



# A STUDY ON THE EFFECTS OF COVID-19 PANDEMIC ON MSMEs OPERATING AT RAJAJINAGR INDUSTRIAL ESTATE

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**Abstract:** Micro, Small and Medium Enterprise plays an important role and contribute to Indian economic objectives such as higher employment opportunities, higher economic growth, output, encouragement and support for exports and nurturing entrepreneurship. MSME are critical to any country's industrial development, because of its contribution to the growth and the MSME sector is a backbone of the Indian Economy. MSME is extremely essential for the country towards a more rapid and inclusive growth, by 2022, India's GDP will have increased by 25%. The pandemic's impact on the Indian economy is huge across sectors and in various scenarios of complete, protracted and partial lockdown, as well as at various degrees of capacity utilization. Due to low resources, the impact of covid – 19 pandemic is severe on Micro, Small and Medium enterprises rather than other corporations. As a result, the purpose of this study is to examine the influence of Covid -19 pandemic on MSMEs performance in the Rajajinagar Industrial Estate, Bengaluru. The study is based on the result of a survey conducted on 100 MSMEs in Rajajinagar Industrial Estate. As per the survey, 48% of enterprise accept that there was an impact on enterprises during lockdown. The research type used in this study is Descriptive in nature, the data for this study is majorly from Primary data and Sampling method used in this study is Stratified Sampling. This study helps to know source impact of the crisis on the enterprises and how they have overcome from that problem during pandemic and also to know the preparedness of MSME's to face a similar crisis if any in the near uncertain future.

**Key words:** MSME, Impact of Covid - 19, Schemes, Strategies

## INTRODUCTION

Corona virus (Covid – 19) is one of the biggest disaster in the year 2020. It was firstly found in China, later it was spread worldwide. Nearly 162 countries were put into lockdown. The pandemic was moving like a wave. The one main method to avoid coronavirus was social distancing. So that all the countries were focused on social distancing. Around 12.2 crore peoples have lost their jobs due to covid – 19 pandemic. In 12.2 crore people 75% of people were small traders and wage labors. The impact on Indian Economy during Covid – 19, it has been highly troublemaking in terms of economic activity as well as loss of human lives, there was a significant gap in country's health information systems, and decline in preventive behaviors such as mask wearing, physical distancing and handwashing as household, living among crowded was avoided.

MSME can manufacture and produce various products and services nationally and internationally. MSME gives a major employment opportunity in India and they provide loans to workers and also, they provide funds or credit limit to banks. MSME's requires less investment, operating in MSME is flexible, the import rate will be low, contribution to domestic products will be high and easy movable locations. MSMEs produce wide variety of products in domestic and international markets. They provide employment opportunities and develops country in different areas like low rate of imports, low investment requirement, flexibility in operations, mobility through the locations and high contribution to domestic production. MSMEs contributed to its socio-economic development.

During pandemic lockdown nearly 9% MSME's were shutdown, 95% of MSME firms were negatively impacted during national lockdown in April 2020 and Around 35% of MSME sectors lost their recovery potential, and firms couldn't get business loans to deal with the financial crisis, thus they closed. MSME's faced three critical barriers such as productivity, market access and more finance. There was almost Rs. 150 crore loss from manufacturing units of exports sectors from March 2020 to May 2020. To support MSME's during Pandemic situation, government came forward to provide soft loans with long term repayment and the credit limit was increased and introduced Emergency Credit Line Guarantee Scheme, Repo-Rate Reduction, PF and EPF

assistance. According to polls, 50% of entrepreneurs are optimistic in their company recovery following a pandemic. During a pandemic, individuals requested more needed commodities, causing prices to rise. MSME Development Institutes (DI's) helped MSME units for procuring raw materials for manufacturing the masks, PPE kits, etc. by working with the State Government. MSME Development Institutes also provided the necessary guidance for obtaining loans from banks under various government to MSME units.

## NEED FOR THE STUDY

This research study will focus on the difficulties MSME's had during the pandemic period as well as how they recovered from the Covid-19 crisis. It enables the government to create new programmes in support of unsuccessful organisations and helps both new and current businesses in preparing for and dealing with potential challenges. It also aids students and authors in gathering information on the effects of MSME's. This research also helps company owners, clients, creditors, and the government in developing strategies and understanding how to operate their companies in the event of such uncertain in the future crisis.

## OBJECTIVES OF THE STUDY

- To gain information regarding the working of various MSME's.
- To focus attention to the issues and difficulties faced by MSME's and workers during the pandemic.
- To understand how government initiatives aided businesses during the COVID-19 crisis.
- To reveal the strategies used by business owners to deal with and resolve similar problems in the future.

## HYPOTHESES

H<sub>10</sub>: There is no significant difference between the profit of the enterprise and the schemes they implemented during the pandemic.

H<sub>11</sub>: There is a significant difference between the profit of the enterprise and the schemes they implemented during the pandemic.

H<sub>20</sub>: There is no significant relationship between the sales and the impact of covid – 19 pandemic on the enterprise.

H<sub>21</sub>: There is a significant relationship between the sales and the impact of covid – 19 pandemic on the enterprise.

H<sub>30</sub>: There is no significant change in the sales of before and after pandemic of the enterprise.

H<sub>31</sub>: There is significant change in the sales of before and after pandemic of the enterprise.

## REVIEW OF LITERATURE

**Dr. Akansha Jain** (2021) conducted a study titled "Role of MSMEs in the Generation of Employment Possibilities and the Growth of the Nation" with the goal of learning about the impact on employment opportunities. This research examines the distribution of workers and employment possibilities in rural and urban areas, as well as the distribution of female and male workers in MSME. **Dr. Aniruddha Sarkar** (2021), in the paper "Impact of Covid – 19 on India's MSME Sector." The author gathered data for this study from numerous sources such as MSME, Government of India, Ministry of Finance, and others, based on surveys and study reports. The goal is to learn more about the MSME sector's contribution to the Indian economy. In this research titled "India: A Growth Opportunity for MSME," **Dr. Arun Gaikwad, C M A Satish Dhokare** (2020), in their research examined the MSMEs sector with the goal of identifying the significant difficulties and solutions. It is based on secondary information. Come Make in India, Digital India, Exports Contributions, Traditional and Heritage Industries, and Indigenization were among the topics highlighted. **Mr. Nagarajan Muthukrishan** (2020), in "Role of MSME in Retaining Indian Economy from Covid Impact." The goal is to learn about the issues that MSME faces during the next few years. They looked at the contributions of MSME to GDP over a ten-year period, as well as the distribution of MSMEs by state and the issues that MSME experienced during that time. **Dr. Pushkar Dubey and Kailash Kumar Sahu** (2020), in a paper titled "MSMEs in the Covid – 19 Crisis and India's Economic Relief Package: A Critical Review." The goal of this research is to determine the economic impact of the covid – 19 pandemic across all sectors. Primary data is used to compile the information. They gathered data on GDP contribution, the state of MSMEs as a result of the Covid virus, and relief package in order to help MSMEs relaunch their operations. **A Sathish** (2019), author of "Entrepreneurial Strategies of MSME for Sustainable Development in India." The goal is to identify the various strategies used by MSME for long-term development. They looked at entrepreneurial development in India in terms of industrial policies, licensing procedures, improvement of existing estates, economic policies, and the construction of financial institutions, among other things, in their research. **Surendar Gade** (2018), in a paper titled "MSME's Role in Economic Growth: An Indian Perspective." They looked at the top MSME industries, job possibilities, development and performance, and contribution to MSME's in this research. The author describes the extent of service opportunities available through MSME, whose mission is to generate service opportunities in the service industry for rural, mass, and corporate customers. In a paper titled "Financial Institutions Role in the Development of MSME's in India," **Prof. Kumar Arvind and Dr. Sharma Priyanka** (2017), examined the economy's previous growth and development of MSMEs, as well as the scenario of financial institutions' development of MSMEs throughout India, and evaluated the obstacles and prospects of capital raising within

financial institutions. In a report titled "Role of MSMEs in the Growth of the Indian Economy," **Ms. Subina Syal** (2015) Its goal is to raise awareness of the organization's expansion and job possibilities. This is based on secondary data, in which the author compiled information on MSME growth and performance, job opportunities, FDI policy, Infrastructure Development, and the 12th 5-year plan for MSME growth. The author stated that India is the global growth gateway due to the competitiveness and quality of the MSME sector's products. In this research titled "Role of MSME in Inclusive Growth," **Srinivas K** (2013). The goal is to gain a better understanding of MSME performance in India. Secondary sources are used to acquire data. This project aims to research MSMEs' products in India, provide recommendations based on findings, and count the number of MSMEs' businesses and employees.

## Research Gap

Most of the available literature in this area of study has been developed on employment opportunities, economic development, women entrepreneurial development, impact on growth, manufacturing trade and MSME sector. This project is based on the zonal MSME which is located at the Rajajinagar Industrial Estate. This project work is mainly focused on the impact on MSME's during Covid – 19 and it also throws light how they overcame from the covid - 19 crisis, how the government have responded to the crisis and opportunities found by MSME's to overcome the crisis.

## SCOPE OF THE STUDY

This study will help to know about the problems faced by MSME's and an idea to overcome the problems. This study involves the various sectors of MSME's. This study covers the information of MSME's Investment. This study helps to know the various problems faced by the enterprise owners during covid pandemic and how to overcome from this crisis with different ways.

## LIMITATIONS

- The research work is limited to MSMEs in Rajajinagar Industrial Estate, which might not reflect the impact of covid – 19 on all MSME's in general.
- The Sample size of this report it limited to 100 Enterprises.
- Few Respondents were unwilling to provide accurate details.

## TYPE OF THE RESEARCH

This paper is a study on the impact on corona virus on MSME's in India. This study is Descriptive in nature. This study analyses the impact of covid – 19 pandemic in MSME sectors. It is Descriptive method because this methodology focuses on questions answering related to WHAT than WHY of the research subject, which analyzes the challenges faced by employees and enterprises during pandemic like the payments of employees, orders of customers, etc. It is a part of Quantitative research which involve conducting survey research. It helped to find out the various schemes the enterprise implemented and the strategies they use if any crisis occur in the future. It helped to collect the data and the demographics of the same with the help of statistical analysis

## POPULATION AND SAMPLING UNIT

### Population:

The total MSME units in Rajajinagar Industrial Estate is 1602 units, where there are 1402 units in Micro, 180 units in Small and 20 units in Medium Enterprises.

### Sampling Unit:

Rajajinagar Industrial Estate has been chosen for the survey with the reference to the impact on Covid – 19 on MSME's, where there are 1602 units with the investment of 2,88,49,98,588 (in Rs), which is of total 100 units that is Micro – 73 units, Small – 18 units and Medium – 7 units.

## SAMPLING METHOD

### Stratified Sampling:

It means diving the population into subpopulations which may differ in important ways. Based on the overall population proportion, it is calculated by how many people should be sampled from each sub group. In this report, there are totally 1602 units in Rajajinagar Industrial Estate which is sub categorized into Micro 1402, Small 180 and Medium 20 Enterprises, by selecting 73 units in Micro, 18 in Small and 7 units in Medium Enterprise.

## SAMPLE SIZE

The total number of respondents included in this study are 100 units of MSMEs in Rajajinagar Industrial Estate, where the number is broken down into sub groups by Micro – 73 units, Small – 18 units and Medium - 9 units by the age, gender so that the total sample achieves represents in the entire population

## SOURCE OF DATA COLLECTION

The data in this study was obtained in the form of survey which was survey based. The major respondents were MSMEs located in Rajajinagar Industrial Estate and information was also collected through various websites, publications, journals, books and annual reports of MSME.

## STATISTICAL TOOLS AND TECHNIQUES

In this study, for testing hypothesis SPSS Software was used to get the output. Certain statistical tool like Pie charts, Bar Diagrams, Correlation, Anova, Student “t” test, Chi-Square test, and Weighted Average techniques has been used for analysis of data and testing of hypotheses.

## DATA ANALYSIS AND INTERPRETATION

1. To analyze the difference between the profits and the schemes implemented by the enterprises, ANOVA has been used

	Sum of Squares	df	Mean Square	F	Sig.
what is your Profit of Between the enterprise ( Groups Before)	4.791	4	1.198	1.784	.138
Within Groups	63.799	95	.672		
Total	68.590	99			
what is your Profit of Between the enterprise ( Groups Before)	6.929	4	1.732	2.011	.099
Within Groups	81.821	95	.861		
Total	88.750	99			
what is your Profit of Between the enterprise ( Groups Before)	14.299	4	3.575	4.750	.002
Within Groups	71.491	95	.753		
Total	85.790	99			

Tabulated results of ANOVA:

	During Pandemic	After Pandemic
<b>F Value</b>	2.011	4.750
<b>Table Value</b>	3.52	3.52
<b>Level of Significance</b>	0.05	0.05

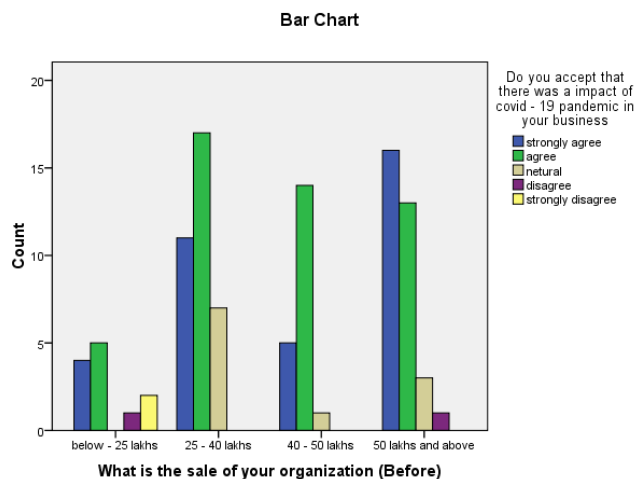
## CONCLUSION:

The F value is 2.011 during pandemic and 4.750 after pandemic, table value is 3.52 with (4,99) df and 0.05 level of significance. Hence, it is concluded, F ratio is less than the table value during the pandemic and F ratio is greater than the table value after pandemic.

Therefore, for during pandemic null hypothesis is rejected. There is significant difference between profit of the enterprise and the schemes they implemented during pandemic. Hence it can be concluded that the schemes introduced by the government gave a big boost to the MSME's and help them cope up the challenges of the pandemic.

After pandemic the pandemic got settled, most of the firms' profits started growing slowly and even the firm's reliability on the government schemes started evading. The same is prove through ANOVA where the null hypothesis is accepted. Hence, there is a no significant difference between the profit and the schemes implemented by the enterprise.

2. Chi Square test to find out the significant association between sales and impact of covid – 19 pandemic in the enterprise



**Crosstab**

Count		Do you accept that there was a impact of covid - 19 pandemic in your business					Total
		strongly agree	agree	netural	disagree	strongly disagree	
What is the sale of your organization (Before)	below - 25 lakhs	4	5	0	1	2	12
	25 - 40 lakhs	11	17	7	0	0	35
	40 - 50 lakhs	5	14	1	0	0	20
	50 lakhs and above	16	13	3	1	0	33
Total		36	49	11	2	2	100

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.892 <sup>a</sup>	12	.006
Likelihood Ratio	22.487	12	.032
Linear-by-Linear Association	4.576	1	.032
N of Valid Cases	100		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .24.

**Table showing the chi square of the Sales and Impact of covid – 19 in the enterprise**

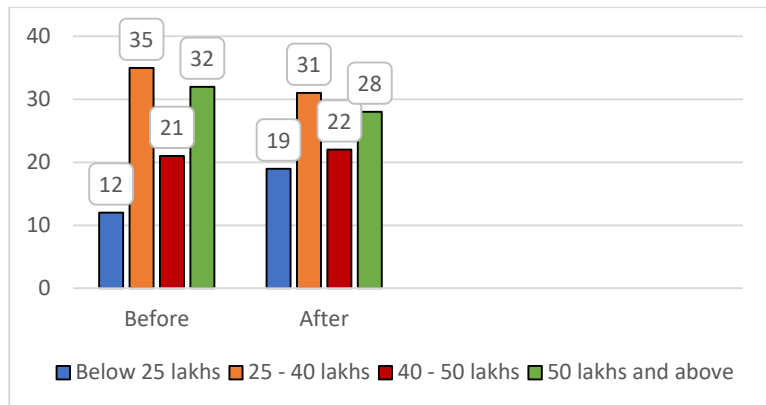
<b>P Value</b>	0.006
<b>Pearson Chi Square Value</b>	27.892
<b>Table Value</b>	21.026
<b>Level of Significance</b>	0.005

**Interpretation:** The calculated Chi Square value is greater than the table value i.e., 27.892 is greater than 21.026. Hence, it is concluded that the null hypothesis is highly significant and is rejected at 5% level of significance. Therefore, sales are associated with the impact of covid – 19 pandemic in the enterprise.



3. Student ‘t’ test to analyze the change in the sales of Before and After Pandemic

Graph showing the sales of the organization



**Interpretation:** From the above graph states that before lockdown majority of enterprises sales was between 25 – 40 lakhs before lockdown, during lockdown it was decreased, the enterprises major sales was below 25 lakhs which affected the enterprises and again the sales increased to 25 – 40 lakhs after pandemic, during lockdown the majority enterprise sales was below 25 lakhs.

Table showing the sales of the organization

Sales	Below 25 lakhs	25-40 lakhs	40-50 lakhs	50 lakhs above
Before Pandemic	12	19	21	32
After Pandemic	19	31	22	28

Sales	Below 25 lakhs	25-40 lakhs	40-50 lakhs	50 lakhs and above	Total
d = x – y	-7	4	-1	4	Σd = -1
d <sup>2</sup>	49	16	1	16	Σd <sup>2</sup> = 82

**Analysis:** According to the data, the sales was mostly 50 lakhs and above for 32% before pandemic and 31% of the major respondents’ sales were between 25- 40 Lakhs. 19% respondents’ sales were 25 – 40 lakhs before pandemic, 21% before and 22% after pandemic sales was between 40 – 50 Lakhs and 28% of after pandemic sales was above 50 lakhs. The lowest percentage of responders opined that sales were below 25 lakhs with 12% before pandemic and 19% after pandemic.

t – test value	0.095
Table Value	5.81
Level of Significance	0.01

**Interpretation:** The t value is 0.095 which is lesser than the table value 5.81 with the level of significance 0.01 and t<sub>3</sub>. Hence it is concluded that null hypothesis is accepted and alternative hypothesis is rejected. Therefore, there is no significant difference in sales of the organizations before and during pandemic.

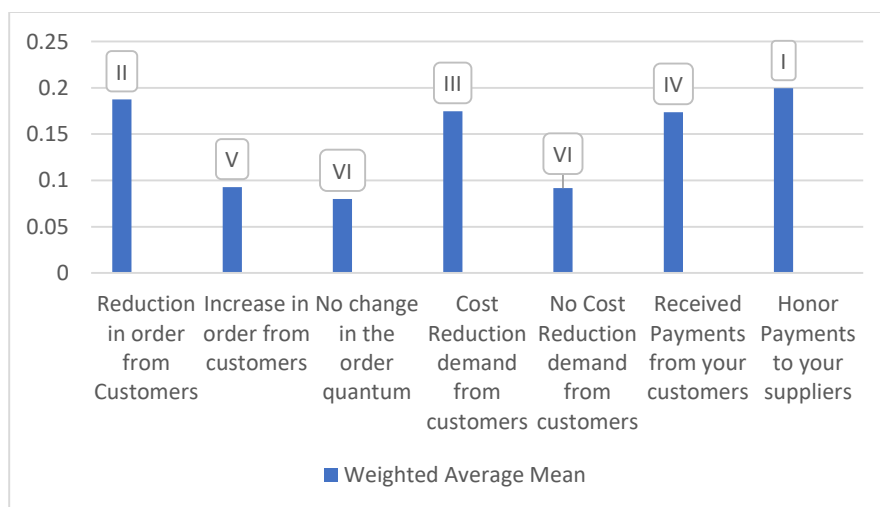
**4. Weighted Average Mean was used to know the highest value which influenced the impact on the business during lockdown**

**Table showing the opinion about the likely impact on the Business during Lockdown**

	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Total	Weighted Average Method	Ranking
<b>Reduction in order from Customers</b>	33*5	50*4	13*3	3*2	1*1	411	0.1876	II
<b>Increase in order from customers</b>	4*5	2*4	15*3	51*2	28*1	203	0.0926	V
<b>No change in the order quantum</b>	1*5	6*4	16*3	21*2	56*1	175	0.0799	VII
<b>Cost Reduction demand from customers</b>	14*5	58*4	26*3	1*2	1*1	383	0.1748	III
<b>No Cost Reduction demand from customers</b>	1*5	2*4	21*3	49*2	27*1	201	0.0917	VI
<b>Received Payments from your customers</b>	29*5	43*4	20*3	6*2	2*1	380	0.1735	IV
<b>Honor Payments to your suppliers</b>	54*5	33*4	10*3	2*2	1*1	437	0.1995	I
<b>Grand Total</b>	-	-	-	-	-	<b>2190</b>	-	-

**Analysis:** The above data indicates that, majority of the respondents i.e. 50% have agreed that there is reduction in order from customers and less respondent of 1% of is strongly disagreed in the reduction in order from customers; high respondents of 51% have disagreed that there is increase in order from customers; high respondents of 56% are strongly disagreed in no change in quantum; high respondents/of 58% agreed in cost reduction demand from customers; high respondents of 49% are disagreed that there is no cost reduction demand from customers; high respondents of 43% agreed that there the enterprise received payments from customers ; high respondents of 54% are strongly

**Graph showing the opinion about the likely impact on the business during lockdown**



**Interpretation:**

From the weighted average technique, we can observe that, the highest weighted average factor is 0.1995, which indicates that for majority of entrepreneurs faced difficulties in honoring **payments to their suppliers**. It had a major impact on the funding of the working capital required for the business during lockdown and also decline in the sales of the firm added to the hard times of many firms.

**5. To analyze the relationship between the sales and profit after the pandemic, correlation test was used**

Profit	Less than 10 lakhs	10 – 30 lakhs	30 – 50 lakhs	50 lakhs and above
After pandemic	7	16	33	44

Sales	Below 25 lakhs	25 – 40 lakhs	40 – 50 lakhs	50 lakhs and above
After pandemic	19	31	22	28

**Table showing the value of correlation of the Sales and Profits after pandemic:**

<b>Sales and Profit (After Pandemic)</b>	<b>0.832586834</b>
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**CONCLUSION:** The correlation of the sales and the profit after was found to be moderately positive and statistically significant. Hence, it shows that sales and profit of the enterprise after pandemic is positively correlated.

**FINDINGS**

- Majority of the enterprises opined that COVID -19 had an impact on the normal operations of the business.
- Before lockdown majority of enterprises sales was between 25 – 40 lakhs before lockdown, during lockdown it was decreased, the enterprises major sales were below 25 lakhs which affected the enterprises and again the sales increased to 25 – 40 lakhs after pandemic, during lockdown the majority enterprise sales was below 25 lakhs. It was found that, t value was 0.095 which was lesser than the table value 5.81 with the level of significance 0.01 and  $t_3$ .
- From the weighted average technique, we can observe that, the highest weighted average factor is 0.1995, which indicates that for majority of entrepreneurs faced difficulties in honoring payments to their suppliers. It had a major impact on the funding of the working capital required for the business during lockdown and also decline in the sales of the firm added to the hard times of many firms.
- The correlation between the sales and the profit after was found to be moderately positive and statistically significant. Hence, it shows that sales and profit of the enterprise after pandemic is positively correlated.
- The F value is 2.011 during pandemic and 4.750 after pandemic, table value is 3.52 with (4,99) df and 0.05 level of significance. Hence, it is concluded, F ratio is less than the table value during pandemic and after pandemic, F ratio is greater than the table value.
- The calculated Chi Square value is greater than the table value i.e., 27.892 is greater than 21.026. Hence, it is concluded that the null hypothesis is highly significant and is rejected at 5% level of significance. Therefore, sales are associated with the impact of covid – 19 pandemic in the enterprise.

**SUGGESTIONS**

- As per the survey, most of the enterprise problem is exposure of risk of payments from customers. To avoid it, enterprise should be knowing about the credit risk of the customers whether they are good at credit risk are not and by sending the bills properly with the date of purchased and other relevant information.
- MSMEs are the main sector for Indian Economy, there is a lack of market access due to poor marketing conditions. So, MSMEs should improve the marketing techniques for better result.
- As though MSME provides Employment opportunities, there is a scarcity of skilled workers in manufacturing sectors. So, training employees and giving knowledge about the respective industry helps to save time and effort.
- It was observed that majority of industries have been using outdated technology, the MSME's must upgrade the technologies.
- MSME officer's must coordinate for sanction of loans, tax planning, provide benefits to new entrance, revival of sick units through coordinating with its directors.
- Big Industrialists / industries should adopt small industries through order support, timely payments, training, marketing and administration.



- Many of the entrepreneurs were not aware about the schemes provided by the government, the entrepreneurs should get to know more about the scheme, create awareness by organizing Entrepreneurial development camp and utilize it to achieve their goals

## CONCLUSION

Covid – 19 was a global challenge, not just in India. MSME contributes to India's economy. Due to covid-19, MSME revenue declined, affecting the Indian economy and MSME sectors. In this analysis, most Rajajinagar Industrial Estate firms were affected by covid – 19. In this study, the largest enterprise sector was Manufacturing, and Micro Enterprise was more prevalent in the survey area. According to the study, the covid pandemic had an impact on business. The factor that most affected enterprises during lockdown was cost reduction demand from customers, and the enterprise increased the credit period for customers. Few businesses reduced their workforces during lockdown, and most took 3 to 6 months to recover. During epidemic, sales dropped, but afterward they rose. Some businesses have shuttered because they haven't recovered from the pandemic. Businesses can survive, expand, and thrive with the help of the Central Government, State Governments, Financial Institutions, Department and Ministry of MSME, etc. Despite the recession, strict tax laws, and high production costs. Most businesses have recovered from the covid epidemic and increased sales and profits.

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