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**FACTORS DETERMINING PERFORMANCE OF  
MANUFACTURING INDUSTRIES – A STUDY IN SRIKAKULAM  
DISTRICT, AP**

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**ABSTRACT**

Manufacturing sector is the backbone of Indian economy. Despite many constraints affected in the last few years, this sector occupied a place of pride covering the largest industries in India and Srikakulam district in Andhra Pradesh state also. The contribution of MSMEs in employment generation and production of goods and services found very much significant, especially in the rural and backward areas of the country. Since, they are an essential source of jobs, create entrepreneurial development and employment in rural areas, the migration of labour from rural to urban areas is controlled. Moreover, the main objective of this research paper is to find out the determining factor of manufacturing industries' performance in Srikakulam district, the study has considered finance resources, marketing facilities, technical skills, government support, information accessibility, skilled labour, financial accessibility, financial sustainability and financial management are the independent variables and performance of manufacturing industries as the dependent variable. In this process of investigation 352 micro, small and medium scale manufacturing enterprises were taken as sample and the perceptions of entrepreneurs collected through with the help of questionnaires. To estimate this regression analysis has been done and found that marketing facilities, government support and information accessibility are indicating 1% significance, and financial awareness, skilled labour, financial sustainability and financial management are indicating 5% significance in influencing the performance of manufacturing industries in Srikakulam district, Andhra Pradesh.

Keywords: MSMEs, performance of enterprises, manufacturing industries.



### **Introduction**

India is becoming one of the most lucrative options for manufacturing industry to prosper. Therefore, manufacturing industrial sector is an important constituent of India's industrial sector. A robust infrastructure is a necessary component for any industrial industry to expand. In order to support the expansion of the manufacturing sector, the Indian government is spending a significant amount of money developing a robust network of roads, trains, and other transportation infrastructure.

As many industrial corridors and road networks rapidly are being formed (Yash Mehta and John Rajan, 2017). Thus, manufacturing industries contribute significantly to India's Gross Domestic Product and export earnings besides meeting the social objectives including that of providing employment opportunities to millions of people across the country. The government is taking various steps to encourage the expansion of the manufacturing sector, realizing its importance and the quantity of jobs it can create. Having the benefit of a high amount of educated population & skilled labour, there is enough scope for the manufacturing sector to further develop in the country. Some of the manufacturing industries which are on a high rise are the automobile industry, electronic & semiconductor industries, machinery, chemical, pharmaceutical industries and aviation industries (Dangayachz and Deshmukh).

The manufacturing industries are one of the important and sensitive sectors of the Indian economy. The objectives of industrialization are high growth rates, employment generation and equitable distribution of income and wealth (Radhicka Kapoor, 2014). The third world countries are trying to solve their economic problems of poverty, inequality and unemployment through systematic process of industrialization. Thus it is universally accepted that industrial development is the ultimate means to achieve economic development and solve social problems. Moreover, Andhra Pradesh is home to many national and multi-national giant corporates and has emerged as a global manufacturing destination in several sectors of industry including electronics and pharmaceuticals, the State has significant locational advantage with respect to international markets and leading global business centres, especially in the Asia Pacific region. Hence, the Government of Andhra Pradesh is bringing out the New Industrial Policy 2023 has been drawn up to keep the larger economic context for Andhra Pradesh in industrial development, changes in relevant policies of Government of India and learning from international experience especially in promoting MSMEs (G.O.Ms.No.39).

Since, the performance of manufacturing industries is of great concern to various governments (central, state and local) as MSMEs promote the employment, output and overall development of the country (Prashant Prabhakar Deshpande (2023), identification of key problems in the manufacturing sector would lay a strong foundation for solving. The time is now to do something to the situation of our MSMEs under manufacturing sector given the aggravating level of poverty in India and the need to meet up with the Millennium Development Goals. Therefore, for any change in policy related to Micro, Small and Medium scale manufacturing industries, there is a need for elaborate studies on the growth, development and performance. Thus, the present study is an effort to analyse the various determinants that influencing the performance of manufacturing industries at present scenario.



## **Literature Review**

Agustin, Andi and Vernetta (2021) have done a research to find empirical evidence to finding the influence between leverage, liquidity, growth, and firm size towards firm performance of manufacturing sector. Hence, the results indicate that there is no significant influence found between liquidity and firm age, but there is a positive significant influence found between growth and firm size and negative significant influence found between leverage towards firm performance. According to Yang Shuili, Lv Xiang, Yang Yi (2021) the influencing factors of the transformation and upgrading of manufacturing industry include five aspects. They are willingness, ability, environment, resources and development trend. Among these willingness and ability belong to the subjective category, whereas technological innovation ability is the most important factor affecting the transformation and upgrading of manufacturing industry. Md. Harun Ur Rashid et al. (2019) studied with an aim to examine the factors that influence green performance in the manufacturing industry as it has become a burning topic in present scenario. Structural Equation Modelling (SEM) has been used as a tool to analyze the data collected from different management levels of employees from the manufacturing industries in Bangladesh. Moreover, economic, operational, social and corporate governance aspects are also significant influential factors of green performance. Ahmad Adnan Al-Tit (2017) conducted a study to explore the factors influencing the organizational performance of manufacturing industries. The aim of this study is to investigate the impact of organizational culture (OC) and supply chain management (SCM) on organizational performance (OP). in this purpose the sample of the study consisted of 93 manufacturing firms and data were collected from employees and managers from different divisions using a reliable and valid measurement instrument. The results verify that OP is significantly predicted by both OC and SCM methods. The current study is important because it tests the association between SCM techniques and OP in a reliable manner. In their 2017 paper, Benjamin Yeo and Delvin Grant pointed out that the manufacturing industry's performance was impacted by both financial considerations and the effects of information and communication technologies (ICTs). The authors also noted that previous research had found little evidence that ICTs enhance manufacturing industry performance. However, their analysis revealed that while companies with high ICT scores performed well between 2006 and 2009, their performance significantly declined between 2010 and 2014. Consequently, ICTs have little effect on the performance of manufacturing sales growth; instead, financial considerations seem to have an impact on the manufacturing industries' performance. Moreover, it is found research gap in the area to study the factors determining performance of manufacturing industries.

## **Statement of the problem**

MSMEs are the backbone of the Indian economy, employing 11 crore people and producing roughly 30% of the nation's GDP (Gross Domestic Product) and manufacturing output. In order to guarantee that MSMEs receive the full benefit of these MSME schemes on schedule, the Indian government has taken the initiative. Moreover, Srikakulam district has abundant natural resources and sufficient work



force but youth need to come forward to start MSME units by availing government schemes. However, it appears that considering the enormous potentials of the manufacturing sector, and despite the acknowledgement of its immense contribution to sustainable economic development, its performance still falls below expectation in many developing countries. In this view the main aim of present study is to investigate the performance of manufacturing industries with reference to MSMEs in Srikakulam district of Andhra Pradesh state with the following objectives.

### **Objectives**

1. To study the finance resources, marketing strategy, technological resources, government support, information accessibility, industrial skills, financial accessibility, financial sustainability, financial management and business performance of manufacturing industries in Srikakulam district.
2. To examine the factors determining the performance of manufacturing industries in the study area.

### **Methodology**

Since, the main aim of this paper is to assess the factors determining the performance of manufacturing industries in general and MSMEs in Srikakulam district in particular, the study reviewed the existing status of the selected entrepreneurs in the study area. Keeping the above aspects under consideration, an attempt has been made in this study to analyze the perceptions of entrepreneurs on various determining factors of manufacturing industries' performance. In this purpose the study has collected data from the entrepreneurs of MSMEs with the help of questionnaire, which contains 1) Finance Resources, 2) Marketing Facilities, 3) Technical Skills, 4) Government Support, 5) Information Accessibility, 6) Labour Skills, 7) Financial Accessibility, 8) Financial Sustainability and 9) Financial Management. Moreover, there are 1827 MSMEs in Srikakulam district (Micro-920 + Small-871 + Medium-36) the total sample of the 162 Micro, 154 Small and 36 Medium scale manufacturing industries were confined on the basis of Google Sample Size calculation method. Hence, a total of 352 manufacturing industries have been considered for this study, which have selected on random sampling survey method across the study area.

### **Data analysis and discussion**

The primary data was collected from the entrepreneurs of micro, small and medium scale manufacturing industries through a standardised questionnaire and processed by SPSS package for output the results. Thus, the analysis of perceptions on frequency distribution done by percentages and test the determining factors of manufacturing industries' performance by regression analysis. Hence, the perceptions of the respondents on 9 determinants of manufacturing industries along with performance of manufacturing industrial are presented in the following tables. At the end of this the regression analysis on determinants of manufacturing industries' performance is presented and discussed.



**Table-1: Awareness of entrepreneurs about financial resources to manufacturing industries**

SL. No	Awareness on Financial Resources	Not aware	Aware	Highly aware	Total
1	Subsidized loans are available to establish manufacturing industries	96 (27.3)	107 (30.4)	149 (42.3)	352 (100.0)
2	Tax holiday for new industrial undertakings encourages manufacturing industries	77 (21.9)	98 (27.8)	177 (50.3)	352 (100.0)
3	Capital & power subsidies to industries in backward areas encourage rural entrepreneurs.	81 (23.0)	125 (35.5)	146 (41.5)	352 (100.0)
4	Government supports manufacturing industries particularly from SC, ST & BC categories.	75 (21.3)	118 (33.5)	159 (45.2)	352 (100.0)
5	Venture capitalists encourage startups and manufacturing industries	90 (25.6)	100 (28.4)	162 (46.0)	352 (100.0)
6	Banks and financial institutions allocating more budget for manufacturing industries	98 (27.8)	109 (31.0)	145 (41.2)	352 (100.0)
7	Over Draft facility is supportive	78 (22.2)	120 (34.1)	154 (43.8)	352 (100.0)
8	More working capital is need for manufacturing industries	86 (24.4)	117 (33.2)	149 (42.3)	352 (100.0)
9	Private money lenders are supportive towards manufacturing industries	79 (22.4)	126 (35.8)	147 (41.8)	352 (100.0)
10	Overall finance awareness is good for manufacturing industries	69 (19.6)	95 (27.0)	188 (53.4)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The awareness of entrepreneurs on financial resources of manufacturing industries is represented in the Table-1. It is noticed that 42.3 percent are highly aware, 30.4 percent are aware, 27.3 percent are not aware to the statement “Subsidized loans are available to establish manufacturing industries”. It is observed that 50.3 percent are highly aware, 27.8 percent are aware, 21.9 percent are not aware to the statement “Tax holiday for new industrial undertakings encourages manufacturing industries”. The data shows that 41.5 percent are highly aware, 35.5 percent are aware, 23.0 percent are not aware to the statement “Capital & power subsidies to industries in backward areas encourage rural entrepreneurs”. It is found that 45.2 percent are highly aware, 33.5 percent are aware, 21.3 percent are not aware to the statement “Government supports manufacturing industries particularly from SC, ST& BC categories”. The data shows that 46.0 percent are highly aware, 28.4 percent are aware and 25.6 percent are not aware to the statement “Venture capitalists encourage startups and manufacturing industries”.

According to the data it is observed that 41.2 percent are highly aware, 31.0 percent are aware, 27.8 percent are not aware to the statement “Banks and financial institutions allocating more budget for manufacturing industries”. It is found that 43.8 percent are highly aware, 34.1 percent are aware, 22.2 percent are not aware to the statement “Over Draft facility is supportive”. From the data 42.3 percent are highly aware, 33.2 percent are aware, 24.4 percent are not aware to the statement “More working capital is need for manufacturing industries” where as 41.8 percent are highly aware, 35.8 percent are aware, 22.4 percent are not aware to the statement



“Private money lenders are supportive towards manufacturing industries” and finally 53.4 percent are highly aware, 27.0 percent are aware, 19.6 percent are not aware to the statement “Overall finance awareness is good for manufacturing industries”.



**Table-2: Perceptions of entrepreneurs about marketing facilities of manufacturing industries**

SL. No	Marketing Facilities	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Availability of local market	37 (10.5)	28 (8.0)	74 (21.0)	100 (28.4)	113 (32.1)	352 (100.0)
2	Scope for export market	31 (8.8)	51 (14.5)	69 (19.6)	79 (22.4)	122 (34.7)	352 (100.0)
3	Government encourages through direct purchase of reserved products	41 (11.6)	32 (9.1)	49 (13.9)	114 (32.4)	116 (33.0)	352 (100.0)
4	Middle men network is available	14 (4.0)	27 (7.7)	68 (19.3)	100 (28.4)	143 (40.6)	352 (100.0)
5	Marketing network is supportive	30 (8.5)	32 (9.1)	51 (14.5)	80 (22.7)	159 (45.2)	352 (100.0)
6	Cold storage/Ware house facility is available	20 (5.7)	56 (15.9)	61 (17.3)	111 (31.5)	104 (29.5)	352 (100.0)
7	Sales emporiums, state cooperative societies and trade fairs are encouraging	24 (6.8)	51 (14.5)	72 (20.5)	98 (27.8)	107 (30.4)	352 (100.0)
8	Online marketing increases the scope of more sales.	11 (3.1)	39 (11.1)	41 (11.6)	116 (33.0)	145 (41.2)	352 (100.0)
9	Government Incentives for export market encourages the manufacturing industries	29 (8.2)	49 (13.9)	71 (20.2)	100 (28.4)	103 (29.3)	352 (100.0)
10	The overall marketing environment is supportive	29 (8.2)	37 (10.5)	51 (14.5)	113 (32.1)	122 (34.7)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs of manufacturing industries on performance of marketing facilities are represented in the Table-2. It is noticed that 32.1 percent strongly agreed and 28.4 percent agreed, but 10.5 percent strongly disagreed to the statement “Availability of local market”. It is observed that 34.7 percent strongly agreed, 22.4 percent agreed, and from the remaining 8.8 percent strongly disagreed to the statement “Scope for export market”. The data shows that 33.0 percent strongly agreed and 32.4 percent agreed, whereas 11.6 percent strongly disagreed to the statement “Government encourages through direct purchase of reserved products, arranging market outlets by sales emporiums, state cooperative societies and trade fairs”. It is found that 40.6 percent strongly agreed and 28.4 percent agreed with the statement “Middle men network is available”, but 4.0 percent strongly disagreed to this. While 45.2 percent strongly agreed and 22.7 percent agreed with the statement “Marketing network is supportive”, 8.5 percent strongly disagreed to this.

Moreover, the data shows 29.5 percent strongly agreed and 31.5 percent agreed towards the statement “Cold storage/Ware house facility is available”, 5.7 percent strongly disagreed to this. It is found that 30.4 percent strongly agreed, 27.8 percent agreed, and from the remaining 6.8 percent strongly disagreed with the statement “Sales emporiums, state cooperative societies and trade fairs are encouraging”. It is found that 41.2 percent strongly agreed, 33.0 percent agreed, but 3.1 percent strongly disagreed to the statement “Online marketing increases the scope



of more sales”. While 29.3 percent strongly agreed and 28.4 percent agreed with the statement “Government Incentives for export market encourages the manufacturing industries”, 13.9 percent disagreed and 8.2 percent strongly disagreed to this. Finally, 34.7 percent strongly agreed and 32.1 percent agreed to the statement “The overall





marketing environment is supportive”, but 10.5 percent disagreed and 8.2 percent strongly disagreed with this.

**Table-3: Perceptions of entrepreneurs about availability of technological resources to manufacturing industries**

SL. No	Technological Resources	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Information on recent technology developments are available	32 (9.1)	40 (11.4)	53 (15.1)	92 (26.1)	135 (38.4)	352 (100.0)
2	Sufficient sources for machinery suppliers are available	17 (4.8)	32 (9.1)	75 (21.3)	87 (24.7)	141 (40.1)	352 (100.0)
3	Latest technology is being used in production	24 (6.8)	33 (9.4)	58 (16.5)	105 (29.8)	132 (37.5)	352 (100.0)
4	Appropriate technology suitable for local needs is available	29 (8.2)	33 (9.4)	79 (22.4)	95 (27.0)	116 (33.0)	352 (100.0)
5	Imported machinery is available	26 (7.4)	34 (9.7)	53 (15.1)	108 (30.7)	131 (37.2)	352 (100.0)
6	Facility for on job training is sufficient	30 (8.5)	48 (13.6)	65 (18.5)	100 (28.4)	109 (31.0)	352 (100.0)
7	Maintenance of local technology and imported technology is easy	29 (8.2)	45 (12.8)	54 (15.3)	91 (25.9)	133 (37.8)	352 (100.0)
8	Information technology is in utilization	29 (8.2)	57 (16.2)	76 (21.6)	80 (22.7)	110 (31.3)	352 (100.0)
9	Availability of skilled man power for working on imported technology is easy	45 (12.8)	55 (15.6)	66 (18.8)	87 (24.7)	99 (28.1)	352 (100.0)
10	The overall technology environment is supportive	37 (10.5)	48 (13.6)	60 (17.0)	85 (24.1)	122 (34.7)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about availability of technological resources to manufacturing industries are represented in the Table-3. It is noticed that a dominated group of 38.4 percent strongly agreed and 26.1 percent agreed, but a minimum group of 9.1 percent strongly disagreed to the statement “Information on recent technology developments are available”. While 40.1 percent strongly agreed and 24.7 percent agreed to the statement “Sufficient sources for machinery suppliers are available”, 9.1 percent disagreed and 4.8 percent strongly disagreed. The data shows that 37.5 percent strongly agreed and 29.8 percent agreed to the statement “Latest technology is being used in production”, 9.4 percent disagreed and 6.8 percent strongly disagreed. It is found that 33.0 percent strongly agreed and 27.0 percent agreed, but 9.4 percent disagreed and 8.2 percent strongly disagreed to the statement “Appropriate technology suitable for local needs is available”. Moreover, 37.2 percent strongly agreed and 30.7 percent agreed towards the statement “Imported machinery is available”, 9.7 percent disagreed and 7.4 percent strongly disagreed.

As per the data it is observed that 31.0 percent strongly agreed and 28.4 percent agreed to the statement “Facility for on job training is sufficient”, 13.6 percent disagreed and 8.5 percent strongly disagreed. It is found that 37.8 percent strongly agreed and 25.9 percent agreed, but 12.8 percent disagreed and 8.2 percent strongly



disagreed to the statement “Maintenance of local technology and imported technology is easy”. As it is found 31.3 percent strongly agreed and 22.7 percent agreed to the statement “Information technology is in utilization”, 16.2 percent disagreed and 8.2 percent strongly disagreed. While 28.1 percent strongly agreed and 24.7 percent



agreed to the statement “Availability of skilled man power for working on imported technology is easy”, 15.6 percent disagreed and 12.8 percent strongly disagreed with this. Finally, 34.7 percent strongly agreed and 24.1 percent agreed to the statement “The overall technology environment is supportive”, 13.6 percent disagreed and 10.5 percent strongly disagreed.

**Table-4: Perceptions of entrepreneurs about government support to manufacturing industries**

SL. No	Government Support	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Government schemes are encouraging to start manufacturing industries	44 (12.5)	57 (16.2)	70 (19.9)	83 (23.6)	98 (27.8)	352 (100.0)
2	Incentives and subsidies are encouraging to start manufacturing industries	30 (8.5)	47 (13.4)	74 (21.0)	83 (23.6)	118 (33.5)	352 (100.0)
3	Industrial policies has been encouraging to start manufacturing industries	30 (8.5)	46 (13.1)	61 (17.3)	103 (29.3)	112 (31.8)	352 (100.0)
4	Government officials are supportive and approvals made easy	40 (11.4)	52 (14.8)	76 (21.6)	80 (22.7)	104 (29.5)	352 (100.0)
5	Single window licensing system is effective	35 (9.9)	43 (12.2)	53 (15.1)	101 (28.7)	120 (34.1)	352 (100.0)
6	Government marketing assistance is helpful to the Entrepreneurs	34 (9.7)	52 (14.8)	60 (17.0)	81 (23.0)	125 (35.5)	352 (100.0)
7	Entrepreneur Development programs are continuously motivating budding entrepreneurs	28 (8.0)	32 (9.1)	67 (19.0)	106 (30.1)	119 (33.8)	352 (100.0)
8	Entrepreneurial eco system is encouraging	42 (11.9)	52 (14.8)	67 (19.0)	86 (24.4)	105 (29.8)	352 (100.0)
9	Industrial relations are being maintained by the Government	42 (11.9)	48 (13.6)	60 (17.0)	75 (21.3)	127 (36.1)	352 (100.0)
10	The overall Government support is positive	24 (6.8)	41 (11.6)	62 (17.6)	104 (29.5)	121 (34.4)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about government support to manufacturing industries are represented in the Table-4. It is noticed 27.8 percent strongly agreed and 23.6 percent agreed that Government schemes are encouraging to start manufacturing industries, but 16.2 percent disagreed and 12.5 percent strongly disagreed to the statement. The data shows 33.5 percent strongly agreed and 23.6 percent agreed that incentives and subsidies are encouraging to start manufacturing industries, 13.4 percent disagreed and 8.5 percent strongly disagreed to the statement. The data shows 31.8 percent strongly agreed and 29.3 percent agreed that industrial policies have been encouraging to start manufacturing industries, but 13.1 percent disagreed and 8.5 percent strongly disagreed with this. It is found 29.5 percent strongly agreed and 22.7 percent agreed that government officials are supportive and approvals made easy, but 14.8 percent disagreed and 11.4 percent strongly disagreed to the statement. It is found that 34.1 percent strongly agreed and 28.7 percent agreed that single window licensing system is effective, but 12.2 percent disagreed and 9.9 percent strongly disagreed with this.



The data reveals 35.5 percent strongly agreed and 23.0 percent agreed that government marketing assistance is helpful to the entrepreneurs, whereas 14.8 percent disagreed and 9.7 percent strongly disagreed. It is found 33.8 percent strongly agreed



and 30.1 percent agreed that entrepreneur development programs are continuously motivating budding entrepreneurs, but 9.1 percent disagreed and 8.0 percent strongly disagreed. As per the data 29.8 percent strongly agreed and 24.4 percent agreed that entrepreneurial eco system is encouraging, whereas 14.8 percent disagreed and 11.9 percent strongly disagreed. While 36.1 percent strongly agreed and 21.3 percent agreed that industrial relations are being maintained by the government, but 13.6 percent disagreed and 11.9 percent strongly disagreed. Finally, 34.4 percent strongly agreed and 29.5 percent agreed that overall government support is positive towards manufacturing industries, but 11.6 percent disagreed and 6.8 percent strongly disagreed to the statement.

**Table-5: Perceptions of entrepreneurs about information accessibility to manufacturing industries**

SL. No	Information Accessibility	No Access	Less Access	Access	Moderate Access	More Access	Total
1	Establishment of a business	30 (8.5)	43 (12.2)	76 (21.6)	82 (23.3)	121 (34.4)	352 (100.0)
2	Availability of place	34 (9.7)	55 (15.6)	69 (19.6)	93 (26.4)	101 (28.7)	352 (100.0)
3	Source of finance for initial capital	36 (10.2)	50 (14.2)	68 (19.3)	74 (21.0)	124 (35.2)	352 (100.0)
4	Access to bank finance	20 (5.7)	30 (8.5)	68 (19.3)	102 (29.0)	132 (37.5)	352 (100.0)
5	Availability of machinery / equipment	37 (10.5)	28 (8.0)	53 (15.1)	120 (34.1)	114 (32.4)	352 (100.0)
6	Availability of workforce	41 (11.6)	43 (12.2)	63 (17.9)	86 (24.4)	119 (33.8)	352 (100.0)
7	Marketing sources to sale the goods/service	40 (11.4)	50 (14.2)	78 (22.2)	85 (24.1)	99 (28.1)	352 (100.0)
8	Availability of raw materials	31 (8.8)	43 (12.2)	50 (14.2)	93 (26.4)	135 (38.4)	352 (100.0)
9	Transport facilities	25 (7.1)	35 (9.9)	52 (14.8)	100 (28.4)	140 (39.8)	352 (100.0)
10	Industrial laws and legal advises	32 (9.1)	52 (14.8)	65 (18.5)	93 (26.4)	110 (31.3)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about information accessibility to manufacturing industries are represented in the Table-5. It is observed 34.4 percent are more access, 23.3 percent are moderate access and 21.6 percent are access to establishment of a business, but 12.2 percent are less access and 8.5 percent are no access. While 28.7 percent are more access, 26.4 percent are moderate access and 19.6 percent are average access to availability of place for manufacturing industries, 15.6 percent are less access and 9.7 percent are no access with this. The data shows 35.2 percent are more access, 21.0 percent are moderate access, 19.3 percent are access, 14.2 percent are less access and 10.2 percent are no access for source of finance for initial capital. But 37.5 percent are more access, 29.0 percent are moderate access, 19.3 percent are access, 8.5 percent are less access and 5.7 percent are no access to finance from banks. The data shows 32.4 percent are more access, 34.1



percent are moderate access, 15.1 percent are access, 8.0 percent are less access and 10.5 percent are no access to availing machinery/equipment for manufacturing enterprises.



According to the data it is observed that 33.8 percent are more access, 24.4 percent are moderate access, 17.9 percent are access, 12.2 percent are less access and 11.6 percent are no access to avail workforce. It is found that 28.1 percent are more access, 24.1 percent are moderate access, 22.2 percent are Access, 14.2 percent are less access and 11.4 percent are no access to marketing sources for sale the goods/service. From the data 38.4 percent are more access, 26.4 percent are moderate access, 14.2 percent are access, 12.2 percent are less access and 8.8 percent are no access to avail raw materials, whereas 39.8 percent are more access, 28.4 percent are moderate access, 14.8 percent are access, 9.9 percent are less access and 7.1 percent are no access to transport facilities. Finally, 31.3 percent are more access, 26.4 percent are moderate access, 18.5 percent are access, 14.8 percent are less access and 9.1 percent are no access to industrial laws and legal advises.

**Table-6: Perceptions of entrepreneurs about availability of skilled labour to manufacturing industries**

SL. No	Skilled Labour	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Required manpower is available in the district	48 (13.6)	52 (14.8)	70 (19.9)	78 (22.2)	104 (29.5)	352 (100.0)
2	Supervisor level manpower is available	47 (13.4)	55 (15.6)	63 (17.9)	77 (21.9)	110 (31.3)	352 (100.0)
3	Technical Man power is available	48 (13.6)	67 (19.0)	73 (20.7)	77 (21.9)	87 (24.7)	352 (100.0)
4	Manager level man power is available	41 (11.6)	48 (13.6)	63 (17.9)	96 (27.3)	104 (29.5)	352 (100.0)
5	Labour turnover is more	34 (9.7)	44 (12.5)	58 (16.5)	95 (27.0)	121 (34.4)	352 (100.0)
6	Labour migration is more	37 (10.5)	45 (12.8)	51 (14.5)	99 (28.1)	120 (34.1)	352 (100.0)
7	Worker attitude towards work culture is good	35 (9.9)	31 (8.8)	68 (19.3)	104 (29.5)	114 (32.4)	352 (100.0)
8	The overall Man power culture is supportive	27 (7.7)	57 (16.2)	69 (19.6)	92 (26.1)	107 (30.4)	352 (100.0)
9	Trained with required skill for doing business	32 (9.1)	40 (11.4)	50 (14.2)	105 (29.8)	125 (35.5)	352 (100.0)
10	Technically skilled management	29 (8.2)	53 (15.1)	77 (21.9)	92 (26.1)	101 (28.7)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about availability of skilled labour to manufacturing industries are represented in the Table-6. It is noticed 29.5 percent strongly agreed and 22.2 percent agreed that required manpower is available in the district, but 14.8 percent disagreed and 13.6 percent strongly disagreed to this. It is observed 31.3 percent strongly agreed and 21.9 percent agreed that supervisor level manpower is available, whereas 15.6 percent disagreed and 13.4 percent strongly disagreed. The data shows 24.7 percent strongly agreed and 21.9 percent agreed that technical man power is available, but 19.0 percent disagreed and 13.6 percent strongly disagreed to the statement. It is found 29.5 percent strongly agreed and 27.3 percent agreed that manager level man power is available, but 13.6 percent disagreed and 11.6



percent strongly disagreed. The data shows 34.4 percent strongly agreed and 27.0 percent agreed that labour turnover is more in the study area, whereas 12.5 percent disagreed and 9.7 percent strongly disagreed.





According to the data it is observed 34.1 percent strongly agreed and 28.1 percent agreed that labour migration is more in the area, but 12.8 percent disagreed and 10.5 percent strongly disagreed with this. It is found 32.4 percent strongly agreed and 29.5 percent agreed that worker attitude towards work culture is good, whereas 8.8 percent disagreed and 9.9 percent strongly disagreed to this. The data shows 30.4 percent strongly agreed and 26.1 percent agreed that the overall man power culture is supportive towards manufacturing industries, but 16.2 percent disagreed and 7.7 percent strongly disagreed with this. Since, 35.5 percent strongly agreed and 29.8 percent agreed that trained workers are required skill for doing business, whereas 11.4 percent disagreed and 9.1 percent strongly disagreed. Finally, 28.7 percent strongly agreed and 26.1 percent agreed that technically skilled management is needed for manufacturing industries, but 15.1 percent disagreed and 8.2 percent strongly disagreed with this.

**Table-7: Perceptions of entrepreneurs about financial accessibility to manufacturing industries**

SL. No	Financial Accessibility	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Government directly promotes manufacturing industries through industrial policies	19 (5.4)	32 (9.1)	40 (11.4)	78 (22.2)	183 (52.0)	352 (100.0)
2	Government incentives program offers a temporary tax reduction to manufacturing industries	15 (4.3)	44 (12.5)	31 (8.8)	99 (28.1)	163 (46.3)	352 (100.0)
3	Government encourage rural industries with subsidized power supply	12 (3.4)	43 (12.2)	64 (18.2)	84 (23.9)	149 (42.3)	352 (100.0)
4	Credit distribution for manufacturing firms are encouraging	16 (4.5)	28 (8.0)	41 (11.6)	86 (24.4)	181 (51.4)	352 (100.0)
5	Banks come forward to sanction short-term and long-term loans to establish manufacturing industries	31 (8.8)	23 (6.5)	60 (17.0)	109 (31.0)	129 (36.6)	352 (100.0)
6	Affordable financial products and services available to manufacturing industries	15 (4.3)	25 (7.1)	36 (10.2)	91 (25.9)	185 (52.6)	352 (100.0)
7	Over draft facility provided by banks are supportive to manufacturing industries	22 (6.3)	33 (9.4)	48 (13.6)	100 (28.4)	149 (42.3)	352 (100.0)
8	Subsidized loans to establish manufacturing industries are encouraging	30 (8.5)	43 (12.2)	64 (18.2)	76 (21.6)	139 (39.5)	352 (100.0)
9	Easy to get loans from private banks to establish manufacturing industries	27 (7.7)	40 (11.4)	49 (13.9)	82 (23.3)	154 (43.8)	352 (100.0)
10	Finance accessibility is encourageable for manufacturing industries	25 (7.1)	20 (5.7)	32 (9.1)	73 (20.2)	202 (57.4)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about financial accessibility to manufacturing industries are presented in the Table-7. The data shows 52.0 percent strongly agreed and 22.2 percent agreed that government directly promotes manufacturing industries through industrial policies, whereas 9.1 percent disagreed and 5.4 percent strongly disagreed to this. It is observed 46.3 percent strongly agreed and 28.1 percent agreed that government incentives program offers a temporary tax



reduction to manufacturing industries, but 12.5 percent disagreed and 4.3 percent strongly disagreed. The data reveals 42.3 percent strongly agreed and 23.9 percent agreed that government encourage rural industries with subsidized power supply,



whereas 12.2 percent disagreed and 3.4 percent strongly disagreed. It is found 51.4 percent strongly agreed and 24.4 percent agreed that credit distribution for manufacturing firms is encouraging, but 8.0 percent disagreed and 4.5 percent strongly disagreed with this. The data shows 36.6 percent strongly agreed and 31.0 percent agreed that banks come forward to sanction short-term and long-term loans to establish manufacturing industries, whereas 6.5 percent disagreed and 8.8 percent strongly disagreed.

According to the data it is observed 52.6 percent strongly agreed and 25.9 percent agreed that affordable financial products and services available to manufacturing industries, but 7.1 percent disagreed and 4.3 percent strongly disagreed with this. It is found 42.3 percent strongly agreed and 28.4 percent agreed that overdraft facility provided by banks are supportive to manufacturing industries, whereas 9.4 percent disagreed and 6.3 percent strongly disagreed to this. Out of the total respondents 39.5 percent strongly agreed and 21.6 percent agreed that subsidized loans to establish manufacturing industries are encouraging, but 12.2 percent disagreed and 8.5 percent strongly disagreed. While 43.8 percent strongly agreed and 23.3 percent agreed that it is easy to get loans from private banks to establish manufacturing industries, but 11.4 percent disagreed and 7.7 percent strongly disagreed to this. Finally, 57.4 percent strongly agreed and 20.2 percent agreed that finance accessibility is encourageable for manufacturing industries, but 5.7 percent disagreed and 7.1 percent strongly disagreed with this.

**Table-8: Perceptions of entrepreneurs about financial sustainability of manufacturing industries**

SL. No	Financial Sustainability	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total
1	The profitability of my business has been good	18 (5.1)	55 (15.6)	79 (22.4)	93 (26.4)	107 (30.4)	352 (100.0)
2	I have managed to increase my stock without debt financing	45 (12.8)	57 (16.2)	76 (21.6)	84 (23.9)	90 (25.6)	352 (100.0)
3	The customers of my business increased at a higher rate than previous years	35 (9.9)	43 (12.2)	59 (16.8)	74 (21.0)	141 (40.1)	352 (100.0)
4	My business has been experiencing positive cash flow movement	40 (11.4)	56 (15.9)	63 (17.9)	85 (24.1)	108 (30.7)	352 (100.0)
5	I have been meeting my financial obligations in a timely manner	39 (11.1)	54 (15.3)	63 (17.9)	73 (20.7)	123 (34.9)	352 (100.0)
6	A business budget is key in my business operations	47 (13.4)	59 (16.8)	62 (17.6)	82 (23.3)	102 (29.0)	352 (100.0)
7	I have not experienced unfavorable deviations in my budget for my enterprise	46 (13.1)	60 (17.0)	68 (19.3)	83 (23.6)	95 (27.0)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about financial sustainability of manufacturing industries are represented in the Table-8. As per the data 30.4 percent strongly agreed and 26.4 percent agreed that profitability of the manufacturing industries' business has been good, but 15.6 percent disagreed and 5.1 percent



strongly disagreed with this. It is observed 25.6 percent strongly agreed and 23.9 percent agreed that the entrepreneurs have managed to increase their stock without debt financing, whereas 16.2 percent disagreed and 12.8 percent strongly disagreed to



this. The data shows 40.1 percent strongly agreed and 21.0 percent agreed that customers of the manufacturing industries increased at a higher rate than previous years, but 12.2 percent disagreed and 9.9 percent strongly disagreed. It is found 30.7 percent strongly agreed and 24.1 percent agreed that their business has been experiencing positive cash flow movement, but 15.9 percent disagreed and 11.4 percent strongly disagreed. The data shows 34.9 percent strongly agreed and 20.7 percent agreed that they have been meeting their financial obligations in timely manner, whereas 15.3 percent disagreed and 11.1 percent strongly disagreed to this.

According to the data it is observed 29.0 percent strongly agreed and 23.3 percent agreed that budget is the key aspect in their business operations, whereas 16.8 percent disagreed and 13.4 percent strongly disagreed with this. It is found 27.0 percent strongly agreed and 23.6 percent agreed that they have not experienced unfavorable deviations in their budget for enterprise, but 17.0 percent disagreed and 13.1 percent strongly disagreed.

**Table-9: Perceptions of entrepreneurs about financial management of manufacturing industries**

SL. No	Financial Management	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total
1	Book-keeping skills are good	37 (10.5)	51 (14.5)	66 (18.8)	82 (23.3)	116 (33.0)	352 (100.0)
2	Understanding, analysing and interpreting financial data, balance sheets and cash flow	36 (10.2)	49 (13.9)	67 (19.0)	80 (22.7)	120 (34.1)	352 (100.0)
3	Monitoring of Spending, expenses and budgets	22 (6.3)	40 (11.4)	70 (19.9)	79 (22.4)	141 (40.1)	352 (100.0)
4	Understanding how to develop realistic and accurate forecasts	42 (11.9)	59 (16.8)	68 (19.3)	77 (21.9)	106 (30.1)	352 (100.0)
5	Managing cash and cash disbursements	41 (11.6)	59 (16.8)	69 (19.6)	83 (23.6)	100 (28.4)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

The perceptions of entrepreneurs about financial management of manufacturing industries are represented in the Table-9. According to the data 33.0 percent strongly agreed and 23.3 percent agreed that book-keeping skills are good with them, but 14.5 percent disagreed and 10.5 percent strongly disagreed to this. It is observed 34.1 percent strongly agreed and 22.7 percent agreed that they could understand, analyse and interpret their financial data, balance sheets and cash flow operations, whereas 13.9 percent disagreed and 10.2 percent strongly disagreed with this. The data shows 40.1 percent strongly agreed and 22.4 percent agreed that they could monitor their spending, expenses and budgets by themselves, whereas 11.4 percent disagreed and 6.3 percent strongly disagreed. It is found 30.1 percent strongly agreed and 21.9 percent agreed that they could understand how to develop realistic and accurate forecasts of their organisation, but 16.8 percent disagreed and 11.9 percent strongly disagreed to this. While 28.4 percent strongly agreed and 23.6 percent agreed that managing cash and cash disbursements are easy to them, but 16.8



percent disagreed and 11.6 percent strongly disagreed with this.



**Table-10: Satisfaction levels of entrepreneurs about performance of manufacturing industry in Srikakulam district**

SL. No	Performance of Manufacturing Industry	More Dissatisfied	Dissatisfied	Satisfied	Moderately satisfied	Highly satisfied	Total
1	Opportunities and prospects of business	40 (11.4)	57 (16.2)	60 (17.0)	80 (22.7)	115 (32.7)	352 (100.0)
2	Utilisation of productive capacity	44 (12.5)	52 (14.8)	78 (22.2)	83 (23.6)	95 (27.0)	352 (100.0)
3	Management meets the goals through business planning	19 (5.4)	32 (9.1)	77 (21.9)	93 (26.4)	131 (37.2)	352 (100.0)
4	Cost management	47 (13.4)	53 (15.1)	60 (17.0)	92 (26.1)	100 (28.4)	352 (100.0)
5	Market share of business	39 (11.1)	50 (14.2)	55 (15.6)	78 (22.2)	130 (36.9)	352 (100.0)
6	Product demand	35 (9.9)	49 (13.9)	76 (21.6)	85 (24.1)	107 (30.4)	352 (100.0)
7	Efficiency of your supply chain management	42 (11.9)	44 (12.5)	74 (21.0)	92 (26.1)	100 (28.4)	352 (100.0)
8	Firm turnover	40 (11.4)	49 (13.9)	62 (17.6)	78 (22.2)	123 (34.9)	352 (100.0)
9	Revenue streams including pricing structure and margins	43 (12.2)	55 (15.6)	68 (19.3)	89 (25.3)	97 (27.6)	352 (100.0)
10	Customer satisfaction with your product	34 (9.7)	44 (12.5)	61 (17.3)	87 (24.7)	126 (35.8)	352 (100.0)

Source: Primary Data, (Figures in brackets are percentages)

Satisfaction levels of entrepreneurs about performance of manufacturing industry in Srikakulam district are represented in the Table-10. It is found 32.7 percent highly satisfied, 22.7 percent moderately satisfied and 17.0 percent are satisfied with their opportunities and accessibilities of business, but 16.2 percent dissatisfied and 11.4 percent more dissatisfied in this regard. It is observed 27.0 percent highly satisfied, 23.6 percent moderately satisfied and 22.2 percent satisfied with their utilisation of productive capacity, whereas 14.8 percent dissatisfied and 12.5 percent more dissatisfied. The data shows 37.2 percent highly satisfied, 26.4 percent moderately satisfied and 21.9 percent satisfied with the management of their organisation which meets the goals through business planning, but 9.1 percent dissatisfied and 5.4 percent more dissatisfied to this aspect. It is found 28.4 percent highly satisfied, 26.1 percent moderately satisfied and 17.0 percent satisfied with cost management of their organisation, whereas 15.1 percent dissatisfied and 13.4 percent more dissatisfied in this regard. The data shows 36.9 percent highly satisfied, 22.2 percent moderately satisfied and 15.6 percent satisfied with the market share of their business, but 14.2 percent dissatisfied and 11.1 percent more dissatisfied.

According to the data it is observed 30.4 percent highly satisfied, 24.1 percent moderately satisfied and 21.6 percent satisfied with the product demand of their industry, but 13.9 percent dissatisfied and 9.9 percent more dissatisfied to this. It is found 28.4 percent highly satisfied, 26.1 percent moderately satisfied and 21.0 percent satisfied with the efficiency of supply chain management of their organisation, whereas 12.5 percent dissatisfied and 11.9 percent more dissatisfied with this. From



the data 34.9 percent highly satisfied, 22.2 percent moderately satisfied, 17.6 percent satisfied with their firm's turnover, whereas 13.9 percent dissatisfied and 11.4 percent more dissatisfied to this. While 27.6 percent highly satisfied, 25.3 percent moderately





satisfied and 19.3 percent satisfied with the revenue streams of their organisation including pricing structure, costs, margins and expenses, but 15.6 percent dissatisfied and 12.2 percent more dissatisfied with this. Finally, 35.8 percent highly satisfied, 24.7 percent moderately satisfied and 17.3 percent satisfied with their customers' satisfaction of product produced by them, whereas 12.5 percent dissatisfied and 9.7 percent more dissatisfied in this regard.

### Determining factors of manufacturing industries' performance

One of the objectives of this paper is to examine the factors determining the performance of manufacturing industries in Srikakulam district. Thus, to find out this objective regression analysis has been adopted. In this process financial awareness, marketing facilities, technical skills, government support, information accessibility, skilled labour, financial accessibility, financial sustainability and financial management considered as independent variables and performance of manufacturing industries taken as dependent variable. Thus, regression analysis has been done in this paper to estimate the factors determine performance of manufacturing industries.

### Regression Model

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + e_1$$

Where,

Y= Performance of manufacturing industry (**Dependent variable**)

### Independent variables:

X<sub>1</sub>: Financial Awareness

X<sub>2</sub>: Marketing Facilities

X<sub>3</sub>: Technical Skills

X<sub>4</sub>: Government Support

X<sub>5</sub>: Information Accessibility

X<sub>6</sub>: Labour Skills

X<sub>7</sub>: Financial Accessibility

X<sub>8</sub>: Financial Sustainability

X<sub>9</sub>: Financial Management

b<sub>0</sub>, b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub>, b<sub>4</sub>, b<sub>5</sub>, b<sub>6</sub>, b<sub>7</sub>, b<sub>8</sub>, b<sub>9</sub> are constants and e<sub>1</sub> is error term.

**Table-11: Factors determining the performance of manufacturing industries in Srikakulam district**

<p>Regression Summary for Dependent Variable: Performance of manufacturing industries R= 0.6211 R<sup>2</sup>= 0.3857 Adjusted R<sup>2</sup>= 0.4696 F(9,342)=23.863 p&lt;0.000 Std. Error of estimate: 5.1041</p>
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<b>Determinant factors (Independent variables)</b>	<b>Beta</b>	<b>St. Err. of Beta</b>	<b>B</b>	<b>St. Err. of B</b>	<b>t(342)</b>	<b>p-level</b>
Intercept			13.093	6.890	1.900	0.058
Financial Awareness	1.378	0.509	1.971	0.729	2.705*	0.007
Marketing Facilities	0.311	0.047	0.422	0.063	6.677**	0.000



Technical Skills	0.427	0.403	0.671	0.634	1.059	0.290
Government Support	0.146	0.045	0.199	0.062	3.236**	0.001
Information Accessibility	3.256	0.437	4.447	0.597	7.451**	0.000
Labour Skills	1.211	0.476	1.903	0.748	2.545*	0.011
Financial Accessibility	0.064	0.362	0.147	0.824	0.178	0.859
Financial Sustainability	0.927	0.446	1.667	0.802	2.080*	0.038
Financial Management	0.116	0.051	0.160	0.071	2.265*	0.024

\* Significant at 5% level; \*\* Significant at 1% level

The influence of determining factors on the performance of manufacturing industries in Srikakulam district is presented in the Table-11. Here performance of manufacturing industry considered as dependent variable and the determining factors such as; financial awareness, marketing facilities, technical skills, government support, information accessibility, labour skills, financial accessibility, financial sustainability and financial management considered as independent variables, and both dependent and independent variables measured by quantitative values. Hence the regression analysis has applied to estimate the impact of independent variables on dependent variable, and the results are discussed below.

**Financial Awareness:** Financial awareness of entrepreneurs is expecting a positive significant relationship with performance of manufacturing industries in Srikakulam district. Here the regression coefficient of t-value 2.705 indicates significance at 5% level because the p-value 0.007, which is less than 0.05. This infers that 5% increase in financial awareness significantly influences 46.96 percent increase in performance of manufacturing industries in Srikakulam district.

**Marketing Facilities:** Marketing facilities is expecting significant relationship with the performance of manufacturing industries in Srikakulam district, where the coefficient of t-value 6.677 indicates significance at 1% level because the p-value 0.000 is less than 0.01. This infers that 1% increase in marketing facilities of manufacturing industries in Srikakulam district influences significantly 46.96 percent of their performance.

**Technical Skills:** Technical skills of manufacturing industries are expecting a positive relationship with their performance, but the coefficient of t-value 1.059 indicates not significant because the p-value 0.290 is more than 0.05. This infers that performance of manufacturing industries in Srikakulam district do not influenced by their technical skills.

**Government Support:** Government support to manufacturing enterprises is expecting significant relationship with their performance, where the regression coefficient of t-value 3.236 indicates 1% significance because the p-value 0.001 is less than 0.01. This infers that 1% satisfaction of manufacturing entrepreneurs in Srikakulam district towards government support leads to 46.96 percent increase in performance significantly.

**Information Accessibility:** Information accessibility is expecting positive significant relationship with the performance of manufacturing industries in Srikakulam district, where the coefficient of t-value 7.451 indicates significance at 1% level because the p-value 0.000 is less than 0.01. This infers that 1% increase in information accessibility significantly influences 46.96 percent performance of manufacturing



industries in Srikakulam district.

**Labour Skills:** Labour skills are expecting positive relationship with their performance of manufacturing industries in Srikakulam district, where the coefficient



of t-value 2.545 indicates significance at 5% level because the p-value is 0.011 is lesser than 0.05. This shows that 5% increase in labour skills significantly influences 46.96 percent performance of manufacturing industries in Srikakulam district.

**Financial Accessibility:** Financial accessibility of manufacturing entrepreneurs in Srikakulam district is expecting positive relationship with their performance. Since, the regression coefficient of t-value 0.178 indicates not significant because the p-value 0.859, which is higher than 0.05. This infers that manufacturing industries in Srikakulam district do not influenced by financial accessibility.

**Financial Sustainability:** Financial sustainability of manufacturing enterprises in Srikakulam district is expecting a significant relationship with their performance. In this estimation the coefficient of t-value 2.080 indicates significance at 5% level because the p-value 0.038 is lesser than 0.05. This shows that 5% increase in financial sustainability significantly influences 46.96 percent performance of manufacturing industries in Srikakulam district.

**Financial Management:** On the other hand financial management of manufacturing enterprises Srikakulam district is expecting to be a significant relationship with their performance. Moreover, the regression coefficient of t-value 2.265 indicates significance at 5% level because the p-value 0.024 is lesser than 0.05. This shows that 5% increase in financial management significantly influences 46.96 percent performance of manufacturing industries in Srikakulam district.

### **Conclusion**

This regression model is best fit for analyse the factors determinants the performance of manufacturing industries in Srikakulam district because the adjusted  $R^2$  is 46.96 (0.4696),  $R^2$  is 0.3857 and R is 0.6211. Since, the f-value 23.863 indicates significant at 1% level because the p-value is 0.000. Hence, in this regression test out of the 9 discriminate variables considered for performance of manufacturing industries, it is found that 7 variables are indicating significance, where marketing facilities, government support, information accessibility are indicating significant at 1% level and financial awareness, labour skills, financial sustainability and financial management are indicating 5% significance. Whereas, the remaining 2 variables i.e., technical skills and financial accessibility are not found any significance.

### **Discussion**

The awareness of entrepreneurs on availability of financial resources for manufacturing industries, the data reveals that 72.7 percent opined subsidized loans are available because 72.2 percent felt banks and financial institutions are allocating more budgets for manufacturing industries. In this regard 77.9 percent of the respondents opined over draft facility is supportive to entrepreneurs. Moreover, 78.1 percent of the respondents agreed that tax holiday for new industrial undertakings encourages manufacturing industries, 74.4 venture capitalists encourage startups of manufacturing industries. While 77.0 percent respondents felt capital & power subsidies to industries in backward areas encourage rural entrepreneurs, 78.7 percent opined government supports manufacturing industries particularly for SC, ST & BC categories. Since, 75.5 percent of the respondents felt more working capital is need



for manufacturing industries, 77.6 percent opined private money lenders are supportive towards manufacturing industries. Hence, 80.4 percent agreed that the overall finance awareness is good for manufacturing industries.

The perceptions of entrepreneurs on the performance of marketing facilities



for manufacturing industries the data indicate that 60.5 percent are depends on local market, but 57.1 percent felt that there is a scope for export market for their products. While 65.4 percent opined government decision to direct purchase of reserved products, arranging market outlets like sales emporium and state cooperative societies, and trade fairs encourage manufacturing industries in marketing, 69.0 percent felt middle men network also available for the marketing of their products. Even though 67.9 percent agreed that marketing network is supportive for manufacturing industries, 61.0 percent opined cold storage/ware house facility is available to preserve their products. Moreover, 58.2 percent felt more scope for promoting the products produced by the manufacturing industries, 74.2 percent opined online marketing increases the scope of more sales. Since, 57.7 percent felt government incentives for export market encourages the manufacturing industries. Hence, 66.8 percent of the respondents opined that the overall marketing environment for manufacturing industries is supportive.

Perceptions of the entrepreneurs of manufacturing industries towards their performance in technical skills revealed that 64.5 percent felt that information on recent technology developments available. Therefore, 67.3 percent entrepreneurs are being used latest technology in their production. Moreover, 64.8 percent of the respondents agreed that sufficient sources for machinery suppliers are available Srikakulam district, 67.9 percent are availing imported machinery also. While 60.0 of the entrepreneurs opined availability of appropriate technology is suitable for local needs, 63.7 percent felt that it is easy to maintenance of local technology and imported technology in the study area. Since, 59.4 percent of the respondents agreed that facility for on job training is sufficient, 54.0 percent opined information technology is in utilization. Even though 52.8 percent of the respondents felt easy to avail skilled man power for working on imported technology. Hence, 58.8 percent of the entrepreneurs expressed that the overall technology of environment for manufacturing enterprises is supportive.

The perceptions of entrepreneurs about the government support towards manufacturing industries revealed that 51.4 percent opined government schemes are encouraging to start manufacturing industries, in this regard 57.1 percent respondents felt incentives and subsidies are encouraging. While 61.1 percent entrepreneurs agreed that industrial policies have been encouraging to start manufacturing industries, 52.2 percent observed government officials are supportive to approve proposals to start manufacturing industries. Moreover, 62.8 percent agreed that single window licensing system is effective manufacturing industries, 58.5 percent satisfied with government marketing assistance to help the entrepreneurs. Since, 63.9 percent opined that Entrepreneur Development Programs are continuously motivating entrepreneurs, 54.2 percent opined entrepreneurial eco system is encouraging and 57.2 percent felt industrial relations are being maintained by the government. Hence, 63.9 percent satisfied with the overall government support towards manufacturing industries.

The perceptions of entrepreneurs about information accessibility of manufacturing industries indicate that 85.8 percent found access to bank finance and 83.0 percent satisfied with transport facilities. Moreover, 81.6 percent of the



entrepreneurs satisfied with the availability of machinery / equipment to manufacturing industries, 79.3 percent happy with establishment of their business. While 79.0 percent of the respondents satisfied with the availability of raw materials, 76.1 percent satisfied with availability of workforce and 74.7 percent satisfied with





availability of place for manufacturing industries. Since, 75.5 percent of the entrepreneurs found happy with source of finance for initial capital, 74.4 percent found good with marketing sources to sale their goods/service. Hence, 76.2 percent of the entrepreneurs agreed that industrial laws and legal advisers found positive towards manufacturing industries'

The perceptions of entrepreneurs about availability of skilled labour for manufacturing industries, the data shows that 65.3 percent opined trained labour with required skill are available for doing business. Even though 62.2 percent felt labour migration is more in Srikakulam district, 61.9 percent observed worker attitude towards work culture is good. Therefore, 61.4 percent of the entrepreneurs felt labour turnover is more for manufacturing industries. Since, 56.8 percent of the respondents opined that manager level man power is available for manufacturing industries, 54.8 percent felt that these man power are found technically skilled. While, 53.2 percent of the entrepreneurs observed that supervisor level manpower is available in the study area, 46.6 percent found technical man power is available. Therefore, 51.7 percent of the respondents felt that required manpower for manufacturing industries is available in Srikakulam district. Hence, 56.5 percent expressed that the overall availability of man power culture in the study area is supportive to the manufacturing industries.

Perceptions of entrepreneurs with reference to financial accessibility of manufacturing industry infer that 78.5 percent opined affordable financial products and services are available to manufacturing industries in Srikakulam district. In this regard 74.2 percent felt government directly promotes manufacturing industries through industrial policies and 74.4 felt government incentives program offers a temporary tax reduction to manufacturing industries. Therefore, 66.2 percent entrepreneurs opined that government encourages rural industries with subsidized power supply and credit distribution for manufacturing firms (75.8%). Moreover, 67.6 percent respondents felt banks come forward to sanction short-term and long-term loans to establish manufacturing industries, 70.7 percent opined the over draft facility provided by banks are supportive to manufacturing industries. Therefore, 61.1 percent agreed that subsidized loans to establish manufacturing industries are encouraging. So, 67.1 percent entrepreneurs found easy to get loans from private banks to establish manufacturing industries. Thus, it can be understood that 77.6 percent of the entrepreneurs opined finance accessibility is encourageable for manufacturing industries in Srikakulam district.

The perceptions of entrepreneurs towards financial sustainability of manufacturing industries in Srikakulam district revealed that 56.8 percent opined the profitability of their business has been good but 49.5 percent could managed to increase their stock without debt financing. Moreover, 61.1 percent of the entrepreneurs felt that the customers of their business increased in the current year at a higher rate than the previous years, 54.8 percent opined that their business has been experiencing positive cash flow movement. Therefore, 55.6 percent of the respondents have been meeting their financial obligations in a timely manner because 52.3 percent believe that business budget is a key in their business operations. Hence, it is found that 50.6 of the entrepreneurs have not experienced unfavorable deviations in their budget for enterprises.



Perceptions of the entrepreneurs about financial management of manufacturing industries in the study area indicate that 56.3 percent felt book-keeping skills are good because 56.8 percent are satisfied with understanding, analysing and



interpreting financial data, balance sheets and cash flow analysis. Moreover, 62.5 percent of the entrepreneurs able to monitoring their spending, expenses and budgets, 52.0 percent could understand how to develop realistic and accurate forecasts of their industrial requirements. But it is found that 52.0 percent of the entrepreneurs able to manage their cash and disbursements.

The perceptions of entrepreneurs on performance of manufacturing industry in Srikakulam district shows that 63.6 percent opined management could able to meet their the goals through business planning. So 60.5 percent of the entrepreneurs could able to meet their customer satisfaction with products. While 59.1 percent of the respondents satisfied with their market share of business, 57.1 percent satisfied with their firms' turnover. Moreover, 55.4 percent of the entrepreneurs are utilising their opportunities and prospects of business, 54.5 percent satisfied with efficiency of their supply chain management. Since, 54.5 percent of the entrepreneurs satisfied with their cost management and product demand, 52.9 percent could streamline their revenue including pricing structure and margins. Therefore, 50.6 percent of the entrepreneurs satisfied with their utilisation of productive capacity.

### **Conclusion**

Manufacturing sector is the backbone of Indian economy. Despite many constraints affected in the last few years, this sector occupied a place of pride covering the largest industries in India and Srikakulam district in Andhra Pradesh state also. The contribution of MSMEs in employment generation and production of goods and services found very much significant, especially in the rural and backward areas of the country. Since, MSMEs are an essential source of jobs, create entrepreneurial development and employment in rural areas, the migration of labour from rural to urban areas is controlled. Moreover, the main objective of this research paper is to find out the factors determining the manufacturing industries in Srikakulam district the study has considered finance resources, marketing facilities, technical skills, government support, information accessibility, skilled labour, financial accessibility, financial sustainability and financial management are the independent variables and performance of manufacturing industries as the dependent variable. To estimate this regression test has been applied and found that marketing facilities, government support, information accessibility, financial awareness, skilled labour, financial sustainability and financial management are significantly influencing the performance of manufacturing industries in Srikakulam district, Andhra Pradesh.



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