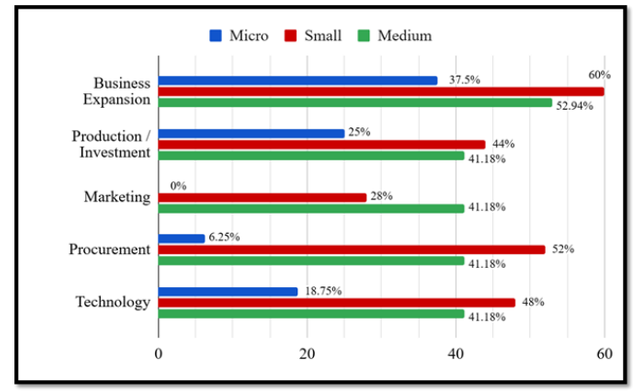


Figure 25. Utilisation of Credit by MSME for Different Purposes (in Percentages)

Source: Primary Survey

4.5 Impact Assessment of Credit

The impact assessment of credit utilisation is presented in Figure 26. Credit has helped firms grow in terms of overall business expansion across groups. For instance, almost 36, 60 and 56 per cent of MSMEs reported business expansion or sales expansion due to credit availability. Compared to sales expansion, only a few firms have reported the expansion of employment. For instance, only 16 per cent of micro, 22 per cent of small and 6 per cent of medium enterprises reported employment generation due to credit availability. In terms of technological upgrades, most firms have experienced improvements in technology in their business except firms from micro-enterprises. More importantly, the study finds that the majority of firms from across groups experienced an improvement in productivity. However, productivity improvement is more noticeable for small and medium enterprises than for micro-enterprises. In terms of export expansion, it is found that hardly any firm has experienced export expansion as the majority of firms are not involved in any export activities. It is worth mentioning that a small-sized enterprise in Bikaner reported post-credit availing that it has started exporting carpets. Over time, the enterprise has invested in technology and machinery to improve export quality.

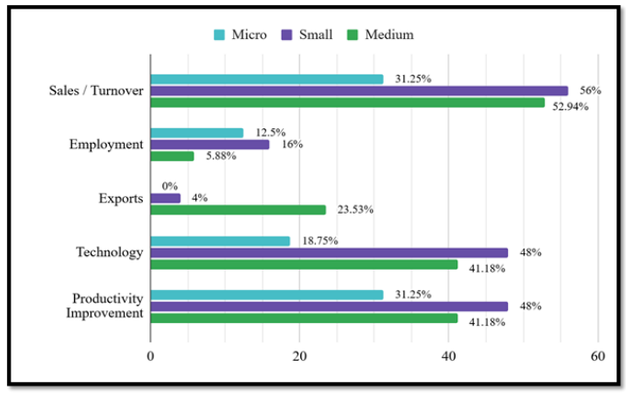


Figure 26. Credit's Impact on MSMEs (Percentage Given Positive Response)

Source: Primary Survey

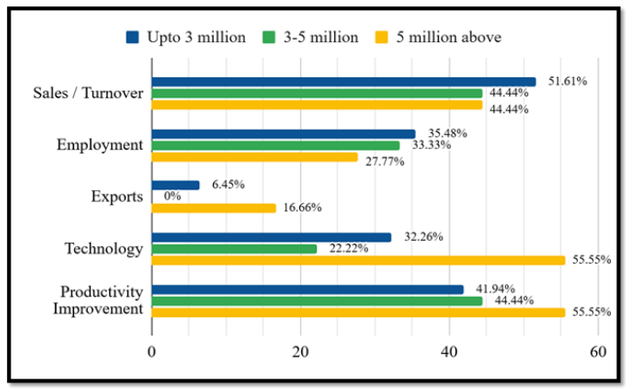


Figure 27. Impact on MSMEs Based on Credit Size

Source: Primary Survey

Figure 27 depicts the impact of credit based on the size of the credit. Credit has helped firms grow in terms of sales, employment, technology and productivity. More than 50 per cent of enterprises that took credit up to 3 million rupees have reported an increase in sales turnover, 30 per cent reported improvement in technology, and 40 per cent reported improvement in productivity. Credit size above 5 million rupees reported an improvement in technology and productivity. These are small and medium-sized enterprises that used the credit to increase their infrastructure, capacity, and equipment. Further, we discuss the various challenges faced by MSMEs in availing credit facilities.

4.6 Challenges Faced by MSMEs in Availing Credit

MSMEs encounter numerous obstacles when attempting to obtain credit from institutional sources. More than 50 per cent of the sample surveyed reported very high collateral requirements from banks as a major obstacle in procuring credit. The paperwork process is time-consuming, and the majority of MSMEs are discouraged due to a lack of available information or time spent on documentation. Additional challenges identified include providing audited financial statements, the non-availability of required documents, the lengthy approval process, shorter repayment terms, and the disbursement of insufficient funds.

Table 17. Challenges Faced by MSMEs in Procuring Credit

Reasons for Difficulty	No. of MSMEs
High collateral	32 (55.1)
Requirement of audited financial statements	12 (20.6)
Lengthy documentation	25 (43.1)
Non- availability of required documents	23 (39.6)
Time taken for approval	19 (32.7)
Shorter repayment period	23(39.6)
Insufficient amount sanctioned	20 (34.4)

Source: Primary Survey - the figures in brackets are percentages

Further, to get more insights into these challenges based on the size of the firm or category based. This is important since micro enterprises are expected to face severe challenges compared to small and medium enterprises. The table below shows how three categories of MSME faced difficulty obtaining finance from institutional sources.

Table 18. Difficulties Faced by MSMEs in Procuring Credit - Category-wise

Category	High collateral	Requirement of audited financial statements	Lengthy documentation	Non-availability of required documents	Time taken for approval	Shorter repayment period	Insufficient amount sanctioned
Micro	9	4	5	9	4	5	3
Small	13	7	16	11	10	10	11
Medium	10	1	4	3	5	8	6
Total	32 (55.2%)	12 (20.7%)	25 (43.1%)	23 (39.7%)	19 (32.8%)	23 (39.7%)	20 (34.5%)

Source: Primary Survey

The analysis of MSMEs' access to finance reveals significant obstacles in securing credit from various financial institutions. High collateral requirements emerge as a primary barrier across all three categories (micro, small, and medium enterprises), disproportionately affecting small enterprises. While micro and medium enterprises also report challenges with collateral, the severity is notably higher among small enterprises.

Long documentation processes pose another critical hindrance, particularly for small enterprises. Small enterprises' predominant role in Rajasthan's service industry, where client companies' payment cycles directly impact their cash flow, contributes to the elevated difficulties they face. This payment delay disrupts these enterprises' balance sheets, further complicating their situation. As a result, small enterprises are especially vulnerable in the credit procurement process. Together, small businesses make up 50 percent of MSMEs and account for more than one-third of the state's GSDP. Medium-sized enterprises find it easier to obtain larger loans, whereas small enterprises face lower average loan sizes and often resort to crowdfunding to reduce reliance on financing from banks. 50 per cent of the sample use loans primarily for working capital belonged to small enterprises. Despite securing smaller credit, small enterprises report most improvements in sales, production, procurement, technology and infrastructure after receiving credit, but fewer micro enterprises noted these benefits. Furthermore, manufacturing and services sectors are more successful in obtaining substantial loans, whereas agriculture typically receives smaller amounts. High collateral requirements emerged as a major barrier across all categories, with small enterprises facing the greatest challenges.

4.7 Summary

This chapter focusses on the impact of credit in Rajasthan, taking 58 enterprises from four districts: Jaipur, Bhilwara, Ajmer, and Bikaner. MSMEs face various challenges in obtaining credit. The collateral requirements of the banks and audited financial documents are the main hindrance for the micro and small enterprises accessing credit. The impact of credit is based on the size of the credit availed to MSMEs. The survey findings are that credit has helped firms grow in sales, employment, technology, and productivity. More than 50 per cent of enterprises that took credit upto 3 million rupees have reported an increase in sales turnover, 30 per cent reported improvement in technology, and 40 per cent reported improvement in productivity. Credit size above 5 million rupees reported an improvement in technology and productivity. Employment generation in firms is less for credit

amounts of 5 million rupees and above. These are small and medium-sized enterprises that used the credit to increase their infrastructure, capacity, and equipment. The MSMEs have experienced sales expansion, business expansion, and improvements in technology, but very few reported increases in exports. We now look at the impact of credit on MSMEs in Maharashtra.

CHAPTER 5

IMPACT ASSESSMENT OF CREDIT — ANALYSIS OF THE STATE OF MAHARASHTRA

5.1 Introductory

After analysing the survey data from Rajasthan, this chapter analyses the survey of Maharashtra. As the most industrialised state in India, Maharashtra ranks second in productivity, contributing 13.97% to the nation's total factory output. In 2023-24, the GSDP of Maharashtra was estimated at Rs.38.79 trillion, with a CAGR of 5.88% from 2015-16 to 2023-24.

Maharashtra's economy is diverse, encompassing various industrial sectors such as manufacturing, finance, and services. The state is a leading producer of agricultural commodities, including cotton and fruits like mangoes and grapes, and it stands as the largest producer of sugarcane. Additionally, Maharashtra has become a key hub for IT and electronics. Mumbai, the capital, serves as India's commercial capital and has developed into a global financial centre, featuring two operational ports and a third under construction, alongside numerous international banking and financial services firms. The state also benefits from a large pool of skilled labour, making it an attractive destination for knowledge-based and manufacturing industries. Pune, another significant city, has emerged as an educational hub.

To further stimulate growth, the Maharashtra Government is developing several Special Economic Zones (SEZs) for sectors such as IT, pharmaceuticals, biotechnology, textiles, automotive components, gems and jewellery, and food processing. The state has the highest number of special export promotion zones, with 37 exporting SEZs across diverse sectors, including textiles, food processing, and IT as of October 2020. In a partnership with the Asian Development Bank (ADB), the Government of India secured a Rs.14 billion loan in October 2020 to upgrade 450 km of state highways and major district roads. According to the Department for Promotion of Industry and Internal Trade (DPIIT), Maharashtra received FDI inflows totaling Rs.16.8 trillion between October 2019 and March 2024, ranking first in the country for FDI reception. In May 2022, the state government signed memorandums of understanding (MOUs) with 23 international firms to attract investments worth Rs.303 billion.

This robust and diverse economic landscape fosters a dynamic micro, small, and medium enterprises (MSME) sector, which includes industries such as agriculture, food processing, manufacturing, services, and exports. Maharashtra's MSMEs play a crucial role in job creation, promoting entrepreneurship, and enhancing local and national economies.

With around 4.76 million MSME units, Maharashtra ranks among the top ten states in India for its strong MSME sector, comprising 7.5% of India's total 63 million MSMEs. The state also has the fourth-highest density of small businesses, contributing nearly 13% of the country's overall MSME output. According to the Ministry of Micro, Small, and Medium Enterprises, the employment figures for 2022-23 indicate that Maharashtra's MSME sector employed approximately 9.07 million people, accounting for 24% of the state's total workforce and a significant

portion of the 110 million workers engaged in India's MSME sector. Although Maharashtra has historically maintained the highest credit-to-GDP ratio among Indian states, this ratio has declined over the past two decades compared to levels seen in 2004. Nonetheless, the state's vibrant MSME sector remains a cornerstone of its economic strength, driving innovation and growth while adapting to emerging challenges.

The study conducted a survey in five districts in Maharashtra to evaluate the impact of refinance on MSME. These districts are Pune, Palghar, Thane, Parbhani, and Raigarh. Thane and Pune are two districts that cover almost 40 per cent of MSME in Maharashtra (see Figure 28). We present a brief profile of these districts below.

5.2 MSME Profile in Maharashtra as per Udyog Aadhar Platform

Figure 28 shows the total MSME and their bifurcation for the sample districts. It is seen that

micro-enterprises dominate in terms of the number of registered MSES in districts. Pune and Thane are relatively urbanised districts, whereas Palghar, Parbhani and Raigad are less urbanised districts.

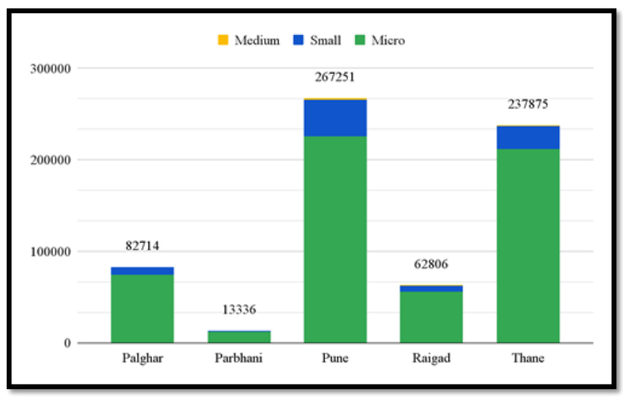


Figure 28. Udyog Aadhar Registration in Sample Districts

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=27

In terms of percentage, micro-enterprises comprise more than 85 per cent in Palghar, Parbhani, thane and Raigad. In the case of Pune, the share of micro-enterprises is around 80 per cent. Medium firms are the least in all districts. The districts truly represent the all-India distribution of MSME by type.

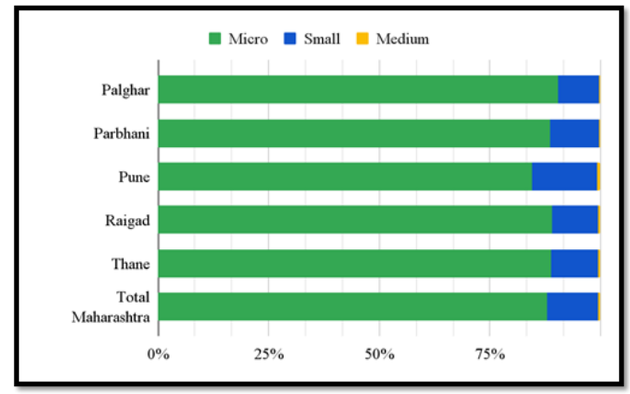


Figure 29. District-wise share of MSMEs

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=27

Table 19. Total Udyog Aadhaar Registrations in Maharashtra

District Name	Total Udyog Aadhaar Registrations	Micro	Small	Medium
Palghar	82714	74784	7577	353
Parbhani	13336	11814	1492	30
Pune	267251	225610	39836	1805
Raigad	62806	55910	6599	297
Thane	237875	211454	25115	1306
Total Maharashtra	1978328	1739133	229263	9932

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=27

Figure 30 depicts that 25% of the MSMEs are located in Pune and Thane followed by Palghar and Raigad. Parbhani has less than one percent MSMEs presence in the district. The proximity to Mumbai facilitated the growth of nearby districts such as Pune, Raigad, Thane, and Palghar, resulting in the establishment of MSMEs.

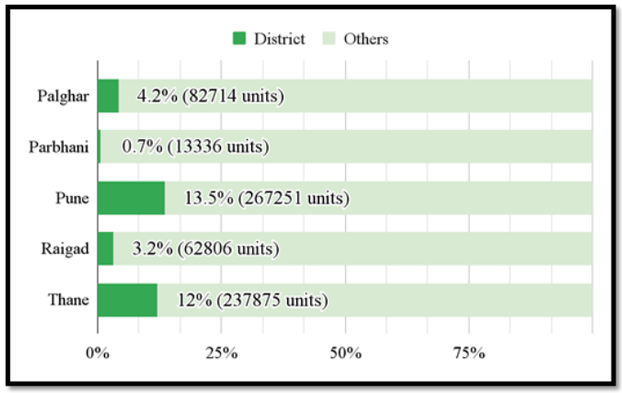


Figure 30. Total Enterprises - District-wise Share

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=2

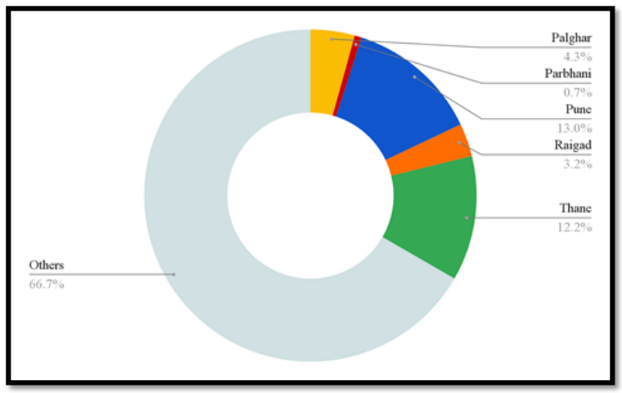


Figure 31. Micro Enterprises – District-wise

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=27

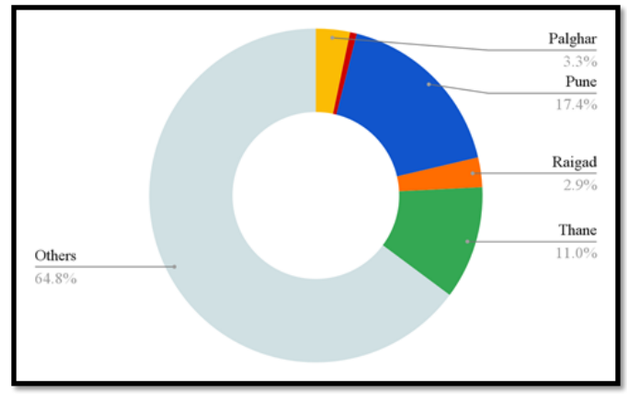


Figure 32. Small enterprises – District-wise

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=27

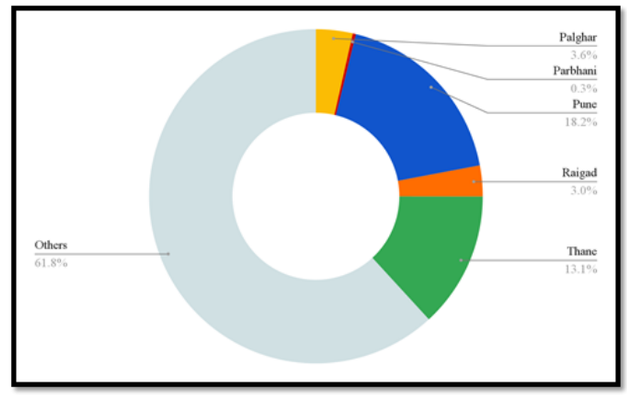


Figure 33. Medium Enterprises - District wise

Source: Compiled from https://dashboard.msme.gov.in/uam_dist_wise.aspx?stid=27

Figures 31, 32, and 33 indicate that the districts surveyed in Maharashtra exhibit a significant presence of MSMEs.

5.3 Selected District Profile

Palghar District

On 1 August 2014, the Maharashtra State government delineated Palghar District from the former Thane district. The Arabian Sea delineates the western boundary, whereas the Sahyadri mountains and districts of Maharashtra and Gujarat constitute the

opposing sides. The district has a population of 2,990,116 distributed throughout 4696.99 sq. km., with 48 per cent residing in urban areas. The total literacy rate is 66.65 per cent. With the exception of certain interior regions, the district possesses a robust infrastructure including roads, state highways, railways, power, and water supplies. Uttar Pradesh, Bihar, Rajasthan, and Madhya Pradesh are the primary sources of competent labour.

Palghar is home to India's inaugural atomic power plant situated in Tarapur and is renowned throughout the country for its chikoo plantations. According to the Ministry of MSME, Palghar is ranked 7th in the total number of MSMEs in the state for the year 2022-2023. Palghar has an aggregate investment of Rs. 507,281 in plant and machinery, predominantly located in the talukas of Vasai, Palghar, Dahanu, and Wada, employing a total of 151,725 individuals. These units are involved in the manufacturing of engineering products, food items, metals, plastics, chemicals, textiles, leather, and other materials. The district contains several creeks, rivers, and other freshwater bodies, promoting economic activities such as fishing, aquaculture, and the rearing of dairy, poultry, and goats. The district possesses abundant mineral resources, including sand and stones, which are valuable for development in the adjacent metropolitan areas, such as Mumbai.

Parbhani District

Parbhani is located in the Marathwada region of Maharashtra State, bounded on all sides by other districts in the state. Parbhani is well connected by road to other major towns in Maharashtra and also in the neighbouring state of Andhra Pradesh. It has three industrial areas spread across a geographical area of 6511 sq. mtr. and a rural population of 1042513. The estimated average number of daily workers employed in small scale industries is 10133, with an investment of Rs.1.5 billion and a turnover of Rs.5.7 billion.

Across prominent industrial sectors in Parbhani district, maximum growth trend is recorded in the field of agro based units. As cotton is abundantly produced, vendorisation and ancillary development is significant with the presence of oil mills, ginning mills, and cottonseed oil mills. Service enterprises are primarily focused on repairs and maintenance for oil and dal mills, automobiles, electrical and electronic appliances.

Raigad District

Raigad District, located in the Konkan Region of Maharashtra, is bordered by the Sahyadri Ranges to the east and the Arabian Sea to the west. The district has a total population of 2.2 million, distributed across an area of 7148 sq. km., of which 24.22 per cent reside in urban areas. Raigad is well-connected with other regions of the state and hosts nearly eight industrial zones. The district is notable for its mineral resources, including traces of iron ore found in laterite rocks, as well as Jambha stones used in construction. Abundant sand is available in rivers and on beaches. The district is rich in rainforest areas, covering approximately 149,000 hectares, and yields significant quantities of teakwood, bamboo, and medicinal plants.

The district's industrial vendorisation and ancillarisation primarily cater to the Oil & Natural Gas Corporation of India and Rashtriya Chemicals & Fertilisers Ltd, providing items machine parts and electrical accessories. Service enterprises include agricultural and farm equipment servicing, electronic repairs, flour mills, hotels and restaurants. Opportunities exist in both agro-based and animal-based industries. Major exportable commodities include chemicals, petrochemicals, engineering

products, iron ore, steel, Ayurvedic medicines, pharmaceuticals, rice, cashew nuts, and agro products.

Pune District

Pune, the second-largest town in Maharashtra, is situated on the western edge of the Sahyadri Mountains and spans a geographical area of 15,643 sq km, representing approximately 5.09 per cent of the state's total area. With a population of 94,29,408, of which 41.92 per cent resides in rural areas, the district exhibits a high literacy rate, comparable to the state average. The district benefits from robust infrastructural connectivity and hosts significant defence and research establishments. The forest area within the district accounts for 10.95 per cent of its total geographical area. Forest products include timber, fuel wood, grass, bamboo and gum. However, effective utilisation of agricultural resources remains insufficient.

The information technology sector is rapidly expanding in and around Pune city, which hosts ten major industrial areas. Notably, the metal-based industry leads with 1,867 units, followed by the engineering sector, which employs 12,641 workers with an investment of Rs. 4.5 billion. Other prominent industries include rubber, plastic, and petrochemical sectors. Vendorization and ancillarisation is prominent in industries like automobile spare parts, machine tools, electronic products and food products, which are also the key exportable items from the district. Other promising industries are herbal and Ayurvedic products, agro-processing units, cold storage facilities and IT-related products.

Thane District

Thane, located in the northernmost part of Konkan and adjacent to the Arabian Sea and spans a geographical area of 9,558 sq. km, constituting 3.11 per cent of the total area of Maharashtra. Thane is the third most industrialised district in Maharashtra, featuring 13 industrial areas. Thane comprises of three distinct zones:

I. the suburban area under direct influence of Mumbai metropolis

II. the industrially developing areas of Vasai, Bhiwandi, Palghar and Dahanu and

III. the conventional village-based cottage industries and agro-industries.

The Thane-Belapur-Kalyan industrial belt, particularly notable for its concentration of sophisticated, modern industries, is the primary hub of the district's industrial growth.

In terms of industrial units and employment, engineering industries take the lead, with 826 units employing a total of 11,127 workers. The woollen, silk, and artificial thread-based clothing industry follows closely, employing 11,268 workers. In terms of investment, the cotton textile industry stands out, with a significant investment of Rs. 4 billion. Other prominent industries in the district include chemical-based, rubber, plastic, petrochemical, and metal-based industries. Vendorization and ancillarisation are evident in sectors such as ready-made garments (cotton and art silk), food and beverages, pharmaceuticals, and machine tools. The service sector in Thane includes computer training centres, consultancy services, salesmanship, and electrical and electronics instrument service centres.

5.4. Observations and Findings from Primary Survey in Maharashtra

The distribution of the sample surveyed and their characteristics are presented in Table 20. It is seen that a total of 63 MSMEs were surveyed, out of which micro-enterprises comprise 41 units (64.9%), small enterprises 8 units (13 %), and medium enterprises 14 units (22.2 %). Micro enterprises constitute the

predominant segment among the MSMEs examined in the five designated districts of Maharashtra.

Table 20. Classification of Sample Surveyed by Category

S.no.	Category	Numbers	Percentage
1.	Micro	41	64.9
2.	Small	8	13
3.	Medium	14	22.2
	Total	63	100

Source: Primary Survey

In terms of the distribution of samples by districts, 85 per cent of MSMEs were from Pune and Thane districts. These two districts have a concentration of MSMEs in Maharashtra. They hold the highest Udyog registration, with micro-enterprises constituting the majority. In Thane, we covered micro-enterprises as it is a hub of micro-enterprises cluster. Pune has a mix of micro-enterprises, small and medium as well (see Figure 34).

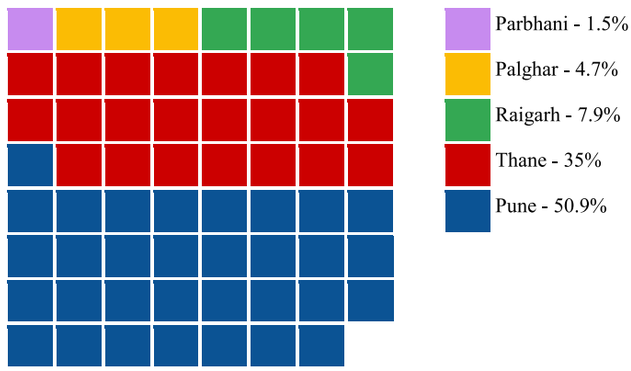


Figure 34. Distribution of MSMEs Surveyed - District-wise

Source: Primary Survey

District-wise Distribution of MSME

Figure 35 below presents the district-wise distribution of MSME by type: Micro, Small and Medium across sample districts. It is seen the sample covered a high number of micro-enterprises from Thane, Palghar, and Raigarh. In the case of Pune, almost equal number of firms covered from micro and medium enterprises. Further, the firms covered from Parbhani and Raigarh belonged to medium and micro-enterprises only, respectively.

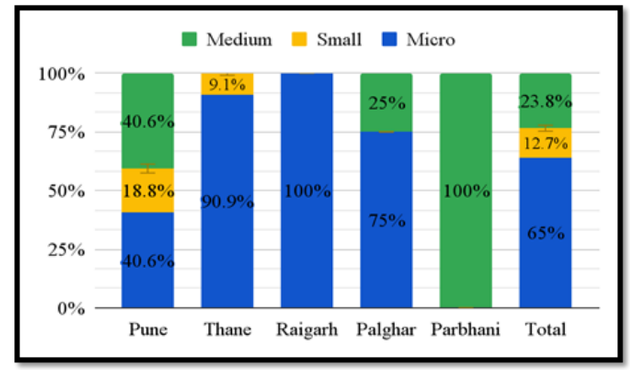


Figure 35. MSMEs Surveyed as per Districts

Source: Primary Survey

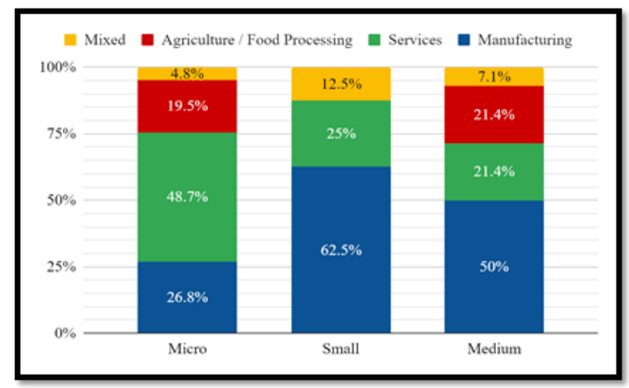


Figure 36. Classification and Type of Industry of the Sample Surveyed

Source: Author's own

Sources of Finance

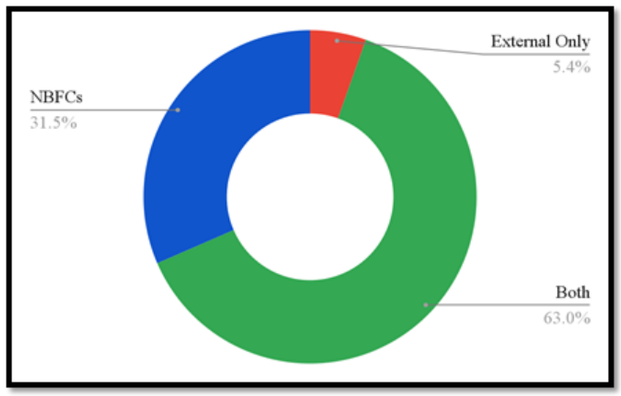


Figure 37. Sources of Finance

Source: Primary Survey

The sources of finance of MSME for Maharashtra are presented in Figure 37. It is found that 63 percent of MSMEs in Maharashtra reported both internal (own savings, borrowing from friends and relatives, gold loan etc.) and institutional (institutional credit from banks, NBFC, cooperative banks etc.) 31.5 percent of MSMEs used to finance their businesses. Compared to Rajasthan, a big chunk of MSME (31.5 per cent) rely on NBFC for funds. Further, the survey reveals that only 5% of firms depend exclusively on institutional firms.

Further, field notes and discussions with beneficiaries suggest that 92 percent of MSMEs use their own savings along with institutional finance for the business. 8 percent of micro-enterprises have used only institutional credit to start their businesses. The business activities of these enterprises included tuition classes, rice agri-processing, real estate, scrap dealing, and vegetable vending. In Maharashtra, all categories have sourced credit from NBFCs.

5.4.1 Profile of Credit Availed

We look at the size of loans taken by MSMEs surveyed in Maharashtra. This is presented in Table 21. Overall, it is seen that more than 53% of MSMEs borrowed up to Rs. 3 million. Most of them belong to micro-enterprises. Around 78 percent of micro-enterprises have borrowed up to 3 million rupees, and 22 percent borrowed above 3 million rupees. It is seen that though micro-enterprises availed of smaller loans, 12 percent took credit above 5 million rupees. One of these micro enterprises operated a franchise of Bikaner Sweets. The credit size of the small enterprises was heavily skewed in favour of more than 5 million and above category. A loan of 70 million rupees was taken by a medium-sized enterprise engaged in manufacturing knee replacement materials and joint replacement materials. Further, 71 percent of medium enterprises have borrowed more than 5 million rupees.

Table 21. Profile of the Credit Availed by the Sample Surveyed (in Million Rupees)

Credit Size/ Category	Micro	Small	Medium	Total
Up to 3 million	32	0	2	34 (53.9%)
3 - 5 million	4	1	2	7 (11.1%)
5 million and above	5	7	10	22 (34.9%)
Total	41 (65%)	8 (12.7%)	14 (22.2%)	63

Source: Primary Survey

Figure 38 illustrates the credit size, indicating that medium enterprises have secured larger credit amounts (5 million and above) due to their greater capacity due to their size and greater loan payment capacities compared to small and micro enterprises.

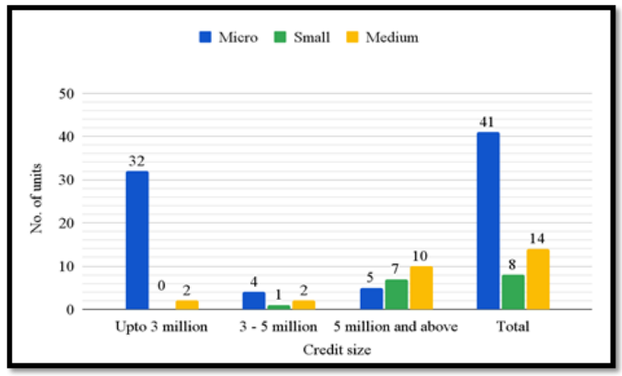


Figure 38. Profile of Credit Availed by Sample

Source: Primary Survey

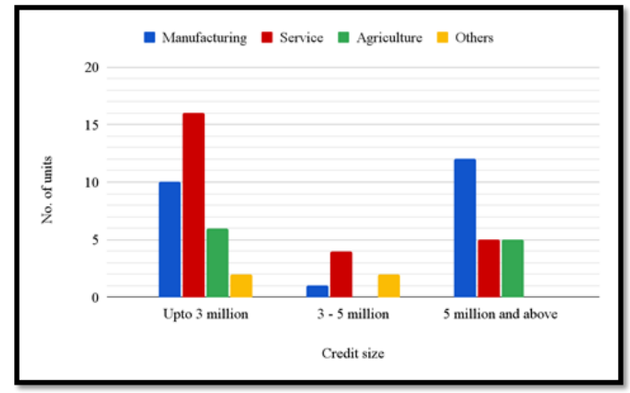


Figure 39. Distribution of Enterprises Based on Activities and Credit Size

Source: Primary Survey

Credit Size by Activities

Table 22 and Figure 39 shows that around 54 percent have taken loans up to 3 million rupees, and 35 percent of enterprises have availed of loans above 5 million rupees. In terms of activities, around 36.5 percent of enterprises were in the manufacturing sector, 40 percent in services, 11 percent in agriculture, and the remaining 6.3 percent in mixed or other sectors. Survey results further suggest that firms from the services and agriculture sector availed of a lower credit size (up to 3 million) than other groups.

Table 22. Distribution of Enterprises Based on Activities and Credit Size

Industry / Credit size	Up to 3 million	3- 5 million	5 million and above	Total
Manufacturing	10	1	12	23 (36.5%)
Service	16	4	5	25 (39.6%)
Agriculture	6	0	5	11 (17.4%)
Mixed	2	2	0	4 (6.3%)
Total	34 (53.9%)	7 (11.1%)	22 (34.9%)	63

Source: Primary Survey. The figures in the brackets show as percentage of the total

Average Credit Size

Table 23 presents the average size of credit for micro, small, and medium enterprises in Maharashtra. The credit size varies from 3 million rupees to 96 million rupees. The data shows that the average credit size increases with the size of the firm. The average credit size for Micro enterprises is 3.02 million rupees, whereas it is Rs. 47 million for small units. In the case of medium enterprises, the average size stands at much higher (Rs. 96 million).

Table 23. Average Credit Size of Enterprises, Category wise (In Million Rupees)

Category	Credit size	No. of Units	Average Credit size
Micro	124.1	41	3.02
Small	373.6	8	46.7
Medium	1344.2	14	96

Source: Primary Survey

Further disaggregated analyses of credit size by MSME type are carried out. Table 24 highlights the distribution of credit among micro-enterprises. The credit ranges from 1.36 million rupees to 12.44 million rupees, implying wide-variations. Further,

majority of micro enterprises (78%) received the average credit size of Rs. 1.36 million. An examination of the surveyed micro enterprises reveals that those established since 2011 have obtained higher credit facilities, indicating established firms have better chance of receiving higher credit.

Table 24. Average Credit Size for Micro Enterprises (In Million Rupees)

Credit Band	No. of Units	Credit size	Average credit size
Up to 3 million	32	43.8	1.36
3.1- 5 million	4	18.1	4.52
5 million and above	5	62.2	12.44

Source: Primary Survey

The distribution of credit among small enterprises is presented in Table 25. It is found that 87.5 percent (7/8) of small enterprises have accessed a total of 368.6 million rupees, with an average credit size exceeding 52.7 million rupees. The small enterprises constitute 12 percent of the sample in Maharashtra. The average credit size is uniformly accessible.

Table 25. Average Credit Size for Small Enterprises (In Million Rupees)

Credit Band	No. of Units	Credit size	Average credit size
Up to 3 million	1	5	5
3.1- 5 million	0	0	0
5 million and above	7	368.6	52.7

Source: Primary Survey

The distribution of credit among medium enterprises is presented in Table 26. Table 26 shows that the majority of the medium enterprises (71 percent) avail of loans above 5 million rupees, with an average credit size of Rs. 133 million. These medium enterprises are auto ancillaries in Pune and textiles in Thane. There is disparity in the credit availed in medium enterprises. The medium enterprises in Maharashtra have working capital arrangements with the banks; thus, their requirements for credit facilities are less. They need access to credit mainly for technology upgrades, exports, and capacity expansion.

Table 26. Average Credit Size for Medium Enterprises (In Million Rupees)

Credit Band	No. of Units	Credit size	Average credit size
Up to 3 million	2	4	2
3.1- 5 million	2	10	5
5 million and above	10	1330.2	133.02

Source: Primary Survey

Let us now look at the credit utilisation.

5.4.2 Credit Utilisation Pattern

It has been observed that MSMEs use the credit for multiple purposes such as for production, procurement, or technology but also for working capital needs. Working capital is essential for MSMEs, as their survival in business depends on it. Table 27 shows that 62 per cent of enterprises have used the credit received for the purpose it was availed of. However, around 38 % used credit other the intended purposes and most of them are belonging to small and medium firms. Around 60 percent of enterprises reported that credit is used the credit for working capital management or day-to-day business.

Table 27. Credit Utilised for the Purpose Credit Was Availed (In Numbers)

Category	Credit utilised (Yes)	Credit utilised (No)	Total
Micro	31	10	41
Small	3	5	8
Medium	5	9	14
Total	39(62)	24(38)	63

Source: Primary Survey. The figures in bracket are percentage

Figure 40 shows that credit utilisation has helped MSMEs expand their businesses. In Maharashtra, more than 75 percent of MSMEs reported business expansion, and 60 percent improved production, and investment. However, small enterprises were less as a proportion of the sample reported using credit for technology, infrastructure, and procurement. These sections of business are important for the growth of the enterprise. 75% of micro-enterprises have also seen business expansion. Medium enterprises have reported an improvement in infrastructure, technology, procurement, and investment. Since their size of businesses is large, the expansion into medium enterprises is a challenge.

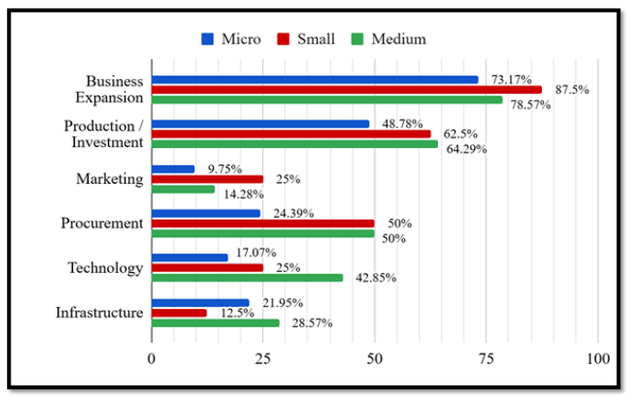


Figure 40. Utilisation of Credit by MSME for Different Purposes (In Percentages)

Source: Primary Survey

5.5 Impact Assessment of Credit

The impact assessment of credit is presented in Figure 41. In Maharashtra, 70 percent of micro, 75 percent of medium-sized enterprises, and 85 percent of medium enterprises have reported an increase in sales due to credit availability. However, the employment expansion is limited to small and medium enterprises. For example, only 25 percent of micro enterprises have reported an expansion in employment. On the other hand, 75 percent of small and 47 percent of medium firms reported that their organization increased employment after receiving credit. Similar trends are noticed for exports, technology and productivity growth. Therefore, the survey suggests that all categories of MSMEs have experienced a positive impact of credit, but the positive impact of more visible for medium and small sized enterprises. It is observed that only 4 percent of micro enterprises have used credit for export activities. These enterprises located in Thane specialize in textiles and operate a sewing centre from which they export their output.

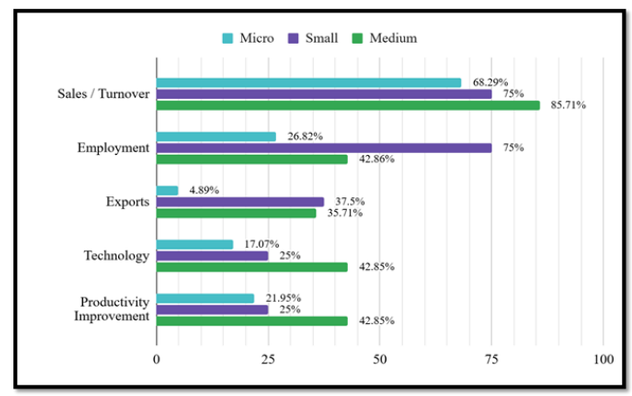


Figure 41. Credit's Impact on MSMEs (Percentage Given Positive Response)

Source: Primary Survey

Impact Assessment by Credit Size

Further, the study explored whether there is a variation of positive impact based on the credit size.

The results are presented in Figure 42. Results from Figure 42 reveal that the impact of credit is positively related to size of the credit. For instance, in the case of sales expansion, medium firms have experienced the highest expansion of sales compared to micro and medium firms. Similar trends are also observed in employment, technology, and productivity improvement. Thus, the credit impact in medium firms of Maharashtra is greater as the credit size increases.

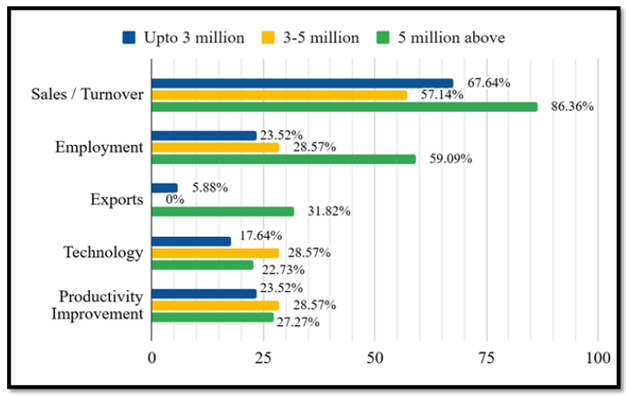


Figure 42. Impact on MSMEs based on Credit size

Source: Primary Survey

Figure 42 depicts the impact of credit based on the size of the credit in Maharashtra. Credit has facilitated the expansion of firms in sales, employment, technology, and productivity. 80 per cent of enterprises that took credit more than 5 million rupees reported an increase in sales turnover, 60 per cent reported employment generated, and 30 per cent registered exports. Credit size up to 3 million rupees 70 per cent reported sales, and 20 per cent enterprises saw employment generation, productivity, and technology. Thus, the credit impact in Maharashtra is greater as the credit size increases. Further, we discuss the various challenges faced by MSMEs in availing credit facilities.

5.6 Challenges Faced by MSMEs in Availing Credit

The table below shows the various challenges faced by MSMEs in availing credit from institutional sources. Out of 63 MSMEs surveyed, 30 identified high collateral requirements as one of the major challenges. Further, most MSMEs have reported that the amount sanctioned by banks is insufficient to meet their requirements. The required documents are another major hindrance to formal credit.

Table 28. Challenges Faced by MSMEs in Procuring Credit

Reasons of Difficulty	No. of MSME
High collateral	30 (47.6%)
Requirement of audited financial statements	27(42.8%)
Lengthy documentation	18(28.5%)
Non availability of required documents	3 (4.7%)
Time taken for approval	11(17.4%)
Shorter repayment period	16(25.3%)
Insufficient amount sanctioned	20(31.7%)
Others- Higher interest rate	9(14.2%)

Source: Primary Survey - The figures in the brackets show the percentage of the total

The respondents from the survey were asked to list the challenges they faced in availing credit from institutional sources, i.e., mainly banks. The respondents gave multiple responses to the question. Thus, the Table 29 presents these responses as the numbers who have identified those challenges.

Table 29. Difficulties Faced by MSMEs in Procuring Credit - Category-wise

Category	High collateral	Requirement of audited financial statements	Lengthy documentation	Non availability of required documents	Time taken for approval	Shorter repayment period	Insufficient amount sanctioned	Others (High interest rate)
Micro	22	25	10	3	7	11	13	4
Small	3	1	2	0	1	0	2	3
Medium	5	1	6	0	3	5	5	2
Total	30 (47.6%)	27 (42.9%)	18 (28.6%)	3 (4.8%)	11 (17.5%)	16 (25.4%)	20 (31.5%)	9 (14.3%)

Source: Primary Survey

It is important to understand the difficulties faced by MSMEs category-wise to facilitate taking appropriate steps. It is a well-known fact that the size of the enterprises is an important consideration by financial institutions when extending credit. The above table shows that micro-enterprises have responded to high collateral requirements, the requirement of audited financial statements, lengthy documentation procedures, a shorter time period for repayment, and an insufficient amount sanctioned as a hurdle to the enterprises. A few of them have expressed that the rate of interest charged by institutional sources is high, making borrowing very costly for them. Small and medium-sized enterprises have also faced challenges, but the concerns of micro-enterprises are more prevalence.

5.7 Summary

This chapter examines the influence of credit in Maharashtra, analysing 63 enterprises across five districts: Pune, Thane, Palghar, Parbhani, and Raigarh. MSMEs face various challenges in obtaining credit. The collateral requirements of the banks and audited financial documents are the main hindrance for the micro enterprises in accessing credit. The impact of credit is based on the size of the credit availed to MSMEs. The survey findings are that credit has helped firms grow in sales, employment, technology, and productivity. More than 70 per cent of enterprises that took credit upto 3 million rupees have reported an increase in sales turnover, 20 per cent enterprises saw employment generation, productivity, and technology. Credit size above 5 million rupees reported an improvement in technology and productivity. Employment generation in firms is more for credit amounts of 5 million rupees and above. These are small and medium-sized enterprises that used the credit to increase their infrastructure, capacity, and equipment. The MSMEs have experienced sales expansion, business expansion, and improvements in technology and exports.

Despite having the fourth-highest density of MSMEs in the country, micro-enterprises in Maharashtra face numerous challenges for formal credit. Their challenges are more pronounced than those of small and medium enterprises. Even with Maharashtra's relatively high credit-to-GDP ratio compared to other states, nearly half of the surveyed businesses cited high collateral requirements as a major obstacle. This difficulty in securing commercial bank loans has pushed many MSMEs, particularly micro units, to rely on NBFCs, which account for 31 percent of the sample.

CHAPTER 6

THE COMBINED IMPACT OF CREDIT UTILISATION IN RAJASTHAN AND MAHARASHTRA

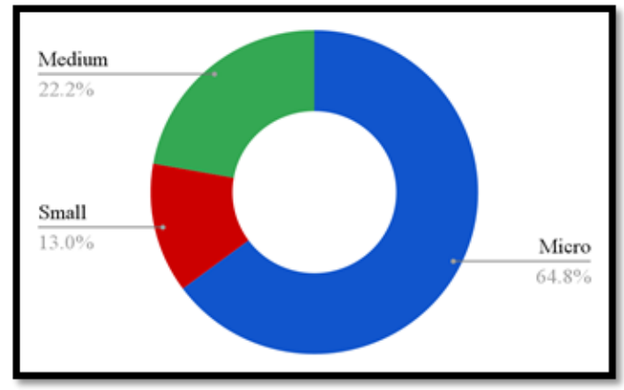
6.1 Introduction

This chapter analyses credit's effect by combining the samples of Rajasthan and Maharashtra. The combined impact of credit utilisation will help us understand its impact on employment, sales, technological upgradation, productivity, etc, which is representative of all of India. This chapter will elucidate the similarities and differences between the two states and facilitate recommendations. The surveyed MSMEs in Maharashtra and Rajasthan varied in size and loan amounts obtained. The influence of different loan sizes will be examined to ascertain whether credit magnitude affects outcomes such as sales growth and productivity. The choice between internal and institutional financing sources will indicate the financial conditions encountered by MSMEs in these states.

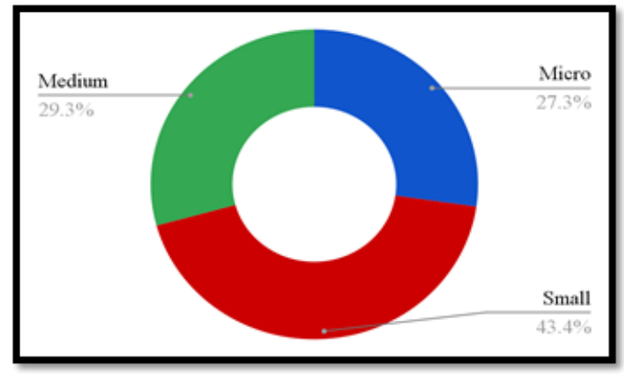
6.2 Attributes of Samples in Maharashtra and Rajasthan

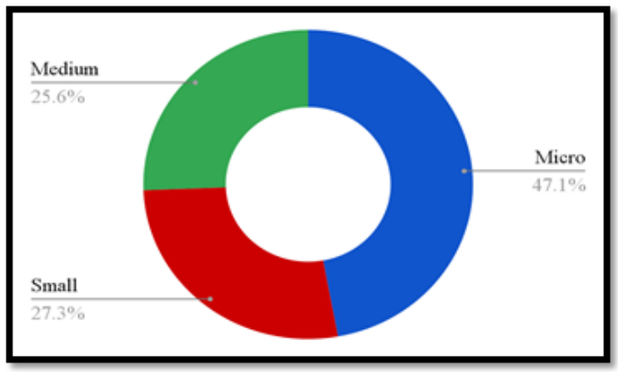
The distribution of the combined sample indicates that the majority of the firms surveyed were from micro enterprises (65%). The remaining 35 % is divided between small (13%) and medium firms (22%). The sample therefore, represents the all-India distribution patterns.

(a) Maharashtra sample



(b) Rajasthan sample





(c) Combined sample

Figure 43. Attributes of Sample— (a) Maharashtra, (b) Rajasthan and (c) Combined, By Type of Enterprises

Source: Primary Survey

Distribution of Sample by Type of Activities

Figure 44 shows the distribution of the combined sample by sector. It is seen that 44 percent of enterprises engaged in services, 31 percent in manufacturing, and 25 percent in agri-processing and mixed activities. The survey results indicate that most of the micro-enterprises in Maharashtra and small enterprises from Rajasthan engaged in services.

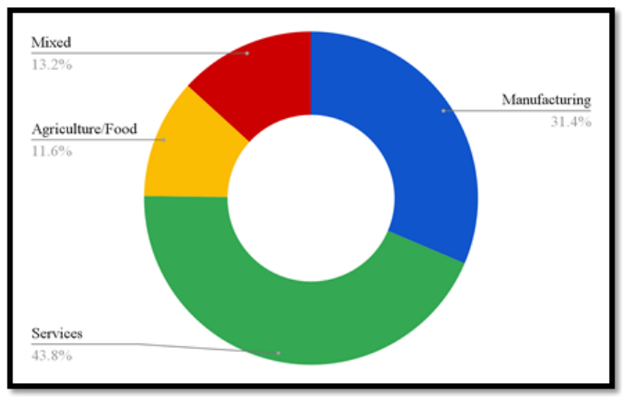


Figure 44. Attributes of Samples by Type of Activity

Source: Primary Survey

Classification of enterprises by activity indicates that the majority of medium-sized enterprises are engaged in manufacturing. Small enterprises are either engaged in manufacturing or services and not in agriculture. Micro-enterprises engage in all types of activity (Table 30).

Table 30. Classification of Enterprises Based on Their Main Activity

Type of Unit/ Industry	Manuf acturing	Services	Agriculture /Food Processing	Mixed
Micro	14	31	8	5
Small	13	14	0	7
Medium	11	10	6	4
Total	38	55	14	16

Source: Primary Survey

Table 30 and Figure 45 shows that 53 percent of the enterprises engaged in service-related activities were micro-enterprises. In Rajasthan, the majority of the enterprises were transporters, offering a wide range of trailer services. In Maharashtra, the services offered included real estate broking, mess services, and educational services, among others. 24 percent of micro enterprises were engaged in manufacturing. Textiles, coal mines, marble, and carpets were the primary focus of manufacturing enterprises in Rajasthan. In Maharashtra, manufacturing activities have varied from pickles to auto part makers to manufacturers of knee replacement caps and jewellery.

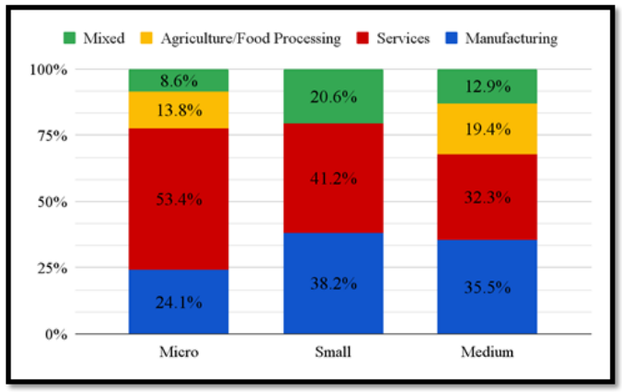


Figure 45. Distribution of Samples by Activities and Industry

Source: Primary Survey

6.2.1 The Extent of Credit Availability in Maharashtra and Rajasthan

The credit allocation in Maharashtra is significantly lower for micro and small enterprises than in Rajasthan (refer to Figure 46). The total credit allocation for micro-enterprises in Rajasthan was 1.5 times greater than that in Maharashtra. In Maharashtra, the credit size for small enterprises was low, at 37.4 million rupees, compared to 57.6 million rupees in Rajasthan. Medium enterprises have availed a larger amount of credit in Maharashtra than in Rajasthan. In Maharashtra, the total credit for medium enterprises is 134.4 million rupees, compared to 79.5 million rupees in Rajasthan.

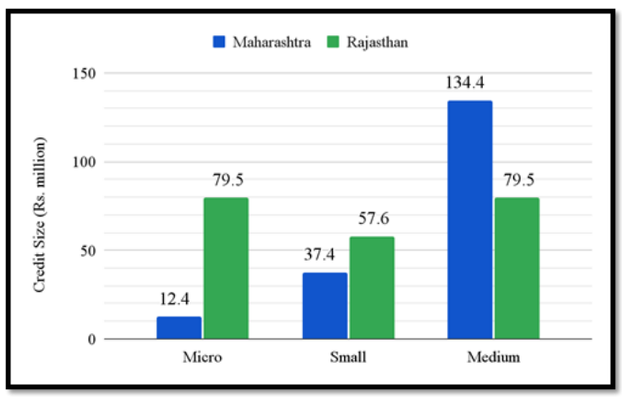


Figure 46. Credit size in Maharashtra and Rajasthan

Source: Primary Survey

6.2.2. Average Credit Size by Types of Enterprise

The average credit size is higher across different groups in Maharashtra than in Rajasthan, except for Micro-enterprises. The average credit size of a micro-enterprise in Rajasthan is higher than that of Maharashtra. Further, it is noticed that the average credit increases with firm size.

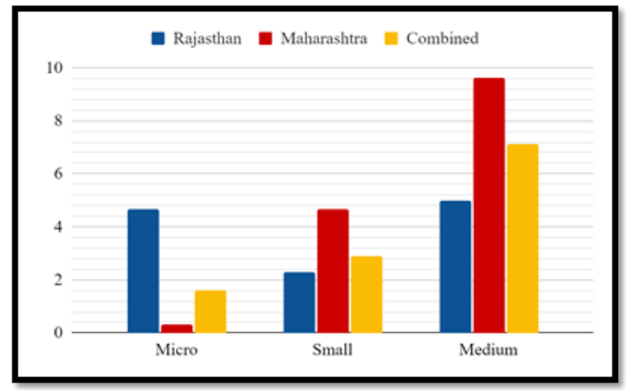


Figure 47. Average Credit Size in Maharashtra and Rajasthan

6.2.3. Credit Utilisation Pattern by the intended Purpose

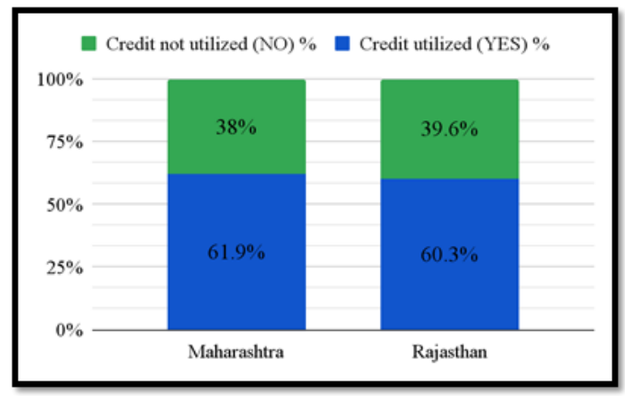


Figure 48. State-wise Percentage of Credit Utilised / Not Utilised for Intended Purpose

Source: Primary Survey

Figure 48 indicates that 60 percent of MSMEs in Rajasthan and Maharashtra utilized credit for their designated purposes. The remaining 40% utilized credit for multiple purposes other than intended. Further, the utilization of credit by different types of MSME suggests that most micro-enterprises use their credit for the intended purpose, unlike small and medium enterprises. Discussions with MSME suggest that in Maharashtra, medium enterprises are more likely to use credit for their working capital requirements than small enterprises. MSMEs in Rajasthan use credit for working capital requirements, regardless of the firm's size. The MSMEs stressed that meeting the working capital requirements is of utmost importance to running the business smoothly.

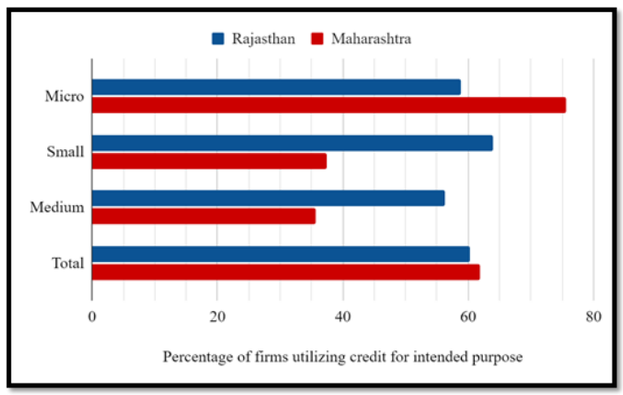


Figure 49. Credit Utilisation as intended- Rajasthan and Maharashtra

Source: Primary Survey

In Maharashtra, the medium enterprises surveyed have been in business for longer; nonetheless, they prioritise credit for working capital requirements. Most of these enterprises had a working capital agreement with commercial banks.

Further, the pattern of credit utilisation for various activities is presented in Figure 50. It is seen from Figure 50 that most firms use credit for multiple purposes, such as business expansion, production, technology upgradation, infrastructure development, procurement, and marketing. However, only a few MSMEs used credit for export expansion.

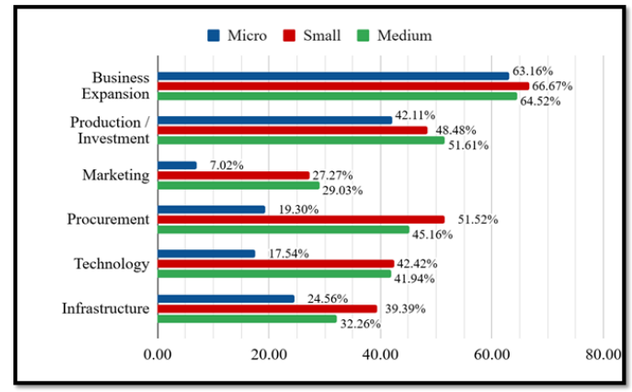


Figure 50. Credit Utilisation for Various Activities (Percentage)

Source: Primary Survey

6.3 Impact Assessment

The impact of the assessment of credit presented by MSMEs is presented in Figure 51. Results indicate that most MSMEs have benefited due to credit availability in terms of sales expansion, employment generation, technological upgradation, and productivity improvement. However, the positive impacts are more visible for small and medium enterprises.

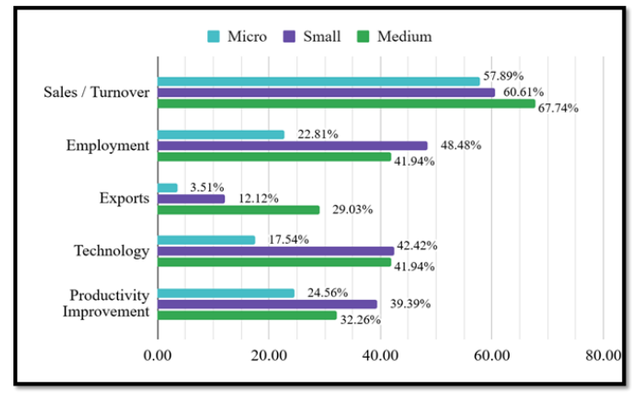


Figure 51. Credit's Impact on MSMEs (Percentage Given Positive Response)

Source: Primary Survey

Does Credit Size Influence Outcome?

To answer the above question, we divide the whole samples by the credit size as: up to Rs.3 million, between Rs. 3 to 5 million, and Rs. 5 million and above. The results are presented in Figure 52.

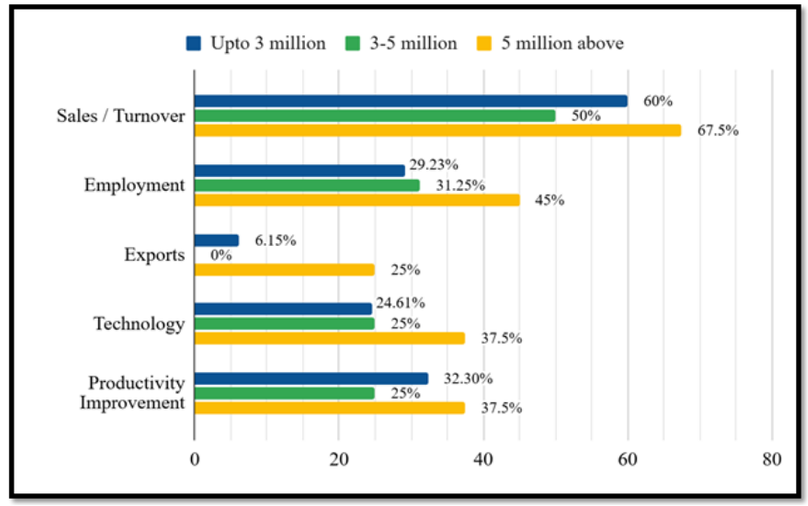


Figure 52. Impact of Credit Utilisation Based on Credit Size

Source: Primary Survey

Results from Figure 52 suggest that enterprises with credit sizes exceeding 5 million rupees have experienced greater gains than those with smaller credit sizes. This indicates that an increase in credit will enhance enterprises' benefits regarding sales, employment generation, productivity, and technology. In the case of employment generation, both micro and small units experienced around a 30% rise in employment. The figure for medium firms is around 45%. Most firms are involved in domestic activities rather than exports. Credit has a limited impact on exports.

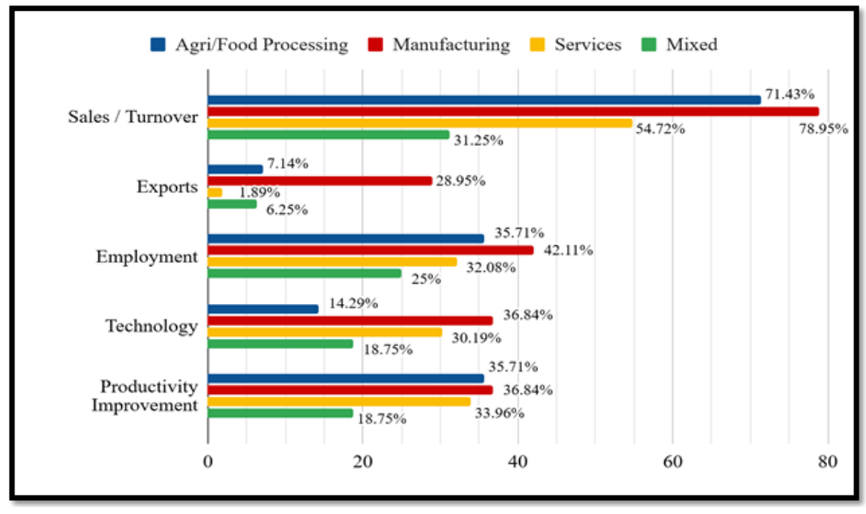


Figure 53. Impact of Credit by Economic Activities

Source: Primary Survey

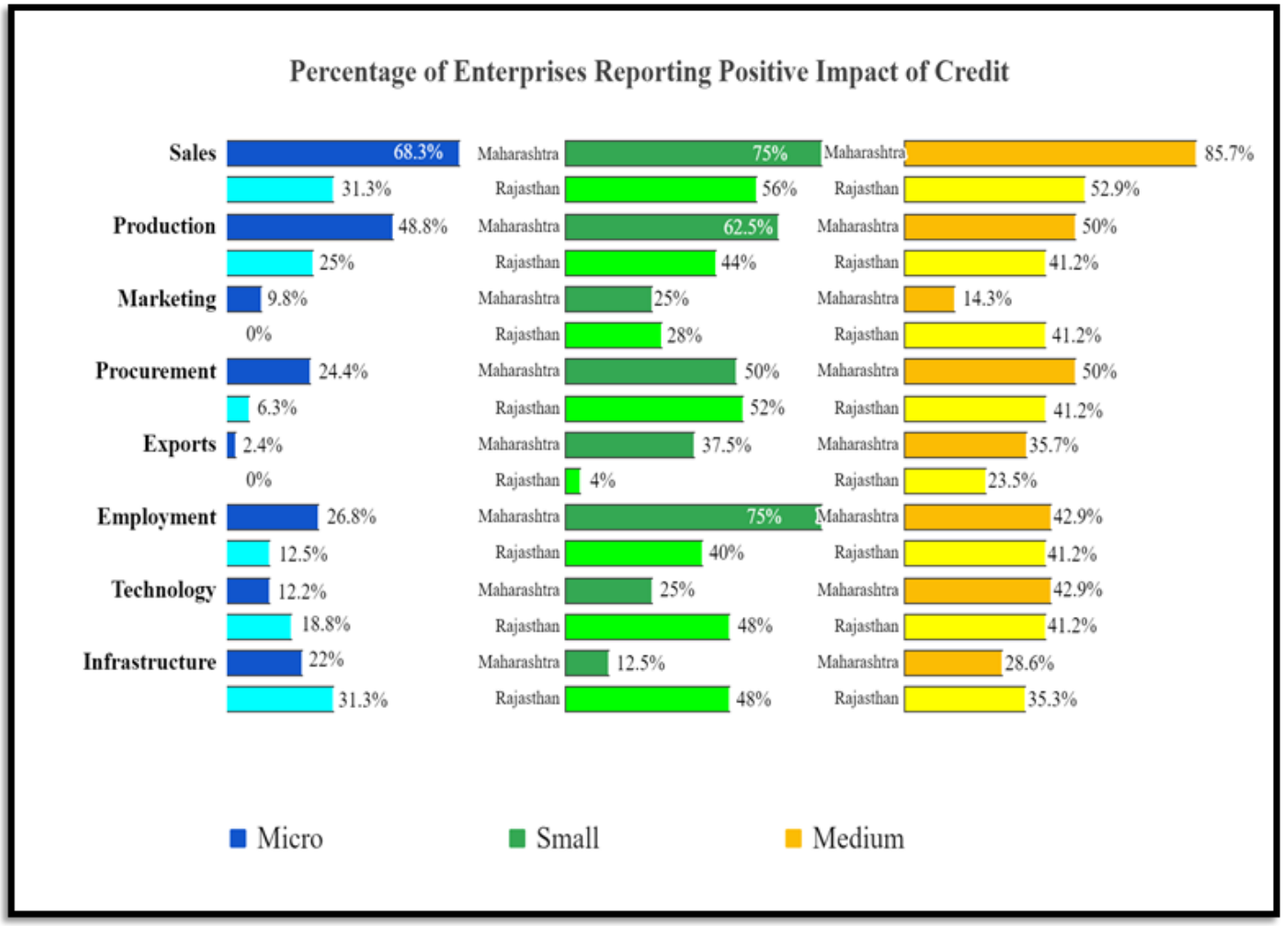


Figure 54. Percentage of Enterprises Reporting Positive Impact of Credit

Source: Primary Survey

Figure 54 elucidates several observations.

- Sales of Micro, Small, and Medium Enterprises (MSMEs) have risen more significantly in Maharashtra compared to Rajasthan.
- Small and medium enterprises in both states are undergoing technological transformations. Small enterprises in Rajasthan engage in technological advancement more than those in Maharashtra.
- Maharashtra exhibits a superior level of exports relative to Rajasthan. This could be attributed to the presence of auto ancillary enterprises in the Maharashtra sample. Medium enterprises in Rajasthan export carpets, handicrafts, etc.
- The infrastructure has expanded for both states. Rajasthan has experienced greater advancements in its infrastructure relative to Maharashtra.
- Both states and small to medium enterprises have been able to increase their employment. Micro enterprises in Maharashtra reported more change in employment compared to Rajasthan.

As a result, credit has a positive impact on MSMEs in both states. Nonetheless, these enterprises face challenges in accessing credit facilities. We now look at the challenges faced by MSMEs. The figure below shows the responses to the various challenges faced

by MSMEs in procuring credit from institutional sources. Micro, Small, and Medium Enterprises (MSMEs) in both states have expressed apprehensions regarding banks' imposition of elevated collateral prerequisites. Many micro-enterprises have indicated that the requirement for audited financial statements mandated by banks poses a significant challenge. Small businesses in Rajasthan expressed concern that banks' lengthy documentation process is a hindrance to obtaining formal credit. Throughout the interview process, various small and medium enterprises in Maharashtra and Rajasthan indicated that they utilized intermediaries to obtain loans. These intermediaries assist them with the necessary paperwork. The enterprises surveyed in Rajasthan reported that the approval time for such loans is typically higher. Maharashtra also observed a similar trend, although it was not as significant. Instead, in Maharashtra, the beneficiaries expressed their concern about the high interest rates charged by banks. Furthermore, the enterprises believe that the amount sanctioned as a loan is insufficient; as a result, they seek out NBFCs to meet their financial needs.

6.4 Role of Credit in Employment Generation

The state-wise employment in the MSME sector is presented in Table 31 for 11 major states in India. Combined, these 11 states account for almost 70% of total employment in the MSME sector. It is evident that Maharashtra is the largest contributor in terms of employment, followed by Tamil Nadu, Uttar Pradesh, and Rajasthan for 2021-22 and 2022-23. Similarly, the above four states also account for a larger share of the credit to the MSME sector.

Table 31. Employment Intensity of Credit

States	Employment in MSME (in lakh)		Credit to MSME (in '000' crore)				Change in employment to Change in Credit
	2021-21	2022-23	2021-21	2022-23	Change in Employment	Change in credit	
Gujarat	22.41	24.39	146.87	185.07	198360	38203	5.19
Haryana	11.75	12.55	62.45	80.10	80460	17645	4.56
Karnataka	27.57	35.78	106.00	126.57	820685	20568	39.90
Kerala	7.63	8.514	60.20	67.54	87561	12551	11.92
Madhya Pradesh	14.00	18.23	63.00	72.34	422070	27768	45.19
Maharashtra	45.66	48.90	352.89	365.44	324778	15551	20.88
Punjab	9.34	11.61	59.27.3	70.96	226604	11694	19.38
Rajasthan	24.57	28.16	76.12	95.61	358609	19487	18.40
Tamil Nadu	40.54	46.66	191.35	219.11	607715	27768	21.89
Uttar Pradesh	28.32	41.71	105.21	136.72	1339201	31508	42.50
West Bengal	20.49	29.32	95.77	101.20	882835	5423	162.79
India	353.65	452.75	1783.92	2011.05	9910571	227132	43.63

Source: Authors' Own using Udyam Portal data

To examine the role of credit in employment generation, we estimated the ratio of change in employment to change in credit between 2021-22 and 2022-23. The results are presented in the last column in Table 31.

It is seen that West Bengal experienced the highest employment-to-credit ratio (per 1 core credit), followed by Madhya Pradesh, Uttar Pradesh and Karnataka. Results indicate that one crore credit to the MSME sector (employment intensity of credit) created roughly around 162 employments in West Bengal, 45 employments in Madhya Pradesh, 42 employments in Uttar Pradesh and 40 employments in Karnataka. Both Maharashtra and Rajasthan experienced lower employment intensity of credit (21 and 19, respectively) compared to the above states.

Employment Generation: Evidence from Primary Survey

We use survey data to analyse the employment impact of credit to get more insight into employment generation. For this purpose, we divide the total sample into three categories: employment generation by enterprise, economic activity, and credit size for Maharashtra and Rajasthan. The results are provided in Figures 55 to 57.

It is noticed from Figure 55 that most of the employment growth happened in small and medium enterprises rather than in the micro sector in Maharashtra and Rajasthan. More than 70% of firms from small enterprises in Maharashtra reported that they have increased employment due to credit facilities. Similarly, close to 40 % of firms from small enterprises reported that they had added workers in Rajasthan. This indicates that employment intensity is higher for small and medium firms than for micro-enterprises.

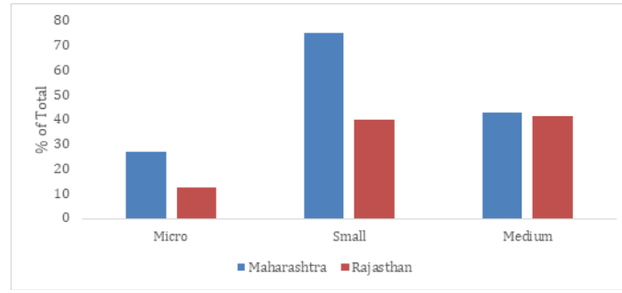


Figure 55. Employment Generation by Types of Enterprise

Source: Primary Survey

In the case of medium enterprises, there is a roughly equal % (42) of firms reported to have increased employment in both states. However, in the case of micro sector, only 12.5% and 26 % of firms reported a rise in employment in Rajasthan and Maharashtra, respectively.

Further, we analysed the employment addition by economic activities (see Figure 56.) It is seen that there is significant difference in employment addition by sector as well as between states. For instance, manufacturing and other sectors contributed to significant employment generation in Maharashtra, and the agriculture and food processing sector is the major source of employment in Rajasthan. The role of service firms in employment generation is limited in both states. This indicates that employment intensity is higher in manufacturing and agri-processing sectors.

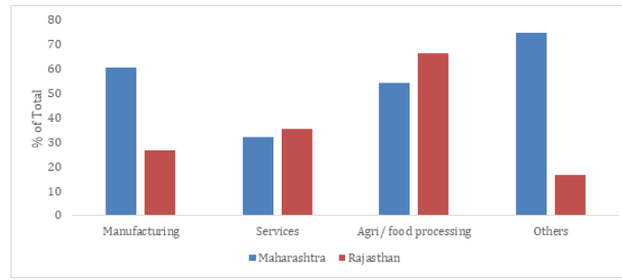


Figure 56. Employment Generation by Economic Activities

Source: Primary Survey

Finally, we also analyse the link between credit size and employment generation. For this purpose, total credit has been divided into three categories: up to Rs. 3 million, between Rs 3 to 5 million, and above Rs. 5 million. The results are presented in Figure 57.

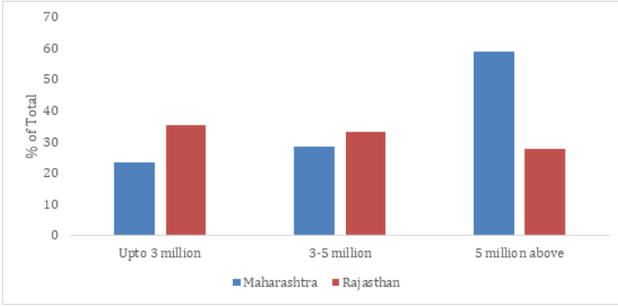


Figure 57. Employment Generation by Credit Size

Source: Primary Survey

It is evident that in terms of credit size, most of the employment generation came with a credit size above 5 million in Maharashtra. Further, the impact of credit size on employment generation is positive for Maharashtra as a rise in credit increases employment. However, there is no relationship between credit size and employment generation in Rajasthan. Overall, we find that credit has a significant impact on employment generation, although there are significant variations in employment generation by state, sector, and enterprise type.

6.5 Sources of Finance and Challenges of Availing Credit

Figure 58 presents the sources of finance of the beneficiaries surveyed in Maharashtra and Rajasthan. Around 90 percent of the MSMEs have reported that they have used internal (own savings, loans from friends and relatives, gold loans, etc.) and institutional sources (borrowing from commercial banks, NBFCs, Cooperative banks, etc.) to meet their capital requirements. In Maharashtra, MSMEs utilized funding from NBFCs primarily due to the inadequacy of the amounts approved by banks. The MSMEs from Rajasthan mostly borrowed from commercial banks and nothing from NBFC.

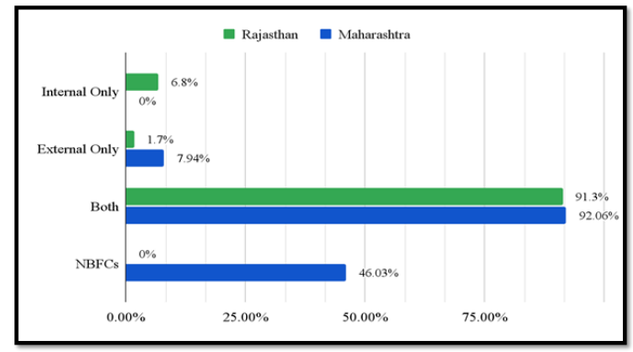


Figure 58. Sources of Finance

Source: Primary Survey

In Rajasthan, 7 percent of enterprises reported utilising solely internal sources of funding to initiate their business. Contrastingly, in Maharashtra, 7 percent of micro-enterprises obtained bank loans to initiate their businesses without any internal financing.

The study combines the credit challenges of both the states, and results are presented in Figure 59. It is seen that MSMEs in both states face common issues but some difference is there. MSMEs have expressed apprehensions regarding banks' imposition of elevated collateral prerequisites.

Many micro-enterprises have indicated that the requirement for audited financial statements mandated by banks poses a significant challenge. Small businesses in Rajasthan expressed concern that banks' lengthy documentation process is a hindrance to obtaining formal credit. Throughout the interview process, various small and medium enterprises in Maharashtra and Rajasthan indicated that they utilised intermediaries to obtain loans. These assist them with the necessary paperwork. The enterprises surveyed in Rajasthan reported that the approval time for such loans is typically higher.

Maharashtra also observed a similar trend, although it was not as significant. Instead, in Maharashtra, the beneficiaries expressed their concern about the high interest rates charged by banks. Furthermore, the enterprises believe that the amount sanctioned as a loan is insufficient; as a result, they seek out NBFCs. The MSMEs surveyed in Maharashtra and Rajasthan have expressed their concerns about the high collateral requirements of the banks, lengthy documentation, and the requirement of audited financial statements (Figure 59).

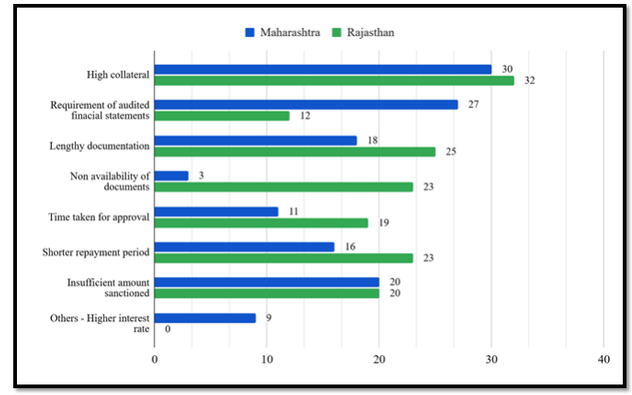


Figure 59. Challenges in Accessing Credit - Maharashtra and Rajasthan

Source: Primary Survey

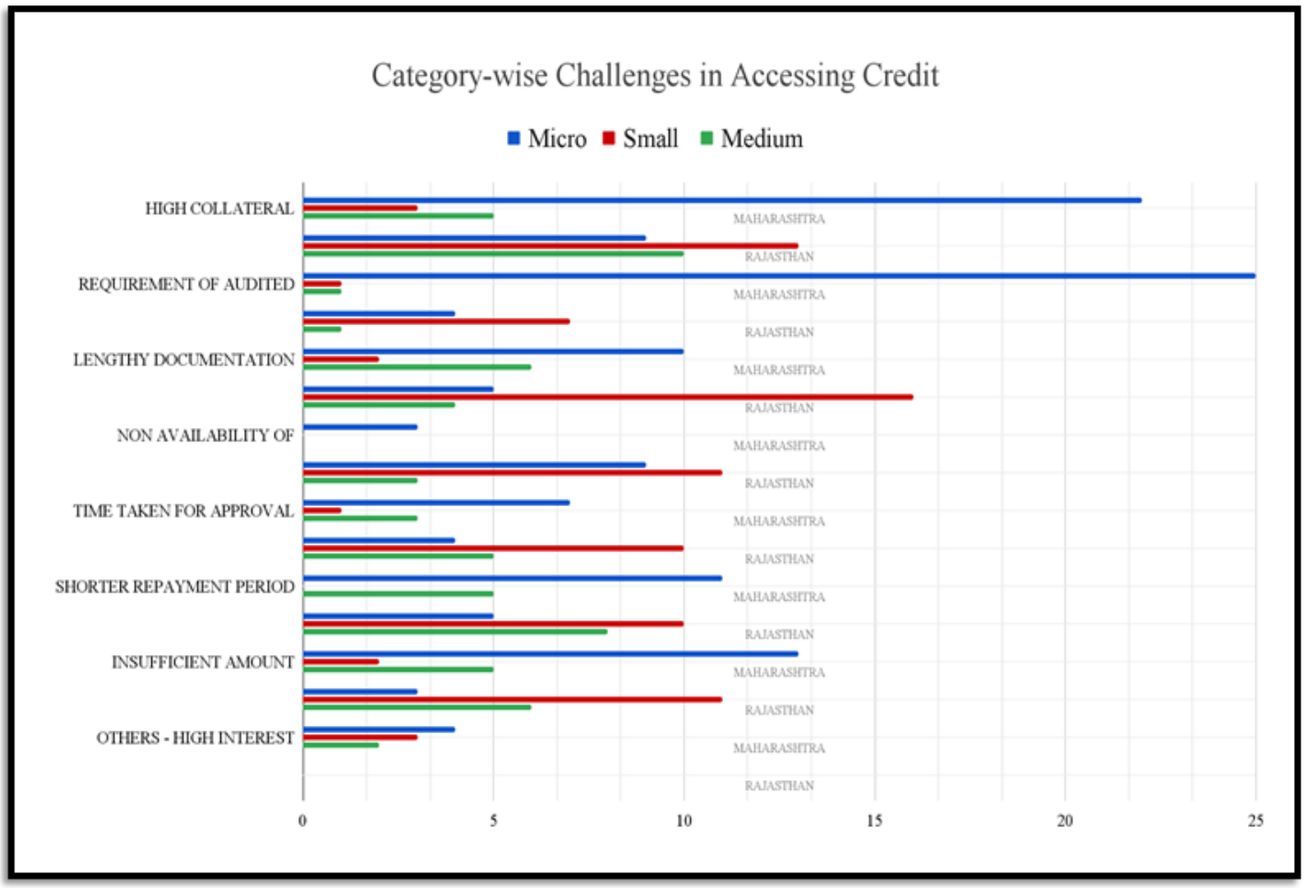


Figure 60. Category-wise Challenges in Accessing Credit - Maharashtra and Rajasthan

Source: Primary Survey

Micro enterprises are known to face more challenges to survive the competition, thus, we look at challenges faced by the MSMEs based on the size of the enterprise. Figure 60 presents the challenges faced by micro, small, and medium enterprises in accessing credit facilities in both states. As mentioned above, micro enterprises have expressed their concerns about the high collateral requirements of the banks. The requirement of audited financial statements and a shorter time period for repayment was a challenge for the micro-enterprises in Maharashtra compared to Rajasthan. The micro-enterprises reported insufficient amounts sanctioned by banks compared to Rajasthan. Thus, the reliance on NBFCs by micro-enterprises in Maharashtra leads to higher interest payments. Further, MSMEs (all sizes) in Maharashtra have reported higher interest payments or interest charged by banks. Contrastingly, in Rajasthan, the MSMEs did not report any challenge of higher interest rates being charged by banks irrespective of size. The small enterprises in Rajasthan have reported lengthy documentation as a challenge to accessing credit. Medium and small enterprises in Maharashtra (22 enterprises surveyed) face no challenge in producing documents for accessing credit.

In conclusion, we see that the challenges faced by MSMEs in both states are common. One may also note that the majority of micro-enterprises face more challenges than small and medium firms. The credit size varies in both states, with Maharashtra seeing the effects of credit more prominently. Further, it revealed the important role of the intermediaries in procuring formal credit.

6.6 Summary

In this chapter, we combined the samples and analysed the sources of finance, credit utilisation pattern and the impact of credits. The survey indicates that MSMEs in Maharashtra and Rajasthan use both internal and institutional sources to fulfil their capital requirements. Most enterprises in both states primarily engage in service-related activities, followed by manufacturing. They typically allocate about 40 percent of the credit received toward working capital. In Maharashtra, micro-enterprises tend to use credit for their intended purpose. However, the medium enterprises surveyed often use the credit for working capital requirements, despite having been in business for a longer period of time and having a working capital agreement with commercial banks. In contrast, enterprises in Rajasthan utilize credit for working capital needs, irrespective of their size.

Further, MSMEs used credit for different purposes such as business expansion, procurement, marketing and infrastructure and technology upgradation. Only a limited number of firms used credit for exports. In line with credit use, the majority of firms experienced a rise in sales, productivity, and employment generation. Further, the credit size positively influenced the impact.

Despite all these positive outcomes, MSMEs are facing numerous challenges in availing formal credit. These challenges include: (a) stringent collateral requirements and the need for audited financial documents; (b) lengthy documentation processes required by banks; (c) insufficient sanctioned amounts; and (d) shorter repayment periods. Further, it is revealed that intermediaries play a crucial role in availing credits.

CHAPTER 7

MSME CREDIT GAP: ANALYSIS OF MAHARASHTRA AND RAJASTHAN

7.1 Introduction

The performance of the MSME sector is vital for India's sustainable economic growth, employment generation, and export performance. The availability of finance at affordable cost is vital for the sustainable performance of the MSME sector, as lack of access to credit affects the MSME sector disproportionately (Ayyagari et al., 2011). A number of studies have highlighted the credit challenges faced by the MSME sector in India. A survey by IFC (2017) finds that over 80% of the MSME sector has no access to formal finance. The financial gap for micro and informal enterprises is even higher. Due to their small size, low profitability and liquidity, and informality, the MSME sector is highly discriminated in terms of access to formal credit. Creating financial opportunities at a reasonable cost is critical to economic development in India. In addition, the MSME sector could not prove themselves as creditworthy and hence denied credit. Given the numerous challenges faced by the MSME sector, there is an opportunity for both policymakers and private players to intervene and create facilities for greater accessibility of capital for MSMEs. In this regard, estimation of the credit gap is vital to assess the credit requirement for the MSME sector, and appropriate measures could be implemented. Therefore, this study aims to estimate the credit gap for the MSME sector at all India levels and two states, Maharashtra and Rajasthan, using secondary data.

The rest of the chapter is as follows: section 2 provides theory and empirical evidence of MSME credit. Section 7.3 presents all India and state-wise trends in non-food credit. Section 7.4 provides the estimated credit gap for India, Maharashtra, and Rajasthan. The chapter summary and conclusions are provided in section 7.5.

7.2. Financing Need of MSME Sector: Theory and Empirical Evidence

The MSME sector requires adequate credit timely for sustainability and growth. The financing need of the MSME sector depends on the stages of the business. During the early stage of MSME, internal sources like friends, own savings, and unregulated markets meet the need for financing. In addition, public sector banks also provide credit for working capital. In the survival stage, the MSME requires additional credit for survival and depends on more informal sources than on formal sources. The requirement of formal credit increases in the growth stage due to the larger requirement of funds. In this stage, MSME depends heavily on formal sources like banks and other formal sources. During the sustenance stage, MSMEs diversify their financing sources and rely on internal finance, banks, venture capital, capital markets, cooperative banks, NBFC, etc. Abraham and Schmukler (2017) analyze demand and supply factors inhibiting access to formal finance. A demand-side problem arises when MSMEs are not creditworthy, and their applications are rejected. A supply-side problem occurs when MSMEs have profitable business projects and cannot arrange sufficient funds to finance them. In the presence of both supply and demand side issues, potential creditors will supply

credit to MSMEs, and there is a need for government intervention.

Among the formal finance institutions, commercial banks constitute the largest source of finance in India. This sector contributes more than 80% of total credit to the MSME sector. In addition, the Securities and Exchange Board of India (SEBI) regulates and facilitates various institutions engaged in providing or meditating capital to MSME sectors. Special financial institutions such as the Small Industries Development Bank of India (SIDBI) promote and provide financial support for the MSME sector. Refinance agencies like Micro Units Development and Refinance Agency (MUDRA) and NABARD provide long-term credit through banks and NBFC. In addition, the government of India and various state governments also provide various financial support under different schemes (for details, see Chapter 8). These schemes have helped the MSME sector to mobilize credit, but they have been found insufficient. According to the 4th ALL Indian MSME census 2006-07, only 5.2% of total MSME borrowed from formal sources and 2.1% from informal sources. The remaining 93% of MSMEs relied on their own sources for financing business. Similarly, a study by International Financial Corporation (2018) highlights the credit gap in the MSME sector. According to this report, the credit gap for the MSME sector is estimated at around $397 billion. More importantly, more than 70% of this sector faces financial constraints to thrive and grow. According to RBI estimates, the overall credit gap is estimated at 20-25 trillion rupees. Another study by PwC (2023) highlights the formal credit situation in India vis-a –vis the USA and China. According to this report, only 14% of MSMEs have access to formal finance compared to 50% in the USA and 37% in China.

Table 32. Credit Gap for MSME Sector India vs. Selected Countries (Percentage)

	USA	China	India
Number of MSME (million)	32	44	64
MSME Credit Penetration	50	37	14
Retail Credit Penetration	75	55	11
Credit Card Penetration	67	38	4

Source: EY, Unleashing Potential, is the next phase of digital lending in India, 2023.

7.3 MSME Credit: All India Situations

The trends in overall non-food credits by banking sector (% of GDP) from 2007-08 to 2022-23 are presented in Figure 61. It is seen that the non-food credit as a % of GDP has gone up from 44% in 2007-08 to more than 50% in 2022-23. Despite the rise in credit penetration, India still lags behind both developed and other developing countries. For instance, the credit ratio is 154% for developed countries and 194% for China in 2023. So, there is an enormous scope for credit expansion in India.

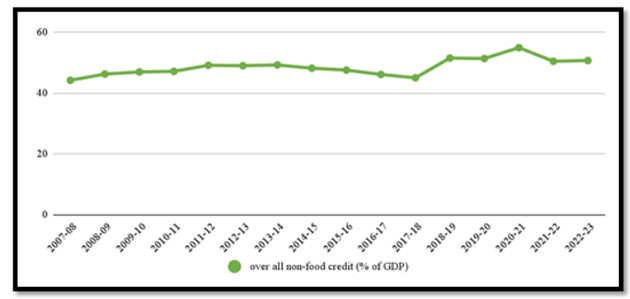


Figure 61. Trends in Non-Food Credits as percentage of GDP

Source: RBI

The trends in MSME credit to total non-food credit by the banking sector as the ratio to GDP is presented in Figure 61. The MSME credit to GDP hovers around 10% between 2009 and 2022. Further, there has not been any significant rise in MSME credit (percentage of GDP) during the same period.

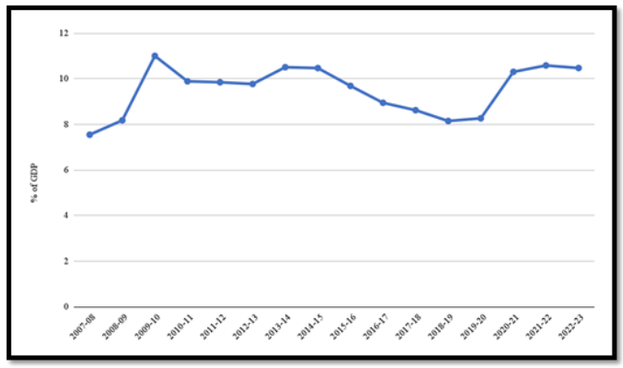


Figure 62. Trends in MSME credit to Non-Food credit (percentage of GDP) (including priority sector loan)

Source: RBI

In addition, the study examines the share of the MSME sector in total non-food credit. Trends suggest that the share of the MSME sector in total non-food credit decreased slightly between 2009 and 2022. For example, the MSME share was more than 23% in 2009, but it declined slightly above 20% in 2022. This suggests that the MSME sector is credit deficient.

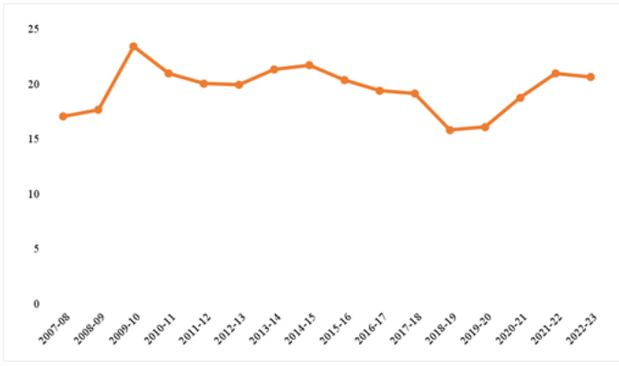


Figure 63. Share of MSME Credit in total Non-Food credit (Percentage)

Source: RBI

7.3.1. State-wise Non-Food Credit Trends

Having discussed the all-India trends of MSME credit, this section analyses state-wise MSME credit levels. First, we present the state-wise industrial credit by banks. The share of the top 8 states in industrial credits is presented in Figure 64. It is seen that Maharashtra is the leading state in India in terms of industrial credit share, followed by Tamil Nadu and Gujarat. These three states share more than 40% of total industrial credit by banks. Other important states are Karnataka and West Bengal. These eight states have a share of more than 60% in India, and the rest have a share of less than 40%, indicating the skewed nature of bank credit allocation.

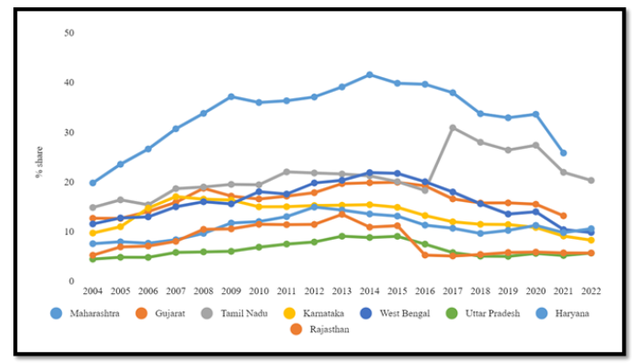


Figure 64. Share of Top 8 States in Total Industrial Credit by Banking Sector

Source: RBI

Further, we present credit as the gross state GDP (GSDP) ratio to understand the credit penetration rate. Credit penetration is very low (% of GSDP) in states except Maharashtra (see Figure 65). For Maharashtra, the credit ratio increased from 26% in 2004 to more than 31% in 2016. Since then, the credit ratio has declined to the 2004 level. There is a huge gap between Maharashtra and other states. Other leading states are Gujrat, Tamil Nadu, Karnataka, and West Bengal, having credit ratios of around 8.2, 8, 6, and 5.5 % of GDP, respectively. Industrial credit only commands less than 5% of GSDP for other states, indicating very low credit penetration. A low

credit penetration rate suggests there is enormous potential for all states.

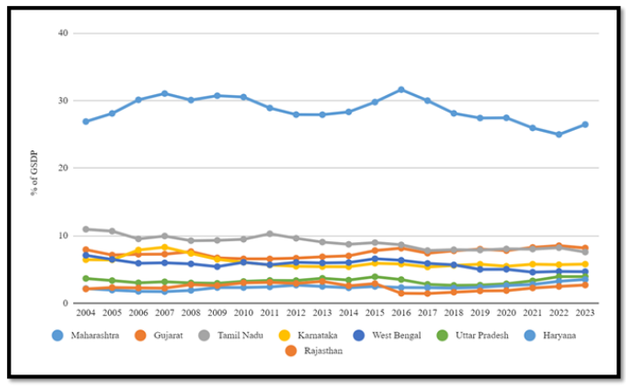


Figure 65. Industrial Credit as the Ratio of GSDP

Source: RBI

7.3.2. State-wise MSME Credit by Banks

State-wise, MSME credit by banks is presented in Table 33 from 2016 to 2022. It is seen from Table 33 that bank credit to the MSME sector increased from 12 lakh crore in 2016 to above 20 lakh crores in 2022, depicting an annual growth rate of 10% during this period. The state-wise picture suggests that Maharashtra is the leading state in India, carrying the largest share of MSME credit. The share of Maharashtra increased from 18.7% in 2016 to 19.8 in 2021 before declining to 16.9% in 2022. The other leading states are; Tamil Nadu, Gujrat, Karnataka, and Uttar Pradesh. These five states account for 50% of total MSME credit in India.

Table 33. State-wise MSME Credit Allocation by Banks

States		2016	2017	2018	2019	2020	2021	2022
Andhra Pradesh	In Crore	40840	44447	49611	56607	57234	62879	71877
	% of total	3.4	3.4	3.7	3.7	3.5	3.5	3.6
Gujarat	In Crore	83928	94600	98059	119506	128908	146873	185076
	% of total	6.9	7.3	7.4	7.9	8.0	8.2	9.2
Haryana	In Crore	42573	42947	45196	54909	55912	62458	80103
	% of total	3.5	3.3	3.4	3.6	3.5	3.5	4.0
Karnataka	In Crore	78751	82371	79983	89095	90853	106008	126576
	% of total	6.5	6.4	6.0	5.9	5.6	5.9	6.3
Kerala	In Crore	45616	46514	48359	53146	59657	60201	67544
	% of total	3.8	3.6	3.7	3.5	3.7	3.4	3.4
Madhya Pradesh	In Crore	38675	41452	45403	52801	57267	63009	72348
	% of total	3.2	3.2	3.4	3.5	3.5	3.5	3.6
Maharashtra	In Crore	227178	250605	235192	262887	303671	352895	365446
	% of total	18.7	19.3	17.8	17.4	18.8	19.8	17.3
Punjab	In Crore	45842	45733	46440	54135	53412	59273	70967
	% of total	3.8	3.5	3.5	3.6	3.3	3.3	3.5
Rajasthan	In Crore	48551	52886	58000	70412	63411	76129	95616
	% of total	4.0	4.1	4.4	4.7	3.9	4.3	4.8
Tamil Nadu	In Crore	139222	145120	151904	165456	181635	191351	219119
	% of total	11.4	11.2	11.5	11.0	11.3	10.7	10.9

Uttar Pradesh	In Crore	69989	79224	72615	90201	88733	105215	136723
	% of total	5.8	6.1	5.5	6.0	5.5	5.9	6.8
West Bengal	In Crore	66260	71418	68578	80937	88995	95779	101202
	% of total	5.4	5.5	5.2	5.4	5.5	5.4	5.0
All India		1216007	1296399	1324239	1510651	1613582	1783925	2011057

Source: RBI.

7.3.3. NBFC Credit to the MSME

In recent times, non-banking finance companies have emerged as an alternative source of MSME credit. NBFC credit to MSMEs has increased by double fold between 2019 and 2023. In terms of %, the share of NBFC has risen from 8.3 % in 2019 to above 13% in 2023 (see Table 34). Further, the growth rate of NBFC credit to the MSME sector is rising faster than the public and private sector bank credit. By following a flexible and adaptable approach to MSME, NBFC is financing the left-out MSME sectors that have been facing severe credit constraints. The digitalization and flexibility approach is the main enabling factor for the rise in the demand for NBFC credit by MSMEs.

Table 34. NBFC Credit to the MSME Sector (In Lakh Crore)

Year	2017	2018	2019	2020	2021	2022	2023
Gross credit (in Lakh crore)	1.11	1.41	1.31	1.02	1.55	1.92	2.74
% total bank credit	8.5	10.9	11.2	7.8	9%	9%	13.6

Source: MSME Pulse

7.4 Credit Gap for MSME Sector

7.4.1. Demand for Credit

To project the credit gap for the MSME sector, we follow the IFC (2017) methodologies. First, we estimate total potential credit over the period 2024-2030. For this, we assume that the upper level of MSME credit demand or potential is equal to its contribution to overall GDP. Currently, the MSME contribution is around 27% of GDP. For this, we use the all-India GDP projection by NITI Aayog for 2047. According to NITI Aayog's report (2024), GDP will grow by 12% in nominal terms between 2023 and 2030. Using all-India GDP, we have estimated the potential credit for the MSME sector, and the estimated potential credit is presented in Table 35. According to our estimation, the potential credit for the MSME sector is Rs 93 lakh crore in 2024-25 and would increase to 187 lakh crores by the end of 2030-31. In terms of US$, the potential credit gap is around $1.2 trillion in 2024-25 and is expected to increase to $2 trillion by the end of 2030-31.

Table 35. Demand Side Credit Estimation

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Credit Potential (Rs. Lakh Crore)	93.2	104	116	131	147	166	187
$ billion	1206	1286	1413	1567	1665	1825	1999

Source: Authors' own

7.4.2. Supply of Credit

On the supply side, we use the five-year moving average technique to calculate the credit supply using formal sources, including the banking sector and NBFC. Results are presented in Table 36. Credit to the MSME sector will increase from Rs. 40.2 lakh crore in 2024-25 to 97 lakh crore in 2030-31. In terms of US$, the credit gap is estimated at $685 billion in 2024-25. The credit gap would be around $959 billion in 2030-32. Out of the total credit gap of $959 billion, the banking sector contribution will be over 82%, and NBFC will contribute the rest.

Table 36. Estimated Credit to MSME Sector (Rs. Lakh Crore)

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Actual Credit	40.2	46.4	53.6	62.1	72	83	97
Banks	36.6	41.7	46.7	54.3	61.9	70.5	80.4
% of total	91	90	88.8	87.4	85.9	84.2	82.4
NBFC	3.56	4.63	6.01	7.82	10.1	13.22	17.2
% of total	9	10	11.2	12.6	14.1	15.8	17.6
Credit Gap	52.98	57.6	62.8	68.8	75.3	82.6	90
Credit Gap							
(in $ billion)	685	712	762	823	850	906	959
Credit Gap of Banking Sector	625	641	677	720	730	762	790
Credit Gap of NBFC	60	71	85	103	120	143	169

Source: Authors' own

7.4.3 State-wise Credit Gap: Maharashtra and Rajasthan

To estimate the credit gap for Maharashtra and Rajasthan, we will utilise the all-India figures and calculate the share of Maharashtra and Rajasthan in total MSME credit, respectively. In total MSME credit, the share of Maharashtra is around 20%. Similarly, the share of Rajasthan stands at 5%. Using the respective shares of Rajasthan and Maharashtra, we estimated the total potential, actual credit, and credit gap. The results are presented in Table 37. In the case of Maharashtra, total credit potential is estimated at Rs. 18.6 lakh crore, and the potential will increase to 37.5 lakh crore by 2030-31. However, the actual credit availability is half of the potential credit, leaving a huge credit gap. For example, the credit will be around Rs.10 lakh crore in 2024-25, increasing to around Rs.18 lakh crore in 2030-31.

Table 37. Credit Gap for Maharashtra and Rajasthan (Rs. Lakh Crore)

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Maharashtra							
Credit Potential	18.6	20.8	23.3	26.2	29.4	33.2	37.5
Actual credit	8	9.2	10.7	12.4	14.4	16.6	19.5
Credit Gap	10.1	11.5	12.5	13.7	15	16.5	18
Credit Gap (in billion $)	137	142	152	164	170	182	192
Rajasthan							
Credit Potential	4.6	5.2	5.8	6.5	7.3	8.3	9.38
Actual Credit	2.02	2.32	2.68	3.1	3.6	4.1	4.88
Credit Gap	2.6	2.88	3.14	3.4	3.7	4.1	4.5
Credit Gap (in billion $)	34	35	38	41	43	45	48

Source: Authors' own

For Rajasthan, potential credit is estimated at Rs. 4.6 lakh crore in 2024-25 and expected to increase to 9.4 lakh crore by 2030-31. However, the actual credit availability is less than half of the potential credit, leaving a huge credit gap. For example, the credit will be around Rs. 2.6 lakh crore in 2024-25, which is expected to increase to around Rs.4.5 lakh crore in 2030-31.

7.5 Summary and Conclusion

The MSME sector is the backbone of the Indian economy. However, this sector is facing multiple challenges. Credit availability at an affordable rate is one of the significant challenges. Despite various schemes and the creation of special platforms, the MSME sector remained credit-constrained. The international comparison also suggests that the MSME sector in India faces severe financial constraints due to its small size and heavy reliance on informal financing.

Against this backdrop, using macroeconomic parameters, this study estimates the total credit gap for the MSME sector at all India levels and two major states, Maharashtra and Rajasthan. The study finds a significant credit gap in the MSME sector. The credit gap is estimated to be around $685 billion in 2024-25 and expected to rise to around $1 trillion by the end of 2030-31. In the case of Maharashtra, the credit gap is estimated to be around $137 billion in 2024-25 and expected to rise to $200 billion in 2030-31

CHAPTER 8

A COMPARATIVE ANALYSIS OF GOVERNMENT SCHEMES: RAJASTHAN AND MAHARASHTRA

8.1. Government Initiatives: Historical and Contemporary

Over the decades, the government has implemented numerous measures to support small-scale enterprises, as well as village and cottage industries in rural regions. Empirical research conducted by Mathiraj and othere (2019) indicates that the Government has implemented initiatives for the MSME sector to enhance its role as a dynamic and vital contributor to the Indian economy.

The MSME Act of 2006 has established stability in investments within MSMEs. The Act has facilitated access to financing for entrepreneurs. Government policies and initiatives are critical facilitators for the MSME sector (Sindhwani et al., 2022). The MSME Act was linked with the 'Make in India' program in 2014 with the objective of achieving self-reliance on manufacturing. Further, the RBI high-powered committee (2019) has recommended various policy measures. Based on the recommendations, the Government of India (GoI) and the Reserve Bank of India (RBI) have implemented various measures to alleviate the issues faced by MSMEs and enhance bank financing for this sector. To enhance bank lending to MSMEs, the RBI has instructed banks to allocate 7.5 percent of total loans to micro units (RBI Master Direction, 2019). The Reserve Bank of India (RBI) has undertaken various initiatives, including the organization of NAMCABS workshops (RBI Annual Report, 2016), convening Empowered Committee meetings on MSMEs across all states, and advising banks to restructure qualifying existing stressed MSME loan accounts up to Rs. 25 crores without designating these accounts as Non-Performing Assets (NPA) (RBI MSME Circular, 2019). Banks have been instructed to provide collateral-free loans under credit guarantee coverage for amounts up to Rs. 2 crores to mitigate the problem of collateral unavailability (Maini, 2019). The Government of India has launched Micro Units Development & Refinance Agency Ltd (MUDRA) MUDRA refinance facilities to enhance financial access for small entrepreneurs in the micro sector (Roy, 2018). The government has undertaken many steps for MSMEs. The Micro Units Development & Refinance Agency Ltd (MUDRA) initiative, characterized by the slogan "fund the unfunded," seeks to serve as the ultimate financiers. The Pradhan Mantri Jan Dhan Yojana (PMJDY) was launched to facilitate access to various financial services via individual basic savings accounts. The Trade Receivables Discounting System (TReDS) of the Reserve Bank of India is a digital project that facilitates MSMEs in obtaining accessible funding through the auctioning of their receivables. Additionally, India's seven largest banks have partnered in a Blockchain-based trade financing effort spearheaded by the Indian IT conglomerate InfoSys.

In addition to central government policies, state governments have also implemented various policies. The objective of this chapter is to compare and contrast the MSME schemes of Centre, Maharashtra, and Rajasthan. The chapter describes a few flagship schemes of the Central govt., Maharashtra govt., and Rajasthan Govt. in section 8.2

8.2 Schemes by the Central Government

1. Prime Minister's Employment Generation Program (PMEGP)

The Prime Minister's Employment Generation Program (PMEGP), initiated in 2008 by the Ministry of Micro, Small and Medium Enterprises of the Government of India, aims to provide financial assistance and promote entrepreneurial initiatives among individuals seeking self-employment. One of the primary benefits of PMEGP is the provision of credit-linked subsidy programs that facilitate the establishment of new micro-enterprises in the non-farm sector. The margin money subsidy ranges from 15 percent to 35 percent of the project cost, applicable to projects up to Rs.50 lakh in the manufacturing sector and Rs. 20 lakh in the service sector. Notably, women entrepreneurs benefit from a margin money subsidy of 35 percent in rural areas and 25 percent in urban areas.

2. Loan for upgradation of the existing PMEGP/ MUDRA units: In the year 2018-19, the program expanded its scope by offering additional financial assistance in the form of a second loan to existing successful PMEGP units, specifically for purposes such as expansion, technology adoption, automation, and modernization. As of December 2022, approximately 834,000 units have received margin money subsidies totalling Rs. 20,643 crores, resulting in an estimated generation of employment for around 6.8 million individuals nationwide.

3. Credit Guarantee Scheme for Micro and Small Enterprises (CGTMSE)

The primary objective of this initiative is to encourage first-generation entrepreneurs to pursue self-employment opportunities by providing credit guarantee support for collateral-free and third-party guarantee-free loans to micro and small enterprises (MSEs), particularly in scenarios where collateral is unavailable. A significant advantage of this scheme is the provision of credit guarantees for loans up to Rs.5 crores, which do not require collateral or third-party guarantees. The guarantee coverage is structured as follows: 85 per cent for micro enterprises with loans up to Rs.5 lakhs, 75 per cent for other categories, and 50 per cent for retail activities.

4. Entrepreneurship and Skill Development Program (ESDP)

Through this initiative, the Central Government seeks to promote the establishment of new enterprises, enhance the capacity of existing Micro, Small, and Medium Enterprises (MSMEs), and address the critical need for fostering an entrepreneurial culture within the country. Under the Entrepreneurship cum Skill Development Programme (E-SDP), a comprehensive six-week training program is offered, focusing on entrepreneurship and skill training in diverse sectors, including agro-based products, hosiery, food and fruit processing, carpet weaving, mechanical engineering workshops, heat treatment, electroplating, basic and advanced welding, fabrication and sheet metal work, as well as basic and advanced carpentry, glass, and ceramics. This scheme has conducted 21,956 training programs to date, resulting in a total of 922,270 trainees.

5. Micro & Small Enterprises Cluster Development Programme (MSE-CDP)

The scheme is designed to support the sustainability and growth of Micro and Small Enterprises (MSEs) by addressing prevalent challenges such as technological advancement, skill enhancement, quality improvement, and market access. A key focus of the scheme is the promotion of green and sustainable manufacturing technologies within these clusters. Under this framework, the Central Government has initiated the establishment of Common Facility Centers, including plug-and-play facilities, as well

as support for infrastructure development projects, such as flatted factory complexes.

6. Coir Vikas Yojana - Umbrella Scheme

Coir represents one of the oldest industries in India and plays a significant role in the economies of the country's principal coconut-producing states, including Maharashtra. Its primary objectives include enhancing the utilisation of India's abundant raw materials at economically viable production levels, increasing returns for workers, entrepreneurs, exporters, and other stakeholders, fully exploiting market potential both domestically and internationally, promoting large-scale investments, upgrading technology, machinery, and processes, enhancing skilled manpower, empowering rural women, generating employment, and implementing welfare measures for coir workers. Under this umbrella scheme, various sub-schemes are administered by the Coir Board, including initiatives focused on Science and Technology, Skill Upgradation, and the Mahila Coir Yojana, as well as programs for Domestic Market Promotion, Export Market Promotion, Trade and Industry Related Functional Support Services, and Welfare Measures. Other significant schemes of the Central Government include the Procurement and Marketing Support Scheme, the Fund for Regeneration of Traditional Industries (SFURTI), and Assistance to Training Institutions (ATI).

8.3 Schemes by the State Governments

8.3.1 Rajasthan

1. Investment Promotion Scheme (RIPS)

In 2022, the State Government of Rajasthan implemented the Rajasthan Investment Promotion Scheme (RIPS) to position the state as a premier destination for investment and innovation among global investors, thereby fostering a robust ecosystem conducive to economic growth and employment generation. The scheme is founded on three core pillars: economic growth, employment opportunities, and the establishment of Rajasthan as an attractive investment locale. The primary objective of RIPS is to formulate and execute a progressive investment policy aimed at achieving an annual growth rate of 15 per cent in both the manufacturing and services sectors. This initiative seeks to promote balanced and inclusive regional development by uplifting industrially underdeveloped areas and generating employment opportunities for 1 million individuals.

2. MSME Assistance Scheme

Launched in 2015, this scheme encompasses several key objectives aimed at fostering the development of MSMEs in Rajasthan. These objectives include facilitating access to credit, providing marketing support for MSMEs, assisting small and medium enterprises (SMEs) in capital acquisition, and offering support for startups and emerging entrepreneurs. Additionally, the scheme emphasises quality improvement, environmental conservation, and the revival and rehabilitation of sick micro and small enterprises. It also recognizes outstanding enterprises through awards, promotes infrastructure development, and allocates land for industrial purposes. Furthermore, it includes provisions for equipment financing, initiatives targeting young or first-stage entrepreneurs, and the development of MSME clusters.

8.3.2 Maharashtra

1. Industrial Promotion Subsidy

The Government of Maharashtra offers a comprehensive array of incentives as part of its industrial policy. A primary component of this incentive framework is the Industrial Promotion Subsidy (IPS), which was initially linked to the Value Added Tax (VAT) and the Central Sales Tax (CST), and has since been adapted to align with the Goods and Services Tax (GST) regime. Under this scheme, eligible

micro, small, and medium enterprises (MSMEs) are granted an Industrial Promotion Subsidy based on 100 percent of the Gross State Goods and Services Tax (SGST) incurred on the initial sale of qualifying products that are billed and delivered within Maharashtra.

2. Industrial Policy 2013 & 2019

The Maharashtra Industrial Policy 2013 has placed significant emphasis on promoting small-scale industries. The state government has implemented various fiscal incentives and support measures targeted at less developed regions to enhance the financial stability of micro, small, and medium enterprises (MSMEs). Additionally, the Maharashtra New Industrial Policy 2019 introduces further fiscal incentives for MSMEs and small industries, including exemptions from stamp duty and electricity duty, as well as provisions for power and interest subsidies.

8.4 Comparative Analysis of Central Government vs. Rajasthan

As a result, we have used Python to understand the similarities and differences in the schemes offered, as well as their effectiveness. We present the analysis of the same below.

8.4.1 Techniques Used Comparing Various Schemes

Sentence embedding is particularly useful in this context because it captures the semantic meaning of entire sentences, not just individual words. When comparing descriptions of government schemes, it's essential to recognize that different descriptions may use various terms or phrases but still convey similar ideas. Sentence embedding techniques allow for this deeper understanding by embedding the entire context and relationships between words in a way that captures the true meaning. Unlike traditional similarity measures like Jaccard or Cosine, which focus on word overlap, sentence embedding considers the overall meaning, making it more robust for complex comparisons. This is especially valuable in scenarios like government schemes, where the descriptions might vary significantly in language but share the same core concepts. Thus, sentence embeddings are ideal for capturing the true semantic similarities and dissimilarities between complex descriptions.

8.4.2 Central vs Rajasthan MSME Policy

Table 38. Central vs Rajasthan MSME Policy, 2014

Scheme	Most Similar Scheme	Similarity	Most Dissimilar Scheme	Dissimilarity
Incentives Available to MSMEs under Rajasthan Investment Promotion Scheme 2014	International Cooperation (IC) Scheme	0.91198595	MSME Technology Centres (TCs) (Existing TCs + New TCs + Extension Centres spread all over the country)	0.68763548
Rajasthan MSME Assistance Scheme	ESDP Scheme	0.939048355	ZED Certification Scheme	0.62658741

Source: Authors' own

The comparison between the Rajasthan state schemes and central schemes for MSMEs (Micro, Small, and Medium Enterprises) reveals strong alignment, particularly in terms of goals and target audiences. The following is a detailed explanation of the similarities and differences based on the comparison, focusing on two key schemes under Rajasthan's Rajasthan Investment Promotion Scheme 2014 and Rajasthan MSME Assistance Scheme.

1. Incentives Available to MSMEs under Rajasthan Investment Promotion Scheme 2014

Most Similar Scheme: International Cooperation (IC) Scheme

Similarity Score: 0.91

- The Rajasthan Investment Promotion Scheme 2014 provides various incentives to MSMEs to promote industrial development and investment in the state. It includes tax benefits, subsidies, and other forms of financial support. The International Cooperation (IC) Scheme at the central level shares similar goals, primarily supporting MSMEs to enhance their global presence through international cooperation, participation in international fairs, and technology partnerships. The high similarity score (0.91) reflects that both schemes are designed to support MSMEs in gaining competitive advantages through financial incentives and capacity-building opportunities, though the focus of the IC Scheme is more global in nature.

Most Dissimilar Scheme: MSME Technology Centres (TCs)

Dissimilarity Score: 0.68

- The MSME Technology Centres scheme is focused on providing infrastructure, technical assistance, and skill development for MSMEs across the country. While it also targets MSMEs, its focus is on offering technological support and creating technical centers for training and development, which is more hands-on and infrastructure-based than the financial incentives offered by the Rajasthan Investment Promotion Scheme. This leads to the dissimilarity, with a score of 0.688, showing that while both schemes target MSMEs, their methods of support differ substantially.

2. Rajasthan MSME Assistance Scheme

Most Similar Scheme: Entrepreneurship and Skill Development Programme (ESDP) Scheme

Similarity Score: 0.93

- The Rajasthan MSME Assistance Scheme is designed to provide financial support, training, and assistance to MSMEs in the state, helping them grow and expand their operations. Similarly, the ESDP Scheme focuses on providing entrepreneurial and skill development training to MSMEs across India, supporting business growth through capacity building and skill development programs. The high similarity score (0.939) indicates that both schemes focus heavily on empowering MSMEs through training and financial support, making them closely aligned in terms of objectives.

Most Dissimilar Scheme: ZED Certification Scheme

Dissimilarity Score: 0.627

The ZED (Zero Defect, Zero Effect) Certification Scheme is quite different from the Rajasthan MSME Assistance Scheme, as it focuses on improving the quality and environmental impact of manufacturing processes in MSMEs. The ZED scheme encourages MSMEs to achieve higher quality standards with minimal environmental impact, whereas the Rajasthan scheme focuses more on financial aid and business assistance without a specific focus on

production quality or environmental factors. This leads to a lower similarity score of 0.627, indicating some overlap in supporting MSMEs but with different end goals.

Findings:

1. Strong Alignment: Rajasthan's state MSME schemes are well-aligned with central government schemes, particularly in areas like financial support and skill development. This alignment reflects shared national and state-level priorities in promoting MSME growth and sustainability.
2. Different Methods of Support: While some central schemes, such as the ZED Certification and MSME Technology Centres, focus on improving the technical capabilities, quality, and environmental sustainability of MSMEs, the Rajasthan schemes focus more on providing financial incentives and training support. This shows that while the overarching goal of supporting MSMEs is common, the methods of doing so can differ between state and central schemes.
3. Holistic Support for MSMEs: Both Rajasthan and central government schemes together provide a well-rounded approach to MSME support, ranging from financial incentives to skill development, international cooperation, and technological infrastructure. This wide array of schemes ensures that MSMEs can access various forms of assistance based on their specific needs and growth stages.

8.4.3 Comparative Analysis of Central Schemes Vs. Maharashtra

Table 39. Central Schemes Vs. Maharashtra

Scheme	Most Similar Scheme	Similarity	Most Dissimilar Scheme	Dissimilarity
Maharashtra Industrial Policy 2013-18: State Govt. Schemes:	A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship (ASPIRE)	0.93754454	Science & Technology	0.700159515
PMEGP: Prime Minister's Employment Generation Programme	Prime Minister's Employment Generation Programme (PMEGP)	0.96681474	ZED Certification Scheme	0.592670395
District Industries Centre Loan Scheme	Rojgar Yukt Gaon	0.964963997	ZED Certification Scheme	0.562204677

Source: Authors' own

Maharashtra Industrial Policy 2013-18 Vs Central Schemes

Most Similar Scheme: A Scheme for Promotion of Innovation, Rural Industries, and Entrepreneurship (ASPIRE)

Similarity Score: 0.9375

- The Maharashtra Industrial Policy (2013-18) and ASPIRE share a high degree of similarity. Both focus on promoting industries, with ASPIRE targeting innovation and entrepreneurship in rural areas. The alignment between the two schemes reflects their shared goal of boosting industrial growth, particularly in rural settings.

Most Dissimilar Scheme: Science & Technology

Dissimilarity Score: 0.7002

- Science & Technology, as a broad field focusing on research, innovation, and technology, differs significantly from the Maharashtra Industrial Policy, which is more concerned with state-level industrial development. The gap suggests a divergence in objectives, with Science & Technology being more focused on advancements in research than on industrial or economic growth policies.

PMEGP (Prime Minister's Employment Generation Programme)

- **Most Similar Scheme:** Prime Minister's Employment Generation Programme (PMEGP)
  - **Similarity Score:** 0.96
  - The exact match here reflects that the same scheme is being compared at different levels (central vs. state implementation), confirming that the policies are highly aligned.
- **Most Dissimilar Scheme:** ZED Certification Scheme
  - **Dissimilarity Score:** 0.59
  - The ZED (Zero Defect, Zero Effect) Certification Scheme, which emphasizes quality standards for manufacturing units with an environmental focus, contrasts with PMEGP, which focuses more on employment generation and entrepreneurship. The relatively low similarity indicates differing primary goals between the schemes.

District Industries Centre (DIC) Loan Scheme

Most Similar Scheme: Rojgar Yukt Gaon

Similarity Score: 0.96

- Both the DIC Loan Scheme and Rojgar Yukt Gaon aim to promote local industries and generate employment. The high similarity score highlights their shared emphasis on grassroots-level employment and development.

Most Dissimilar Scheme: ZED Certification Scheme

Dissimilarity Score: 0.56

- Again, the ZED Certification Scheme appears as the most dissimilar, reflecting its focus on manufacturing excellence and environmental sustainability, which differs from the DIC Loan Scheme's focus on providing financial assistance to small industries.

Findings:

- **High Similarity:** The high similarity scores (ranging from 0.93 to 0.97) suggest that state and central schemes in Maharashtra are closely aligned with their most similar counterparts. These high scores indicate that the goals and policies in these cases are nearly identical or target very similar outcomes, especially in industrial and employment generation schemes.
- **Dissimilarity:** The dissimilarity scores, ranging from 0.56 to 0.70, reflect notable, but not extreme, differences. The ZED Certification

Scheme appears consistently as the most dissimilar of the two schemes, indicating that its focus on quality standards and environmental impact is distinct from the industrial and employment-driven goals of the other schemes. Similarly, the Science & Technology scheme's broader focus makes it the most dissimilar to the Maharashtra Industrial Policy.

Maharashtra MSME Policy, 2023 Vs Central Schemes

The study also compares central govt. schemes and 2023 MSME policies of Maharashtra. The results are presented in Table 40.

Table 40. Central Schemes Vs Maharashtra 2023 Policy

Scheme	Most Similar Scheme	Similarity	Most Dissimilar Scheme	Dissimilarity
Industrial Promotion Subsidy (IPS)	MSME Champions Scheme	0.964856437	Entrepreneurial and Managerial Development of SMEs through Incubators	0.885501862
Interest Subsidy Incentive	Credit Guarantee Scheme for Subordinate Debt (CGSSD) for Stressed MSMEs	0.976532513	Tool Rooms and Technical Institutions - A Component of Infrastructure Development & Capacity Building	0.893927495
Exemption from Electricity Duty	MSME Champions Scheme	0.960160317	SELF RELIANT INDIA (SRI) FUND Empowering MSMEs for Aatmanirbhar Bharat	0.89833795
Waiver of Stamp Duty	MSME Champions Scheme	0.960849808	Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)	0.898003795
Power tariff Subsidy	Raising and Accelerating MSME Performance (RAMP)	0.965396241	Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)	0.909774352
Additional Incentives for Strengthening MSMEs	Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)	0.927757726	Entrepreneurship and Skill Development Programme (ESDP) Scheme	0.759038204
Skill development, employment and entrepreneurship training center for tribal candidates	Entrepreneurial and Managerial Development of SMEs through Incubators	0.933926563	Procurement and Marketing Support (PMS) Scheme	0.824341237

Direct Loan Scheme	Credit Linked Capital Subsidy for Technology Upgradation (CLCSS)	0.940820822	Micro & Small Enterprises Cluster Development Programme (MSE-CDP) Scheme	0.879327729
Development of Fisheries Co Operatives Societies	Assistance to Training Institutions (ATI) Scheme	0.907711632	Credit Guarantee Scheme for Micro & Small Enterprises(CGTMSE)	0.803860248

Source: Authors' own

The comparison between Central and Maharashtra government schemes for 2023 reveals a detailed picture of how closely aligned state-level schemes are with their central counterparts in terms of objectives and target groups, particularly in the industrial and MSME sector. The use of sentence embeddings provides a nuanced way to analyse the semantic and structural similarities between these schemes. Here's a more in-depth explanation of the findings:

1. Industrial Promotion Subsidy (IPS)

Most Similar Scheme: MSME Champions Scheme

Similarity Score: 0.96

- The Industrial Promotion Subsidy (IPS) focuses on providing financial incentives and support to industries to boost their growth, particularly in MSMEs. The MSME Champions Scheme is a similar initiative at the central level, designed to help MSMEs grow by addressing challenges, providing subsidies, and facilitating business opportunities. The high similarity score indicates a strong alignment in the goals of both schemes, especially their shared focus on MSME growth and support.

Most Dissimilar Scheme: Entrepreneurial and Managerial Development of SMEs through Incubators

Dissimilarity Score: 0.88

- While both schemes target MSMEs, the Entrepreneurial and Managerial Development of SMEs through Incubators is more focused on nurturing innovation and startup ecosystems by providing managerial skills and incubator support, which makes it different from the broader financial and industrial support provided by IPS.

2. Interest Subsidy Incentive

Most Similar Scheme: Credit Guarantee Scheme for Subordinate Debt (CGSSD) for Stressed MSMEs

Similarity Score: 0.97

- The Interest Subsidy Incentive offers financial support to industries by providing subsidies on interest rates, much like the Credit Guarantee Scheme for Subordinate Debt (CGSSD), which helps stressed MSMEs by offering financial relief and restructuring support. The similarity in these schemes reflects their shared goal of providing financial support to industries facing stress, particularly in MSMEs.

Most Dissimilar Scheme: Tool Rooms and Technical Institutions

Dissimilarity Score: 0.89

- The Tool Rooms and Technical Institutions scheme is focused on building infrastructure and

technical skills, which is significantly different from the financial relief provided by interest subsidy schemes. This difference in focus creates a higher dissimilarity score.

3. Exemption from Electricity Duty

Most Similar Scheme: MSME Champions Scheme

Similarity Score: 0.96

- The Exemption from Electricity Duty offers cost reductions for industries, much like the MSME Champions Scheme, which supports MSMEs in multiple ways, including financial relief. Both schemes provide incentives for lowering operational costs, thus showing a high degree of similarity.

Most Dissimilar Scheme: SELF RELIANT INDIA (SRI) FUND

Dissimilarity Score: 0.90

- The SELF-RELIANT INDIA FUND aims to empower MSMEs for a self-reliant economy but focuses more on investments and boosting innovation than on direct cost exemptions. This shift in the method of support leads to a moderate dissimilarity score.

4. Waiver of Stamp Duty

Most Similar Scheme: MSME Champions Scheme

Similarity Score: 0.96

- The Waiver of Stamp Duty provides financial relief to businesses by reducing administrative costs, aligning with the MSME Champions Scheme's goal of facilitating ease of doing business for MSMEs. The focus on financial incentives and lowering entry barriers creates this strong similarity.

Most Dissimilar Scheme: Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)

Dissimilarity Score: 0.89

- The CGTMSE provides credit guarantees to MSMEs, which is a financial support system but focused more on enabling loans and credit, unlike the Waiver of Stamp Duty, which reduces the upfront costs of registration. This difference in financial approach leads to their categorization as dissimilar.

5. Power Tariff Subsidy

Most Similar Scheme: Raising and Accelerating MSME Performance (RAMP)

Similarity Score: 0.9654

- The Power Tariff Subsidy lowers energy costs for industries, much like the RAMP scheme, which aims to enhance MSME productivity by providing financial and operational support. Both schemes focus on reducing operational overheads for businesses, which accounts for their high similarity score.

Most Dissimilar Scheme: Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)

Dissimilarity Score: 0.9098

- The CGTMSE is more focused on providing loan guarantees, while the Power Tariff Subsidy directly reduces energy costs. This difference in financial focus (loans vs. operational subsidies) explains their dissimilarity.

6. Additional Incentives for Strengthening MSMEs

Most Similar Scheme: Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)

Similarity Score: 0.9278

- Both schemes provide financial backing to MSMEs, but in different forms. CGTMSE supports loans, while the Additional Incentives for

Strengthening MSMEs provide broader financial incentives to enhance their capabilities, leading to a high similarity score.

Most Dissimilar Scheme: Entrepreneurship and Skill Development Programme (ESDP)

Dissimilarity Score: 0.75

- The ESDP focuses more on developing skills and entrepreneurship, contrasting with the broader financial incentives aimed at strengthening MSMEs in the Additional Incentives scheme.

7. Skill Development, Employment, and Entrepreneurship Training for Tribal Candidates

Most Similar Scheme: Entrepreneurial and Managerial Development of SMEs through Incubators

Similarity Score: 0.93

- Both schemes aim at nurturing entrepreneurial skills and providing training, particularly in marginalized communities like tribal candidates. This focus on skill development explains their high similarity score.

Most Dissimilar Scheme: Procurement and Marketing Support (PMS) Scheme

Dissimilarity Score: 0.82

- The PMS Scheme focuses on market access and procurement, which is operational rather than developmental, causing a difference in objectives between the two.

8. Direct Loan Scheme

Most Similar Scheme: Credit Linked Capital Subsidy for Technology Upgradation (CLCSS)

Similarity Score: 0.94

- The Direct Loan Scheme and CLCSS both focus on providing financial assistance to MSMEs, specifically for capital investment and technological upgrades. Their common focus on improving financial access to small businesses creates a strong similarity.

Most Dissimilar Scheme: Micro & Small Enterprises Cluster Development Programme (MSE-CDP)

Dissimilarity Score: 0.88

The MSE-CDP focuses on cluster development, which involves infrastructure and group-based support, contrasting with the individual-focused financial support of the Direct Loan Scheme.

9. Development of Fisheries Co-operative Societies

Most Similar Scheme: Assistance to Training Institutions (ATI) Scheme

Similarity Score: 0.90

- Both schemes support cooperative societies and institutions through financial and training assistance, which explains their high similarity.

Most Dissimilar Scheme: Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)

Dissimilarity Score: 0.80

- The CGTMSE focuses on providing credit guarantees to MSMEs, which is fundamentally different from the cooperative development model of the fisheries scheme, leading to their dissimilarity.

Findings:

- **High Similarity Scores:** Most schemes have high similarity scores, generally above 0.93, indicating a strong alignment between Maharashtra's state schemes and the corresponding central schemes. This shows that both levels of government are focusing on similar objectives, particularly in supporting MSMEs and industrial growth.
- **Dissimilarity Scores:** The dissimilarity scores range from 0.75 to 0.91, highlighting areas where

the objectives or implementation focus differ. These differences are typically seen in schemes with more specialised goals, such as the Credit Guarantee Scheme for Micro & Small Enterprises and Entrepreneurship and Skill Development programs.

- **Frequent Occurrence of MSME Champions and CGTMSE:** Schemes like the MSME Champions Scheme and CGTMSE appear frequently, both in the most similar and most dissimilar categories. This reflects their broad applicability and relevance across various areas of MSME support, including financial backing, technological development, and operational assistance. However, their broad scope also leads to contrasting purposes with more niche schemes.

This analysis highlights that while central and state-level schemes often share similar goals, there are still significant differences based on specific targets, operational methods, and focus areas.

8.5 Maharashtra vs Rajasthan

The comparison between Maharashtra's and Rajasthan's MSME schemes sheds light on the degree of alignment between key policies in both states. By evaluating the similarity scores for Rajasthan's incentives Available to MSMEs under the Rajasthan Investment Promotion Scheme 2014 and Rajasthan MSME Assistance Scheme with three major Maharashtra programs—Maharashtra Industrial Policy, PMEGP (Prime Minister's Employment Generation Programme), and the District Industries Centre Loan Scheme—we can draw insights into how these schemes relate to one another in terms of their structure, goals, and methods.

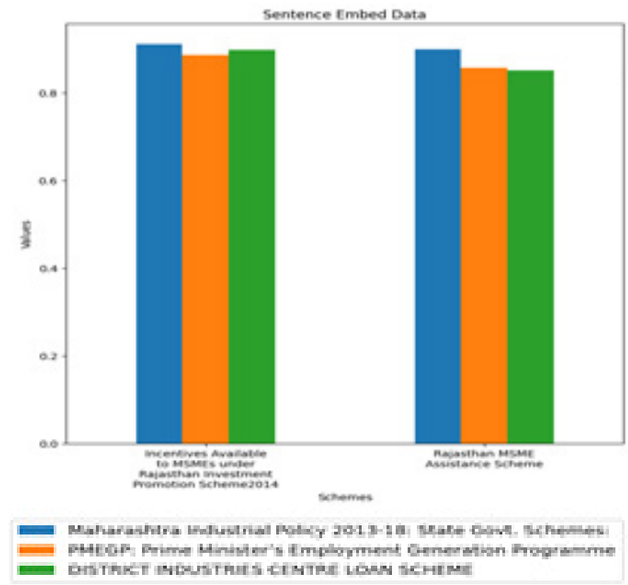


Figure 66. The Relationship Between Maharashtra and Rajasthan's MSME Schemes

Source: Authors' own

8.5.1. Incentives Available to MSMEs under Rajasthan Investment Promotion Scheme 2014

Maharashtra Industrial Policy: 0.91

This high similarity score shows that the Maharashtra Industrial Policy is closely aligned with the Rajasthan Investment Promotion Scheme. Both policies likely provide similar types of financial incentives, subsidies, and infrastructural support aimed at promoting MSMEs, encouraging investments, and fostering industrial growth within their respective states. The slight difference between the policies might come from specific provisions or regional economic priorities, but overall, they share a common goal of boosting MSME activity.

PMEGP: 0.88

- The PMEGP has a slightly lower similarity score when compared with Rajasthan's scheme, likely because PMEGP is a central government initiative with a broader national scope. While PMEGP does

provide financial assistance and helps generate employment through the promotion of MSMEs, its goals and methods may differ slightly in terms of the specific types of incentives and grants offered compared to Rajasthan's more focused regional investment policy.

District Industries Centre Loan Scheme: 0.8985

- The District Industries Centre Loan Scheme is also highly similar, but slightly less so than the Maharashtra Industrial Policy. This scheme is more targeted toward providing loans and financial support at the district level, which may not entirely align with the broader investment promotion goals of Rajasthan's scheme, though both focus heavily on financing MSMEs.

Rajasthan MSME Assistance Scheme

Maharashtra Industrial Policy: 0.90

- The Maharashtra Industrial Policy continues to show the highest similarity score here, indicating that it shares many core objectives with the Rajasthan MSME Assistance Scheme. Both policies likely offer comprehensive support to MSMEs, including financial assistance, training, infrastructure development, and incentives aimed at boosting MSME productivity and growth within their respective states. The policies may also include provisions for promoting innovation, skill development, and entrepreneurship.

PMEGP: 0.85

- The PMEGP score is slightly lower here than in the first category, suggesting that while it aligns with the Rajasthan MSME Assistance Scheme, the two programs have some differences. PMEGP's focus is more on generating employment through MSME promotion, while Rajasthan's assistance scheme might place more emphasis on broader MSME development, including skill training and operational support.

District Industries Centre Loan Scheme: 0.8517

- This is the least similar scheme in this category, though the difference is minimal. The District Industries Centre Loan Scheme is more localized and focused on loan assistance at the district level, which may not fully align with the broader scope of the Rajasthan MSME Assistance Scheme. While both schemes provide financial assistance, the goals and mechanisms might differ slightly.

Interpretation

- **Maharashtra Industrial Policy Consistency:** The Maharashtra Industrial Policy consistently shows the highest similarity scores in both comparisons (0.9123 for the Rajasthan Investment Promotion Scheme and 0.8997 for the Rajasthan MSME Assistance Scheme). This suggests that Maharashtra's industrial policy is comprehensive and broad, aligning well with Rajasthan's MSME promotion schemes. It likely includes similar provisions for financial incentives, infrastructure development, and overall MSME growth, making it highly relevant to Rajasthan's objectives.

PMEGP and District Industries Centre Loan Scheme: The PMEGP and District Industries Centre Loan Scheme show lower similarity scores compared to the Maharashtra Industrial Policy, with both ranging between 0.85 and 0.89. These scores suggest that while both schemes are aligned with Rajasthan's MSME policies, their scope or mechanisms may differ slightly. The PMEGP is a national program with a focus on employment generation, while the District Industries Centre Loan Scheme targets local financial needs. These narrower focuses may account for

the lower similarity compared to the more holistic Maharashtra Industrial Policy.

8.6 Conclusions

Maharashtra Industrial Policy's Alignment: The Maharashtra Industrial Policy is the most closely aligned with Rajasthan's MSME schemes, reflecting a shared commitment to promoting MSME growth, offering financial incentives, and supporting industrial development. This consistency highlights the policy's adaptability and relevance to broader MSME goals.

1. **PMEGP and District Industries Centre Loan Scheme's Role:** While these schemes are relevant, their slightly lower similarity scores indicate they may have more focused or specialized objectives (employment generation for PMEGP and district-level financing for the Loan Scheme), making them less directly comparable to Rajasthan's broader MSME support policies.
2. **Strategic Policy Framework:** Both Maharashtra and Rajasthan show a strong policy framework aimed at MSME development, with similarities across various schemes. This alignment underscores the importance of MSME promotion at both the state and central levels, ensuring these enterprises receive support through various means, be it financial, infrastructural, or capacity-building assistance.

CHAPTER 9

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary and Conclusions

MSMEs are critical for sustainable development in India, given their role in economic growth, employment generation, and industrial development. Despite their importance, the MSME sector is facing numerous challenges. Various studies have highlighted both demand-side and supply-side problems in terms of labour issues, marketing, procuring raw materials, availing formal credit, and international competition. Further, a few studies also highlight huge credit gaps in this sector. This study estimated the credit gap to be around $685 billion in 2024-25 and is expected to rise to around $1 trillion by the end of 2030-31. Further, this study assessed the credit utilisation pattern and its impact on employment generation, productivity improvements, exports, technology upgradation, and infrastructure development at the firm level. Further, the existing research tends to be region-specific rather than broad-based; this study covers multiple regions. MSMEs operate in different sectors and are varied in enterprise sizes, having a presence in different regions; a specific study cannot capture the diverse challenges faced by MSMEs. Therefore, a detailed study covering multiple states is necessary to understand the current situation regarding the availability of formal credit and challenges and their impacts covering semi-urban and rural areas. MSMEs in rural areas face different challenges compared to urban areas, and a study covering rural areas will contribute significantly to the existing literature.

The study used a structured questionnaire to collect information from the MSMEs, covering varied aspects and challenges in accessing formal credit, utilisation of credit, and impact on employment generation, technology upgradation, export performance, etc. We conducted surveys on 63 samples from five districts in Maharashtra and 58 samples from four districts in Rajasthan. Districts from the states are selected based on the presence of MSMEs in rural and semi-urban areas. Micro enterprises dominate surveyed samples in both states. In terms of activities, the majority of the sample is covered by services and manufacturing sectors.

The results of the study suggest that 92 percent of MSMEs rely on both internal and institutional finance. Only a limited sample depends on either internal or institutional finances. Further, the study finds that substantial barriers exist to avail loans from various financial institutions such as commercial banks and NBFCs. It has been noticed that access to NBFC is very limited in Rajasthan, but they account for almost 30 formal funding sources in Maharashtra. Among others, high collateral requirements, audited financial statements, and other documents are significant obstacles across MSMEs. In addition, short-repayment periods, high interest rates, and the presence of intermediaries are other major issues for MSME sectors. Further, Micro and small firms face far greater difficulties than medium firms. In terms of activities, the manufacturing and services sectors are more successful in obtaining substantial loans than firms from agriculture.

In terms of credit utilisation, most of the firms utilise them for their intended purpose. However, small and medium firms utilise credit for working capital, which is essential for their business growth. In terms of credit size, the study shows a significant difference between micro, small, and medium firms. The average credit size is much higher for medium firms than for small or micro firms. The average credit size is related to the firm's size and reputation. Further, the average credit also varies between Rajasthan and Maharashtra, with the latter being higher.

The impact assessment analysis suggests that credit is essential for the sustainability of the MSME sector. Credit has a positive impact on sales, employment generation, technology, production and infrastructure improvement. Employment expansion is more visible for small and medium firms than micro firms. Further, the results indicate that the positive effects are more pronounced in Maharashtra than in Rajasthan. The credit impact on exports is limited since most of the firms are not engaged in export activity. More importantly, the credit size positively influenced the impact across groups. Overall, formal credit is vital to the MSME sector for modernization, infrastructure improvement, productivity enhancement, and employment generation.

In the final part of this study, we estimated the credit gap for the MSME sector by using historical data. For this purpose, we assumed that the maximum credit potential for the MSME sector is equal to their contribution to GDP. The actual credit is projected based on past data. The estimation suggests that there is a huge credit gap for the MSME sector. The credit gap is estimated to be around $685 billion in 2024-25 and is expected to go up to $1 trillion by the end of 2030-31. The estimated credit gap for Maharashtra is $137 billion in 2024-25 and is expected to go up $200 billion by the end of 2030-31. In the case of Rajasthan, the credit gap is estimated to be $34 billion in 2024-25 and is expected to go up $50 billion by the end of 2030-31.

Recommendations of the Study

Based on the findings, the study provides a number of recommendations to overcome the credit challenges and diversify the financial sources as follows:

(1) Since the majority of the MSMEs depend on institutional finance, the availability of formal credit at a reasonable rate is crucial for the sustainability of the MSME sector.

(2) Banks seek collateral and audited financial statements to sanction credit, which is a challenge for micro firms. Alternative criteria should be explored, as in the case of NBFC loans. NBFCs use various other documents like cash book transactions, bank statements of six months, etc., to assess the creditworthiness of the borrower and lend capital without collateral. Banks should also follow these practices for lending to the MSME sector. In addition, other alternatives, such as supply chain finance and factoring options, should also be explored.

(3) Formal lending institutions must consider alternative documents like personal guarantees, bank statements, deposits or credit accounts, GST data, and standardized services like credit cards to assess creditworthiness and lend capital.

(4) Further, new and micro-enterprises face more severe credit challenges than established and medium firms, so there should be special platforms and credit facilities for them. In this context, banks and financial institutions should create and provide special facilities to finance to micro-sector based on alternative criteria. In addition, a digital banking system should be developed to facilitate personalized and customized services to the micro sector.

(5) The formal lending institutions are concentrated in urban areas, and very few are in rural or remote

areas. There should be an expansion of lending institutions in rural or remote areas.

(6) Evidence from the survey suggests that the application procedure and sanctioning of loans is a very complex system and requires a set of documents. Firms need experts/intermediary help for the application. This acts as a burden for firms. Simplification of procedures would help firms. This will, to a large extent, eliminate the intermediary system and reduce the burden.

(7) The study finds that are present in sanctioning credit by banks and NBFC as there is an absence of formal assessment of the creditworthiness of MSMEs. This can be addressed by applying technology such as paperless applications, electronic KYC, and cluster lending approaches.

(8) Collateral-free lending to the MSME sector should be increased to Rs. 30 lakhs as most of the micro sector borrows within the range of Rs.10 to 30 lakh.

(9) The observations during the survey showed that a single policy may not be appropriate for meeting the varied requirements of MSMEs. The guidelines could be relaxed for micro-enterprises in comparison to small and medium enterprises. The banks can be given guidelines to deal with micro-enterprises away from small and medium enterprises.

(10) Despite all the awareness programs, there is a lack of awareness about various government schemes among MSMEs, particularly in rural areas and semi-urban areas. So, awareness about MSME schemes must be at different levels involving the government. Officials, banks, NBFC, MSME associations, and local authorities.

(11) Banks deem the MSME sector insufficiently profitable; the smaller the firm, the greater the financing risk associated with this sector. Thus, banks use the CIBIL score as a measure to extend credit to MSMEs. The CIBIL score is affected when the MSMEs default on repayments, particularly in the micro sector. The working capital cycle of MSME is strained; thus, the default is unavoidable. It is suggested that banks should look at the credit history and revenue generation of the current period, as well as the potential of business expansion as an alternative. In addition, other alternatives, such as supply chain finance and factoring options, should be explored to increase credit flow to the micro-sector.

(12) Banks prefer extending loans to the MSMEs operating in the manufacturing and services sector. The agricultural and other sectors are deprived of the credit. Further, the loan size is smaller in the agriculture sector than in the other sectors. Thus, there is a need for tailored financial interventions to address the specific credit needs and challenges of the different sectors. Open banking and open finance can facilitate more innovative and tailored financing options for MSMEs.

(13) Creation of a credit guarantee agency specific to the MSME sector, and they should be operating either privately or under local government. This credit agency should be refinanced at a concession rate with minimum requirements to mitigate credit constraints.

(14) Despite the refinance facilities by NABARD and MUDRA, the refinance amount is very small compared to the credit required. This study recommends increasing the refinance amount substantially. Therefore, the refinance amount should be increased to reduce the credit gap.

(15) A Risk mitigation mechanism should be created to reduce the risk of lending to the MSME sector, given that MSME lending is perceived as high risk. In this context, credit to the MSME sector must be insured in partnership with insurance companies. This will encourage banks and NBFC to provide more credit to unbankable MSMEs.

Insurance coverage helps MSMEs protect their assets and manage risk that increases their creditworthiness.

(16) The partnership approach should be followed to increase insurance coverage of MSMEs. The government must work with the local government and the financial sector, leveraging the existing support system.

(17) Although a large number of clusters are being created, the system of clustered financing is missing in India. Banks and NBFC must tie up with clustered for financing. Further, clustered should be created product-wise rather than place-wise.

(18) A large number of MSMEs are in the informal sector and are not registered. This creates hindrances for banks and other funding agencies in providing credit and overall development of the MSME sector. Currently, the government is encouraging registration through Udyog Aadhar. Awareness about the registration benefits should be emphasized and must reach all. Currently, the registration process is cumbersome and must be simplified.

(19) More investment should be made in digital infrastructure to improve access to digital transaction and commerce platforms in rural areas.

(20) The awareness about different schemes and credit facilities is lower among micro sectors. Efforts should be made to increase the awareness for increasing the effectives of these schemes.

(21) Financial and Digital literacy programs must be conducted at the local level involving the MSMEs, local authorities, district-clustered centres, Banks, MFIs, NBFCs, and the National Centre for Financial Education (NCFE).

(22) Above all, business empowerment should be created to facilitate ease of doing business.

(23) For higher employment generation, higher credit should be given to the manufacturing and agri/food processing sectors. The potential for employment generation is higher in small enterprises in Rajasthan. In the case of Maharashtra, there is a higher potential for employment generation in the micro and medium sectors.

ANNEXURE I

SURVEY QUESTIONNAIRE - RAJASTHAN IMPACT EVALUATION OF CREDIT UTILISATION AND OUTCOME OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES): A STUDY OF SELECT STATES OF INDIA

This study is being conducted by Symbiosis School of Economics and funded by NABARD. We would like to mention that we have no links with Government and Companies and the inputs shared by you will be absolutely confidential and will be used for research purposes only. The data collected will be only shared with NABARD and no other organisation shall have a claim. The findings of this study will lead to awareness of issues faced by MSMEs. If you have any queries related to any question you can surely interrupt in between. We shall be grateful, if you could spare 20-25 minutes of your time and answer a few questions.

Category MSME	State	District	Block	Location	Interviewer name

A. About the Firm/ Organization

1. Name of the respondent
2. Designation
3. Name of firm:
4. Year of Establishment _____
5. Have you registered your enterprise under Udyog Aadhar 1. Yes 2. No
6. What is the category of the Unit?

   a. Micro b. Small c. Medium d. Ancillary e. Other

7. Which industry closely describes your business

a. Manufacturing b. Services c. Agri/Food processing d. Mixed e. Infrastructure Support services

8. Which is the main product/ activity/service _____
9. Name of the owner of enterprise/ CEO/head_____

10. (10) Gender of the owner: a. Male b. Female Others

11. Is this an ancestral occupation a. Yes b. No

B. Credit Availability and Challenges

12. What is the main source of finance for running your enterprise?

a. Internal b. Institutional c. Both

13. Source of Internal finances

Sources	2018	2019	2020
Own savings			
Mortgaging own property/ assets, gold			
Borrowing from friends/relatives			

14. Sources of institutional finances

Sources	2018	2019	2020
Scheduled Commercial			
NBFC's			
Cooperative Banks			
RRB			
Petty lenders			

15. Sources of finance at present

Sources of finance	2018	2021
Internal (%)		
Institutional (%)		

16. Details of percentage of finances arranged

Sources of Finance	2018	2019	2020	2021
Public sector Bank				
Private banks				
Cooperative Banks				
NBFCs				
Own capital				
Informal credit				
Trade credit				

Others				
Total Capital employed (Rs.)				
Fixed Assets (Rs.)				
Total Equity (Rs.)				

17. Did you face any difficulty in procuring credit /refinance facility? Any reasons (Please tick)

a. High collateral requirements

b. Audited financial statements for last three to five years

c. Lengthy and cumbersome documentation

d. The required documentations were not available

e. Very long time taken for approvals

f. Shorter repayment period

g. Sanction of insufficient amount of loans and advances

h. Any Other_____

18. Name of the Bank and Branch with whom you are dealing for Refinance

Bank_____ Branch_____

Loan amount_____(approx.) Other facilities availed_____

19. Do you find the refinance facility more helpful compared to other schemes of banks or NBFCs

Yes No

If yes, state the reasons_____

20. Availability of credit as per the planning

a. Yes b. No

21. If No what are problems:

C. Utilisation of Credit

22. For which purpose did you avail NABARD refinance facility (Tick one, if many then specify the percentage)

a. Production ____% b. Marketing _____% c. Procurement____%

d. Infrastructure development _____% e. Import and Export_____%

23. Which activities you have invested refinance

	2018	2019	2020	2021
Marketing				
Procurement				
Production				
Import and Export				

24. Will you avail refinance facility in future? If yes, for which purpose. Specify at least one

a. Production b. Marketing c. Procurement d. Import and Export

25. Did you utilize the loan for the purpose it was availed?

Yes No

If No, state the purpose for which it was utilized

_____

26. Type of technology introduced or upgraded (Number of machinery)

	Before loan	After loan
Manual		
Semi-automatic		
Automatic		
Import and Export		

D. Performance Parameters

27. How did credit help you?

a. Business expansion b. employment c. infrastructure d. export, e. production f. technology g. capacity expansion

28. Annual turnover of the firm

	FY 2018	FY 2019	FY 2020	FY 2021
Annual Sales (Rs.)				
Production (Rs.)				
Exports (Rs.)				
Employment (Numbers)				
Production Capacity of the main product				
Actual Production				

Inventory levels				
Production costs				
Operating profits (before tax & interest payment)				
Operating profits (after deducting interest payment & before taxes)				

29. How much is your original investment in plant and machinery?

Manufacturing	**Services**	**Agri- processing**
Up to 25 lakhs	Up to 10 lakhs	Up to 5 lakhs
More than 25 lakhs to 5 crores	More than 10 lakhs to 2 crores	More than 5 lakhs to 20 lakhs
More than 5 crores to 10 crores	More than 2 crores to 5 crores	More than 20 lakhs

30. Details of the manpower involved

Particulars	**2018**	**2019**	**2020**	**2021**
Casual labourers				
Skilled labourers				
Marketing				
Production (Technical staff)				
Other admin				

31. NABARD refinance facility has helped us increase/ upgrade

Particulars	**increase/ upgrade or decrease/downgrade**
Sales	
Production	
Marketing	
Procurement (New raw material/ semi-finished goods	
exports	
Employment	
Technology	
Infrastructure	

32. Do you think if there were better infrastructural facilities, it will help in better utilization of credit?

Yes No

If yes, what are the constraints? _____

_____

33. Loan Repayment Details: (NABARD Refinance)

	2018	2019	2020	2021
Amount of loan taken				
Interest rate				
Interest amount				
Total Loan amount paid back				
Outstanding Debt				

34. Did you ask for a rescheduling of repayment?

If yes, mention the amount.

35. What is the CIN number of your enterprise _____

E. Awareness About Government Schemes for MSME sector

36. How did you receive information on Refinance scheme.

Are you aware of the Government schemes for MSMEs (a) Yes (b) No

If yes, name them

_____

_____

37. The advantages of refinance.

(a) high credit volume (b) easy term and condition, (c) lower interest rate (d) long repayment period

38. How many have been availed by your organization?

_____

If not availed, Why(Reasons)

_____

39. What is the CIN number of your enterprise _____

ANNEXURE II

SURVEY QUESTIONNAIRE - MAHARASHTRA IMPACT EVALUATION OF CREDIT UTILISATION AND OUTCOME OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES): A STUDY OF SELECT STATES OF INDIA

This study is being conducted by Symbiosis School of Economics and funded by NABARD. We would like to mention that we have no links with Government and Companies and the inputs shared by you will be absolutely confidential and will be used for research purposes only. The data collected will be only shared with NABARD and no other organisation shall have a claim. The findings of this study will lead to awareness of issues faced by MSMEs. If you have any queries related to any question you can surely interrupt in between. We shall be grateful, if you could spare 20-25 minutes of your time and answer a few questions.

Category MSME	State	District	Block	Location	Interviewer name

A. About the Firm/ Organization

1. Name of the respondent
2. Designation
3. Gender of the owner: a. Male b. Female Others
4. Name of the owner of Unit_____
5. Name of firm:
6. CIN number (If applicable) _____
7. Year of Establishment _____
8. Have you registered your enterprise under Udyog Aadhar 1. Yes 2. No
9. What is category of the Unit?

a. Micro [ ] b. Small [ ] c. Medium [ ] d. Ancillary [ ] e.Other [ ]

10. Which industry closely describes your business (Tick √)

a. Manufacturing [ ] b. Services [ ] c. Agri/Food processing [ ] d. Mixed [ ] e.

Infrastructure Support services [ ]

11. Which is the main product/ activity/service _____

A. Credit Availability and Challenges

12. What is the main source of finance for running your enterprise? (Tick √)

a. Internal : Own Saving [ ] Mortgage own property [ ] Loan from friends & relatives [ ]

b. Institutional: Commercial Bank [ ] NBFC's [ ] Cooperative Bank [ ] RRB [ ] Petty lenders [ ]

c. Both :

13. Did you face any difficulty in procuring credit facility? Any reasons Specify (Please refer Annexure-I) :___
_____

14. Name of the Bank and Branch from which credit availed

(i) Bank: _____ (ii) Branch: _____

(iii) Loan amount_____(approx.) (iv) Other facilities availed_____

B. Utilization of Credit

15. For which purpose did you avail credit facility (Please refer Annexure-I)

:

16. Will you avail credit facility in future? If yes, for which purpose. Specify at least one

a. Production [ ] b. Marketing [ ] c. Procurement [ ] d. Import and Export [ ]

17. Did you utilize the loan for the purpose it was availed?

Yes [ ] No [ ] If No (Reasons):_____

18. Any upgradation in technology used for business after availing credit: Yes/No

C. Performance Parameters

19. How did credit help you (Tick √)?

a. Business expansion [ ] b. employment [ ] c. infrastructure [ ] d. export [ ] e. production [ ] f. technology [ ] g. capacity expansion [ ]

20. Annual turnover of the firm:

21. How much is your original investment & Turnover in plant and machinery?

Manufacturing & Services	Tick √
Investment up to 1 Crore & turnover up to Rs. 5 crore	
Investment up to 10 Crore & turnover up to Rs. 50 crore	
More than 20 crores to 250 crores	

22. Details of the manpower involved (Specify Number)

Casual Worker: Skilled Labor: Marketing: Production:

23. Credit facility has helped us increase/ upgrade (Tick √)

Sales [ ] Production [ ] Marketing [ ] Procurement [ ] Exports [ ] Employment [ ] Technology [ ] Infrastructure [ ]

24. Did you ask for a rescheduling of repayment?

If yes, mention the amount:

D. Awareness About Government Schemes for MSME sector

25. Are you aware of the Government schemes for MSMEs (a) Yes (b) No

If yes, name them

_____

ANNEXURE III

SURVEY QUESTIONNAIRE - MAHARASHTRA IMPACT EVALUATION OF CREDIT UTILISATION AND OUTCOME OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES): A STUDY OF SELECT STATES OF INDIA

This annexure forms the part of the questionnaire on Impact Evaluation of Credit Utilization and Outcome of Micro, Small and Medium Enterprises (MSMEs): A Study of Select States of India. This annexure includes the options to the respective questions to assist interviewer and interview in answering the questions.

1. Options pertaining to the question no. 13

1 High collateral requirements

2 Audited financial statements for last three to five years

3 Lengthy and cumbersome documentation

4 The required documentations were not available

5 Very long time taken for approvals

6 Shorter repayment period

7 High collateral requirements

8 Audited financial statements for last three to five years

9 Lengthy and cumbersome documentation

10 The required documentations were not available

11 Very long time taken for approvals

12 Any other reason

2. Options pertaining to the question no. 15

Production

Marketing

Procurement

Import & Export

Infrastructure Development

ANNEXURE IV

SIMILARITIES AND DISSIMILARITIES

	Promotion of MSMEs in NER & Sikkim	KHADI GRAMODYOG VIKAS YOJANA - Umbrella Scheme	A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship (ASPIRE)	International Cooperation (IC) Scheme	National SC-ST Hub Scheme	Prime Minister's Employment Generation Programme(PMEGP)	2nd Loan for up-gradation of the existing PMEGP/REGP/ MUDRA units	Credit Guarantee Scheme for Micro & Small Enterprises(CGTMSE)	Micro & Small Enterprises Cluster Development Programme(MSE-CDP) Scheme	Entrepreneurship and Skill Development Programme(ESDP) Scheme	Assistance to Training Institutions (ATI) Scheme	Coir Vikas Yojana-Umbrella Scheme	Procurement and Marketing Support (PMS) Scheme
Promotion of MSMEs in NER & Sikkim	1	0.064	0.08450704225	0.08743169399	0.06504065041	0.07317073171	0.07317073171	0.08196721311	0.1923076923	0.04587155963	0.1007194245	0.0786163522	0.0921985816
KHADI GRAMODYOG VIKAS YOJANA - Umbrella Scheme	0.064	1	0.08333333333	0.03816793893	0.0625	0.09523809524	0.06153846154	0.078125	0.06976744186	0.1086956522	0.04651162791	0.0447761194	0.0581395348
A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship (ASPIRE)	0.08450704225	0.08333333333	1	0.07534246575	0.05952380952	0.125	0.07142857143	0.125	0.08653846154	0.1076923077	0.1212121212	0.0598591549	0.0873786407
International Cooperation (IC) Scheme	0.08743169399	0.03816793893	0.07534246575	1	0.03076923077	0.08	0.08	0.07142857143	0.06756756757	0.05405405405	0.06849315068	0.0911488264984	0.1214285714
National SC-ST Hub Scheme	0.06504065041	0.0625	0.05952380952	0.03076923077	1	0.08064516129	0.06349206349	0.1355932203	0.05882352941	0.06521739133	0.07317073171	0.0296296296	0.0470588235
Prime Minister's Employment Generation Programme(PMEGP)	0.07317073171	0.09523809524	0.125	0.08	0.08064516129	1	0.1333333333	0.1147540984	0.09638554217	0.06382978723	0.07228915663	0.0568181818182	0.0843373494
2nd Loan for up-gradation of the existing PMEGP/REGP/ MUDRA units	0.07317073171	0.06153846154	0.07142857143	0.08	0.06349206349	0.1333333333	1	0.09677419355	0.08333333333	0.1111111111	0.1265822785	0.0488721804	0.0975609756
Credit Guarantee Scheme for Micro & Small Enterprises(CGTMSE)	0.08196721311	0.078125	0.125	0.07142857143	0.1355932203	0.1147540984	0.09677419355	1	0.09638554217	0.1111111111	0.0987654321	0.0410447761	0.0843373494
Micro & Small Enterprises Cluster Development Programme(MSE-CDP) Scheme	0.1923076923	0.06976744186	0.08653846154	0.06756756757	0.05882352941	0.09638554217	0.08333333333	0.09638554217	1	0.08955223881	0.08737864078	0.0559440559	0.0761904762
Entrepreneurship and Skill Development Programme(ESDP) Scheme	0.04587155963	0.1086956522	0.1076923077	0.05405405405	0.06521739133	0.06382978723	0.1111111111	0.1111111111	0.08955223881	1	0.07575757576	0.0235294118	0.1076923077
Assistance to Training Institutions (ATI) Scheme	0.1007194245	0.04651162791	0.1212121212	0.06849315068	0.07317073171	0.07228915663	0.1265822785	0.09876543211	0.08737864078	0.07575757576	1	0.0752688172	0.0776699029
Coir Vikas Yojana-Umbrella Scheme	0.07861635220	0.04477611940	0.05985915493	0.09148264984	0.02962962963	0.05681818182	0.04887218045	0.04104477612	0.05594405594	0.02352941176	0.07526881720	1	0.0598591549
Procurement and Marketing Support (PMS) Scheme	0.09219858156	0.05813953488	0.08737864078	0.12142857143	0.04705882353	0.08433734940	0.09756097561	0.08433734940	0.07619047619	0.10769230770	0.07766990291	0.0598591549	1

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