

GROWTH AND PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN INDIA

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ABSTRACT:

In the present study focuses on growth and performance of Micro, Small and Medium Enterprises like capital structure, employment pattern, average cost of production, and profitability are covered and suggestions emanating from the conclusions are offered for ensuring a better performance in selected Micro, Small and Medium Enterprises. Micro, Small and Medium Enterprises take in enormous scope covering activities like manufacturing, servicing, financing, construction, infrastructure etc. In view of the Government of India ever increasing importance given to the small scale industries they need to be set up in the years to come. By contributing its increasing share to the national production, employment and exports, small scale industries also contribute to the economic development of the country. The study comprises a total sample of 192 units covering all industrial categories. The Study has a three years reference period i.e., 2008-09, 2009-10, 2010-2011.

Key Words: Chittoor District, Growth, India, Micro, Small and Medium Enterprises (MSMEs), Performance.

1. INTRODUCTION

Small scale industries are a imperative ingredient of India's industrialized sector. It contributes significantly to India's Gross Domestic Product (GDP) and export earnings besides meeting the social objectives including that of providing employment opportunity to millions of people across the country. The MSMEs in India are acting as power and spirit of economic growth in the 21st century. The Ministry of Agro and Land Rural industries and Ministry of SSI have been merged into a single Ministry namely, Ministry of Micro, Small and Medium Enterprises. The Small scale sector has played a greater role in the socio economic development of the country during the past fifty years. It has significantly contributed to the overall growth in terms of Gross Domestic Product (GDP) employment generation and exports.

Micro, Small and Medium Enterprises Development Act, 2006

The Government of India enacted the Micro, Small and Medium Enterprises Development (MSMEs) Act, 2006 on June 16, 2006 which was notified on October 2, 2006. With the ratification of MSME Act 2006, the paradigm shift has included the services sector in the definition of micro, small and medium enterprises, apart from extending the scope to medium enterprises. The MSMEs Act, 2006 has modified the definition of micro, small and medium enterprises engaged in manufacturing or production and providing or rendering of services.

Definition of Micro, Small and Medium Enterprises

The Act has defined medium enterprises for the first time. The enterprises are further classified into Micro, Small and Medium categories. The investment limits of these enterprises are as follows:

I. Manufacturing Enterprises:

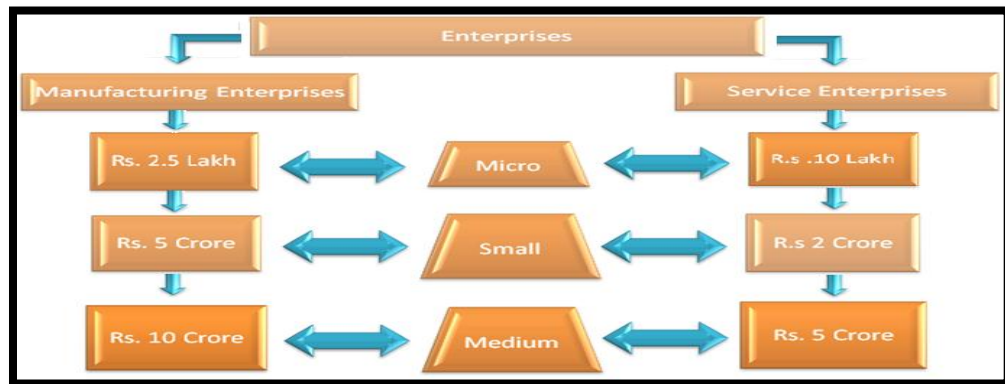
- i) A micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs.25 lakh;
- ii) A small enterprise is an enterprise where investment in plant and machinery is more than Rs.25 lakh but does not exceed Rs.5 crore: and
- iii) A medium enterprise is an enterprise where the investment in plant and machinery is more than Rs.5 crore but does not exceed Rs.10 crore.

II. Service Enterprises:

- i) A micro enterprise is an enterprise where the investment in equipment does not exceed Rs.10 lakh;
- ii) A small enterprise is an enterprise where the investment in equipment is more than Rs.10 lakh but does not exceed Rs.2 crore:
- iii) A medium enterprise is an enterprise where the investment in equipment is more than Rs.2 crore but does not exceed Rs.5 crore.

(The investment limits of these enterprises are as shown in figure 1)

Figure1
Classifications of Micro, Small and Medium Enterprises



(As per Micro, Small and Medium Enterprises Development Act, 2006)

The Micro, Small and Medium Enterprises constitute the overall industrial sector of the country.

2. GROWTH AND PERFORMANCE OF MSMES IN INDIA

Worldwide, the Micro Small and Medium Enterprises (MSMEs) have been accepted as the tank engine of economic growth and for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. The labour intensity of the MSME sector is much higher than that of the large enterprises. In India too, the MSMEs play a pivotal role in the overall industrial economy of the country. In recent years the MSME sector has consistently registered higher growth rate compared to the overall industrial sector. It can be observed from Table1 that the number of MSMEs increased from 67.87 lakh units in 1990-91 to 311.52 lakh units in 2010-11. There has been a steady growth in investments production employment and exports during 2010-11 over 1990-91. The investment and production increased from Rs. 93,555 crore and 78,802 core in 1990-91 to Rs. 7,73,487 crore and Rs. 10, 95,758 crore in 2010-2011 respectively at current prices. There has been a steady increase of employment and exports of MSMEs. The employment in MSMEs increased from 158.34 lakh in 1990-91 to 732.17 lakhs during 2010-2011.

Table 1
Performance of Micro, Small and Medium Enterprises

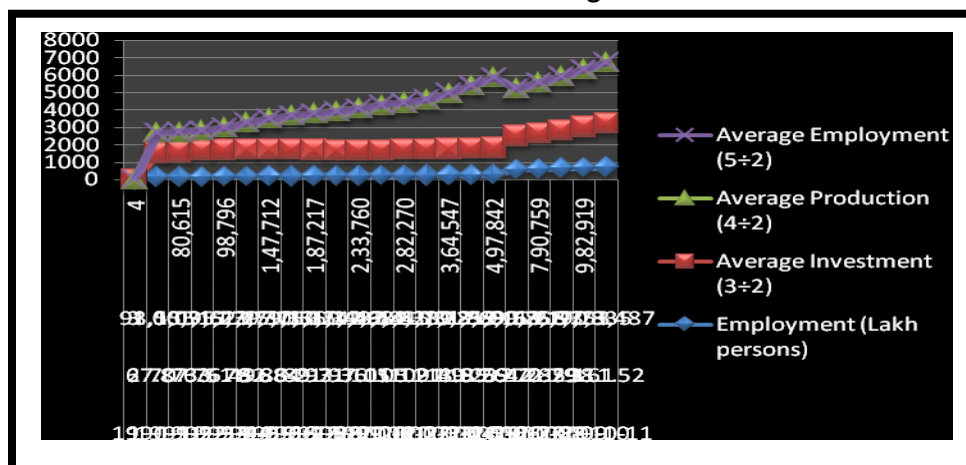
Year	Number of Total MSM Es (in lakh)	Fixed Investment (Rs. Crore)	Production (Rs. Crores)	Employment (Lakh persons)	Average Investment (3÷2)	Average Production (4÷2)	Average Employment (5÷2)
1	2	3	4	5	6	7	8
1990-91	67.87	93,555	78,802	158.34	1,378.44	1,161.07	2.33
1991-92	70.63	1,00,351	80,615	166.99	1,420.80	1,141.37	2.36
1992-93	73.51	1,09,623	84,413	174.84	1,491.27	1,148.32	2.38
1993-94	76.49	1,15,797	98,796	182.64	1,513.88	1,291.62	2.39
1994-95	79.60	1,23,790	1,22,154	191.40	1,555.15	1,534.60	2.40
1995-96	82.84	1,25,750	1,47,712	197.93	1,517.99	1,780.10	2.39
1996-97	86.21	1,30,560	1,67,805	205.86	1,514.44	1,946.47	2.39
1997-98	89.71	1,33,242	1,87,217	213.16	1,485.25	2,086.91	2.38
1998-99	93.36	1,35,482	2,10,454	220.55	1,451.18	2,254.22	2.36
1999-00	97.15	1,39,982	2,33,760	229.10	1,440.89	2,406.18	2.36
2000-01	101.1	1,46,845	2,61,297	238.73	1,452.47	2,584.54	2.36
2001-02	105.21	1,54,389	2,82,270	249.33	1,467.44	2,682.92	2.37
2002-03	109.49	1,62,317	3,14,850	260.21	1,482.48	2,875.61	2.38
2003-04	113.95	1,70,219	3,64,547	271.42	1,493.80	3,199.18	2.38
2004-05	118.59	1,78,699	4,29,796	282.57	1,506.86	3,624.22	2.38

2005-06	123.4 2	1,88,113	4,97,84 2	294.9 1	1,524.17	4,033.72	2.39
2006-07	261.0 1	5,00,758	7,09,39 8	594.6 1	1,918.54	2,717.90	2.28
2007-08	272.7 9	5,58,190	7,90,75 9	626.3 4	2,046.23	2,898.78	2.30
2008-09	285.1 6	6,21,753	8,80,80 5	659.3 5	2,180.37	3,088.81	2.31
2009-10	298.1 0	6,93,835	9,82,91 9	695.3 8	2,327.52	3,297.28	2.33
2010-11	311.5 2	7,73,487	10,95,7 58	732.1 7	2,482.94	3,517.46	2.35
Mean	138.9 4	2,55,082. 71	3,81,99 8.52	325.9 9			
CV	61.84	86.71	83.77	60.48			
LGR	8.49	11.34	12.45	8.35			
CGR	7.7	9.9	13.7	7.6			
t-value	7.097 **	6.058**	10.388* *	7.238 **			

Source: Government of India Ministry of Micro, Small and Medium Enterprises Annual Report 2011-2012. www.msme.gov.in

Graph 1

Number of MSMES in India during the Last Decade



The production increased consistently from Rs. 2, 61,297crore to Rs. 1,09,5758. The employment also registered on from 238.73 lakh persons in 2000-01 to 732.17 lakh persons in 2010-11 the exports increased considerably.

3. GROWTH OF MSMES IN ANDHRA PRADESH

Andhra Pradesh has emerged as one of the most attractive investment destinations by attracting a large number of investors. The State is home to 4,099 large and medium scale industries with an investment of Rs.68, 258 crore creating employment to 9, 77, 754 persons. The state is ranked 3rd in the country with a total Rs. 1, 51,454 crores of committed investment with an employment potential of 7,81,476 persons in the state after liberalization of industrial policy.

Small scale industries form an important part of Andhra Pradesh Economy. The sector contributes around 6 % of GSDP and employs close to 2.5 Lakh people. Andhra Pradesh will have many dynamic and profitable small scale industries. Propelled by technological development and capability building, small scale units will flourish all over the state. To achieve the target growth rate of 9.5% (Agriculture: 5%, Industry: 10% and services: 11%), the state has to grow around 15% during 2011-2012. Andhra Pradesh is a one of the leading states as industrially well developed state in India. Andhra Pradesh State Financial Corporation (APSFC) is a term lending Institution established in 1956 for promoting Small and Medium Scale industries in the state under the provision of Andhra Pradesh State Financial Corporation Act, 1956. During the study period of 2006-07 to 2010-11 the overall performance of APSFC has registered as a positive sign. The sanctioned amount was increased to Rs.1, 205.25 crore (24.83 %) in 2010-11 from Rs.704.75 crore (14.52 %) in the year 2006-07 and the disbursement to Rs. 904.35 crore (25.95 per cent) from Rs.523.14 crore (15.01 %). The recovery performance of the corporation has aggressively increased to Rs.902.38 crore (25.90 %) from Rs.515.95 crore (14.81 %).

Table 2

Andhra Pradesh State Financial Corporation (APSFC) in Sanctioned and Disbursement of Funds (Rs. In Crore) from MSMEs

Years	Sanctioned amount	Disbursement amount
2006-07	704.75(14.52)	523.14(15.01)
2007-08	1006.66(20.73)	662.70(19.02)
2008-09	885.67(18.24)	685.70(19.68)
2009-10	1052.38(21.68)	708.78(20.34)
2010-11	1205.25(24.83)	904.35(25.95)
Total	4854.71(100)	3484.67(100)

Source: Annual report of APSFC

Table 2 Indicates the APSFC overall progress of the sanctioned and disbursement of funds. It may be observed that sanctioned and disbursement funds have increased year to year. It they increased largely in the period of 2006-07 to 2010-11. In the year 2006-07 the APSFC sanctioned funds to MSMEs of Rs.704.75 crore (14.52 %) it was increased to Rs.1,006.66 crore (20.73 %) in 2007-08. The disbursements of APSFC in 2006-07 were Rs.523.70 crore (15.01 %) and they were increased to Rs.662.70 crore (19.02 %). The sanctions has been decreased in 2008-09 to Rs.685.75 crore (19.68 %). Again the sanction amount was increased in 2009-10 and 2010-11 to Rs.1, 052.38 crore (21.68 %) and Rs.1, 205.25 crore (24.83 %) respectively and the disbursements were also increased to Rs.708.78 crore (20.34 %) and Rs.904.35 crore (25.95 %).

Table 3
Recovery Performance of APSFC from MSMEs
(Rs. In Crores)

Years	Recovery Amount		
	Principal	Investment	Total
2006-07	371.18(15.57)	144.77(13.18)	515.95(14.81)
2007-08	421.72(17.68)	200.22(18.22)	621.94(17.85)
2008-09	449.25(18.84)	208.83(19.00)	658.08(18.90)
2009-10	528.04(22.14)	257.08(23.40)	785.12(22.54)
2010-11	614.48(25.77)	287.90(26.20)	902.38(25.90)
Total	2384.67(100)	1098.80(100)	3483.47(100)

Source: Annual report of APSFC

Table 3 indicates that the recovery performance of APSFC from MSMEs assisted funds during the 2006-07 to 2010-11. In the year 2006-07 the APSFC recovered Rs.515.95 crore (14.81 %) of which the principle amount was Rs.371.18 crore (15.57 %) and the interest amount Rs.144.77 crore (13.18 %). The total recovery amount of APSFC was increased year to year as Rs.902.38crore (25.90%). Andhra Pradesh(A.P) boasts the highest level of fiscal incentive for investment in India. A study by rating agency Credit Rating Information Services of India Ltd., (CRISIL) on the state-wise growth trends in revenues and profitability of the Micro, Small and Medium Enterprises MSMEs in India has placed Andhra Pradesh among the top five states on 19th April 2011. The Crisil study also showed that 47 % of the Crisil-rated MSMEs in Andhra Pradesh had high ratings, which indicate their good performance and financial strength. The details of category-wise distribution of Small Scale Industries as on 31.3.09 in the state are depicted in Table 4. The number of MSMEs is represented in graph 2.

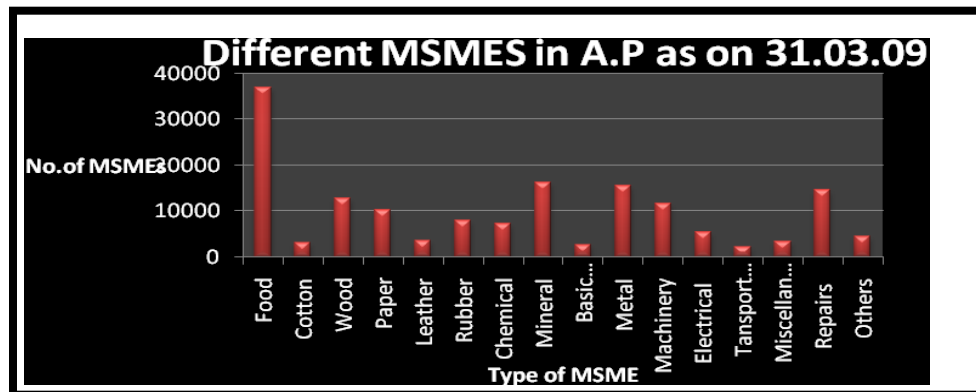
Table 4
Category-Wise Distribution of MSMEs as on 31.3.2009

S. No	Category	No. of Units	Investment Rs. Crores	Employment
1.	Food Processing Beverage and Tobacco products	36,828	2292.52	3,74,529
2.	Cotton Textiles Wool, silk and synthetic fiber textiles Jute, hemp and Mesta textiles Hosiery and garments	3,105	264.57	49,099
3	Wood products	12,769	113.53	71,259
4	Paper products and printing	10,223	623.5	74,381
5	Leather and leather products	3,512	44.86	18,790
6	Rubber, plastic and petroleum products	8,016	873.39	69,759
7	Chemical and allied ends	7,363	1,213.14	1,11,816
8	Mineral based industries	1,62,51	1,403.56	2,60,114
9	Basic metal industries	2,648	460.78	43,741
10	Metal products	15,501	919.98	1,31,294
11	Machinery and equipment	11,696	576.78	88,940
12	Electrical and electronic	5,420	631.6	64,448
13	Transport equipment and parts	2,282	75.82	20,244
14	Miscellaneous	3,471	167.81	29,208
15	Repairs and services	14,634	254.65	74,306
16	Others	4,454	587.84	50,087
	Total	1,58,173	10,504.33	15,32,015

Source: Commissioner of Industries, Government of Andhra Pradesh.

As on 31.3.09, there were 1,58,173 MSMEs in the state with an investment of Rs. 10,504.33 crores, providing employment to 15,32,015 persons, the total exports from Andhra Pradesh during the year 2007-08 were to the tune of Rs. 57,343 crores. The share of software was 45.5%, and that of food products was 10.6%. The exports during 2006-07 were 40,601 crores and that during 2005-06 was 24,407.9 crores.

Graph 2
Different MSMEs in Andhra Pradesh



The State today has nearly 2, 30,000 Small and Tiny units. But there were only 1, 58,173 units as on 31.03.2009 majority, (23.28 %) of which were related to Food processing Beverage and Tobacco products. The data showing the category wise growth pattern in exports of MSMEs is presented in the following Table 5.

Table 5
Growth Pattern in Exports of MSMEs

S.No	Category	2007-08	2008-09
1	Agriculture and Agro Based , Forest	6,083	5,799
2	Leather, Animal, Marine Products	1,746	1,915
3	Mineral and Mineral Products	2,711	4,409
4	Handlooms and textiles	1,097	685
5	Handicrafts and Carpets	545	1,284
6	Drugs, Pharmaceuticals, Allied Chemicals And Plastic.	1,0787	14,850
7	Engineering Items	7,148	13,783
8	Electronics and Electronic Parts	1,104	2,371
9	Software	26,122	32,509
	Total	57,343	77,605

Source: Commissioner of Industries, Government of Andhra Pradesh

Dispersal of small scale units over the state

The 1, 58,173 registered small scale units (2009) in the state are not evenly spread in the districts. While the concentration of units can be seen in the prosperous costal districts, the units are in the Telangana Region. The dispersal of units over the district is given in Table 6.

Table 6
Special Distribution of MSMEs in Andhra Pradesh

Sl. No	District	Up to 31-3-2009		
		Units	Investment Rs. In Crores	Employment Nos.
1	Adilabad	1,953	80.56	21,365
2	Nizamabad	4,032	161.73	37,552
3	Karimnagar	5,174	216.61	48,798
4	Medak	5,159	1,008.83	69,976
5	Hyderabad	15,477	374.68	1,25,329
6	Rangareddy	21,551	2,961.44	2,32,175
7	Mahbubnagar	3,517	250.95	33,558
8	Nalgonda	7,823	456.05	82,203
9	Warangal	6,423	189.09	52,226
10	Khammam	4,812	331.31	44,904
11	Srikakulam	4,837	150.10	43,145
12	Vizianagaram	3,604	147.32	32,873
13	Visakhapatnam	10,746	646.87	94,067
14	East Godavari	8,582	549.48	82,659
15	West Godavari	7,159	351.84	65,166
16	Krishna	9,246	657.11	92,919
17	Guntur	7,812	468.32	79,767
18	Prakasam	5,868	374.35	61,028
19	Nellore	6,421	242.42	64,346
20	Kadapa	4,051	180.19	37,009
21	Kurnool	4,485	177.34	40,132
22	Anantapur	4,975	214.02	43,407
23	Chittoor	4,466	313.70	47,411
	Total	1,58,173	10,504.31	15,32,015

Source: Commissioner of Industries, Government of Andhra Pradesh.

4. NEED FOR THE STUDY

The development of any area can never be a smooth process and particularly the Micro, Small and Medium Enterprises have to face numerous problems within the changed environment. These problems vary from region to region depending upon the stage and level of economic development. MSMEs have attracted the attention and interest of researchers and policy makers to find out the real causes of problems through primary source of information. Most of the economic enquires have examined problems of MSMEs in general. However, the study is intended to appreciate and assess the relative advantages available from agriculture, forest, livestock and mineral resources and human resources of the Chittoor District for planning industrial development, particularly MSMEs. Since the district is drought prone area and

backward in terms of industrial development, a detailed study has been felt essential to find out and analyze the real problems existing and being experienced by the entrepreneurs of the Micro, Small and Medium Enterprises and identify the actual reasons for the slow growth of MSMEs growth of MSMEs and for non motivation among the prospective entrepreneurs to start MSMEs. Though the Government is offering a wide range of incentives and adopting favorable policies and programmes to MSMEs, the growth of MSMEs has been relatively slow and not encouraging. Most of the MSMEs units are operating under certain technical and economic handicaps. Among the various types of MSMEs, some are income generating and others are employment generating and few are both. The study is mainly designed to analyse the growth pattern, location aspects, entrepreneurial evolution, structure of manpower and capital, the operational conditions and problems of MSMEs in Chittoor District. These aspects have been shifted with a view to find solutions to the problems and at the same time to offer strategies to be adopted and followed for achieving higher growth rate of MSMEs.

5. RESEARCH OBJECTIVES

The main objectives of this research can be summarized as follows.

- ▶ To study the growth and Performance of Micro, Small and Medium Enterprises at National and State level.
- ▶ To analyze the performance of Micro, Small and Medium Enterprises in Chittoor District.
- ▶ To examine the various problems of Micro, Small and Medium Enterprises.
- ▶ To provide suggestions to improve the implementation of Micro, Small and Medium and growth of those enterprises.

6. HYPOTHESIS

The following hypotheses are formulated to test the validity of the study:

1. There is no significant difference between the cost output ratio among the different categories of micro and small industrial units.
2. There is no significant difference between fixed capital to output ratio and working capital to output ratio among the different categories of Micro, Small and Medium Enterprises.
3. There is no change in the relative importance of the districts /classified Micro, Small and Medium Enterprises over a period of time.
4. There is no significant difference between qualified technical /skilled labour and unskilled labourers.
5. There is no significant difference between input and output ratio among Micro, Small and Medium Enterprises (MSMEs).

7. SAMPLING DESIGN

The list of registered units functioning in division wise has been obtained from the District Industries Centre (DIC), Chittoor. The survey was conducted on the basis of sampling method for developing sample design. The researcher collected the list of Micro, Small and Medium Enterprises registered with the District Industries Centre, Chittoor. The lists of

registered units have been obtained from the District Industries Centre, Chittoor; all the units have been divided into three revenue divisions based on their location. All the units have been divided into three revenue divisions based on their location. The study comprises a total sample of 192 units covering all industrial categories. Out of 192 sample units, 67 units are located in Madanapalli Division, 55 units in Chittoor Division and 70 units in Tirupati Division. Out of 192 sample units, the study covered 40 units of Agro and allied based units, 5 units of Chemical based units, 17 units of Animal husbandry, 24 units of Engineering based units, 35 units of Non Metallic and Mineral based units, 5 units of Paper and Printing based units, 6 units of Repairs and Service based units, 20 units of Textile based units, 7 units of Forest based units and 33 units of Miscellaneous. All the units have been further classified into ten broad categories. The distribution of sample Small scale units is presented in Table 7.

Table 7

Revenue Division Wise Distribution of Sample Micro, Small and Medium Enterprises in Chittoor District

Sl. No	Category	Revenue division			District Total
		Madanapalli	Chittoor	Tirupati	
1	Agro and allied based units	165 (17)	114 (11)	121 (12)	400 (40)
2	Chemical based units	22 (2)	16 (2)	13 (1)	51 (5)
3	Animal husbandry	58 (6)	43 (4)	67 (7)	168 (17)
4	Engineering based units	116 (11)	58 (6)	69 (7)	243 (24)
5	Non–Metallic and Mineral based units	87 (9)	125 (12)	135 (14)	347 (35)
6	Paper and Printing based units	15 (1)	11 (1)	26 (3)	52 (5)
7	Repairs and Service based units	25 (3)	13 (1)	24 (2)	62 (6)
8	Textile based units	48 (5)	62 (6)	86 (9)	196 (20)
9	Forest based units	29 (3)	28 (3)	18 (1)	75 (7)
10	Miscellaneous	108 (11)	86 (8)	136 (14)	330 (33)
	Total	673 (67)	556 (55)	695 (70)	1924 (192)

Note: Figures in the parentheses are sample of Micro, Small and Medium Enterprises in the respective category.

8. DATABASE

The study is empirical in nature; the empirical data was collected for analyzing growth and performance of Micro, Small and Medium Enterprises by conducting a survey by using an interview schedule. The study is based on both primary and secondary data. The primary data covering all the aspects of Micro, Small and Medium Enterprises in accordance with the objectives of the study were collected through personal interviews with the entrepreneurs and managers of the sample units with the help of a schedule, which was specially designed for the study. The secondary information was collected from various annual reports of Micro, Small and Medium Enterprises; different issues of Economic Survey Published by the Government of India and other important books and Journals, Internet, Reports, Published Documents of District Industries Centre, Ministry of Micro, Small and Medium Enterprises, Government of India, New Delhi and the Hand Book of statistics, Chittoor District, published by chief planning officer, Chittoor from DIC, Chittoor.

9. CONSTRUCTION TOOLS

All the schedules were scrutinized so as to appraise the quantitative and qualitative aspects of the data before each schedule was passed for tabulation. After tabulation of data, the data was analyzed by using statistical tools like t-test, f-test, CGR, and ANOVA.

10. GROWTH OF MICRO, SMALL AND MEDIUM ENTERPRISES IN CHITTOOR DISTRICT (2012-2013)

Table 8
Category Wise Micro, Small and Medium Enterprises in Chittoor District
(Rs. In lakhs)

Sl. No	Category	No. of units	Per cent	No. of Workers	Per cent	Investment (In Lakhs)	Total
1.	Micro, Small Enterprises	1,469	98.06	26,149	91.85	49,724.43	57.42
2.	Medium enterprises	29	1.94	2,320	8.15	36,876.86	42.58
		1,498	(100.00)	28,469	(100.00)	8,6601.29	(100.00)

Source: General Manager, District Industries Centre, Chittoor.

The data in Table 8 show that out of 1,469 units, 98.6 per cent belong to Micro and Small Enterprises, while only 1.94 per cent 29 units to Medium Enterprises. Regarding the number of workers employed, 91.85 per cent 26149 are found in the Micro and Small Enterprises, and only 8.15 per cent in the Medium Enterprises. The investment part shows that 57.42 per cent constitute Micro and Small Enterprises whereas 42.58 per cent Medium Enterprises, on the whole the data shows that a greater number of enterprises constitute micro and small.

Micro Enterprises

The micro enterprises in Chittoor District during 2006-12 are shown in table 9. The number of micro enterprises was 278 during 2006 vi-a vis 870 during 2012. There was a continuous growth in them during the period. The amount invested in plant and machinery was Rs.1, 630.32 lakhs in 2006 as against Rs.4, 669.96 lakhs in 2012. There was a regular increase in the level of investment in these assets. The total capital employed in all the assets put together has increased from Rs. 2, 007.90 lakhs in 2006 to Rs.7, 216, 23 lakhs in 2012. The number of employees in all the units as a whole was 2,930 during 2006 whereas 9,470 during 2012. It may be concluded that there is a rise in micro enterprises in respect of number units, investment in plant and machinery, total capital employed in all the assets and labour force employed.

Table 9

Year wise micro enterprises in Chittoor during 2006-2012

Year	No. of Units	Plant Machinery	And Total Employed	Capital	No. of Employees
2006	278	1,630.32	2,007.90		2,930
2007	303	1,777.21	2,269.11		3,192
2008	405	2,312.06	3,195.24		4,847
2009	491	2,661.32	3,833.55		6,266
2010	604	3,186.33	4,806.31		7,327
2011	710	3,710.25	5,694.73		8,230
2012	870	4,669.96	7,216.23		9,470
CGR (%)	17.7	16.22	20.05		18.25

Source: Compiled from the records of District Industrial Centre, Chittoor

Small Enterprises

The small enterprises in chittoor district for the period 2006-12 are depicted in table 10. It shows that the number of small enterprises have gradually increased from 100 in 2006 to 559 in 2012. The cost incurred in acquiring plant and machinery was Rs.5, 974.77 lakhs in the former as against Rs.45, 054, 47 lakhs in the latter. It may be noted that there is no decline in any one of the years over the preceding years. Similarly, the total capital employed stood at Rs.7, 826.35 lakhs in 2006 whilst Rs.71, 724.47 lakhs in 2012. There has been no decline in the total capital employed in any one of the years during the period. These units have generated employment to 2,549 persons in 2006 whereas 16,679 persons in 2012. It may be summed up that there has been a continuous progress in the number of units established, cost incurred in purchasing of plant and machinery and total capital employed in financing total assets. These have generated employment to thousands of persons during 2006-12. It may be summed up that there is tremendous growth in the matter of small enterprises in the district during 2006-12.

Table 10
Details of Small enterprises in Chittoor during 2006-12
(Rs. In lakhs)

Year	No. of Units	Plant and Machinery	Total Employed	Capital	No. of Employees
2006	100	5,974.77	7,826.35		2,549
2007	179	10,950.91	16,991.24		4,504
2008	286	18,854.87	29,459.06		7,692
2009	366	26,375.44	42,508.59		10,805
2010	446	33,365.77	53,132.05		13,213
2011	523	39,690.92	63,331.91		15,115
2012	599	45,054.47	71,724.47		16,679
CGR (%)	29.14	33.46	37.23		30.78

Source: Compiled from the records of District Industrial Center, Chittoor.

Medium Enterprises

The particulars of medium enterprises in Chittoor District during 2006-12 are presented in table 11. It can be observed from the table that the number of medium enterprises at the end of 2006 were 19. These have gradually gone up to reach 29 at the end of 2012. The amount invested in these units in terms of plant and machinery was Rs.29,727.50 lakhs in 2006 as against Rs.36, 876.86 lakhs in 2012. There has been a gradual increase in the amount invested for acquiring these assets during the period without any exception. The total capital invested was Rs.41, 231.55. lakhs in 2006 vis –a vis Rs.53,115.856 lakhs in 2012. There has been a gradual progress in the total investment made over all the assets spread over medium enterprises during the period under reference. The number of employees working in all these units was 679 during 2006 as against 2, 320 during 2012. It may be concluded that the medium enterprises measured in terms of number units, investment in plant and machinery, total capital employed and number of employees has progressively gone up without any to and fro changes during the period.

Table 11
Particulars Medium Enterprises in Chittoor during 2006-12
(Rs. In lakhs)

Year	No. of units	Plant and Machinery	Total Capital Employed	No. of Employees
2006	19	29,727.50	41,231.55	679
2007	21	31,235.50	44,217.55	854
2008	23	32,653.50	46,110.55	1,740
2009	25	34,034.86	47,903.91	1,947
2010	26	34,807.86	49,498.91	2,040
2011	27	35,307.86	50,698.91	2,135
2012	29	36,876.86	53,115.85	2,320
CGR (%)	6.23	3.13	3.68	19.19

Source: Compiled from the Records of District Industrial Center, Chittoor.

Cost - Output Ratio

Table 12

Cost Output Ratio in the Sample Micro, Small and Medium Enterprises

Sl. No	Category	Raw Materials Cost to Output Ratio	Wages to Output Ratio	Power / energy to Output Ratio	Other Cost to Output Ratio	Total Cost Output Ratio
1	Agro and allied based units	0.16	0.02	0.2	0.13	0.33
2	Chemical based units	0.23	0.03	0.02	0.17	0.45
3	Animal husbandry	0.17	0.01	0.01	0.10	0.30
4	Engineering based units	0.21	0.02	0.01	0.06	0.30
5	Non – Metallic and Mineral based units	0.11	0.02	0.02	0.07	0.22
6	Paper and Printing based units	0.37	0.06	0.03	0.11	0.57
7	Repairs and Service based units	0.26	0.25	0.02	0.09	0.62
8	Textile based units	0.30	0.04	0.03	0.07	0.44
9	Forest based	0.31	0.03	0.02	0.07	0.43
10.	Miscellaneous	0.18	0.01	0.01	0.06	0.26
Total		0.21	0.03	0.01	0.12	0.32

Source: Sample data

The cost output ratio shows that paper and printing based units was highest with 0.37% in the case of raw material. The next in order was forest based 0.31%, textile based units 0.20% and chemical based units 0.23%. As for the wages was concerned the high percentage belonged to repairs and service based units 0.25%, Power and energy to output ratio shows paper and

printing based units and textile based units dominated with 0.03% each. Anova is calculated for the data available in table 12 and the results are shown in Table 13, Anova Results.

Anova consequences reveal that there is no significant difference in the cost - output ratio among the different categories of micro, small and medium enterprises as the calculated F – values is less than Table value at 5% level. Hence, the formulated hypothesis is accepted.

Capital – Output Ratio

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	0.041922	9	0.004658	1.209448	0.329713	2.250131
Columns	0.234988	3	0.078329	20.3379	4.25E-07	2.960351
Error	0.103988	27	0.003851			
Total	0.380898	39				

Table 13

The capital out ratio for different categories of Micro, Small and Medium Enterprises have been worked out and presented in Table 14

Table 14

Capital – Output Ratio in the Sample Micro, Small and Medium Enterprises

Sl. No	Category	Fixed Capital to Output Ratio	Working Capital to Output Ratio	Total Capital to Output Ratio
1	Agro and allied based units	0.11	0.31	0.42
2	Chemical based units	0.32	0.43	0.85
3	Animal husbandry	0.31	0.33	0.64
4	Engineering based units	0.37	0.39	0.76
5	Non – Metallic and Mineral based units	0.19	0.28	0.47
6	Paper and Printing based units	0.38	0.54	0.92
7	Repairs and Service based units	0.39	0.48	0.87
8	Textile based units	0.40	0.48	0.88
9	Forest based	0.24	0.30	0.54
10.	Miscellaneous	0.21	0.29	0.50
Total				

Source: Sample data

The fixed capital output ratio shows that textile based units had high percentage with 0.40%, followed by repairs and service based units with 0.39%, paper and printing based units with 0.38% and engineering based units with 0.37% working capital to output ratio shows the

t-Test: Two-Sample Assuming Unequal Variances		
	Variable 1	Variable 2
Mean	0.292	0.383
Variance	0.009907	0.00889
Observations	10	10
Hypothesized Mean Difference	0	
df	18	
t Stat	-2.09894	
P(T<=t) one-tail	0.025097	
t Critical one-tail	1.734064	
P(T<=t) two-tail	0.050194	
t Critical two-tail	2.100922	

0.54% belonged to paper and printing, 0.48% each to repairs and service based units and textile based units, and 0.39% to engineering based units. T-Test is calculated for the data available in table 15 and the results are exposed in table 15(t-tests.)

Table 15 (T-Test)

It is evident from the above table 15 the t- calculated value is less than the critical value at 5 % level of significance, where the degree of freedom is 18. Hence Null hypothesis is accepted, there is no significant difference between fixed capital to output ratio and working capital to output ratio among the different categories of micro, small and medium enterprises.

Input – Output Ratio

The Input Output Ratio of Sample Micro, Small and Medium Enterprises is Shown in

Table 16

Sl. No.	Category	Input	Out put	Input output Ratio
1	Agro and allied based units	3,78,17,199	12,30,69,009	1:3.25
2	Chemical based units	77,70,607	1,64,12,223	1:2.11
3	Animal husbandry	73,49,780	2,40,23,280	1:3.27
4	Engineering based units	69,59,346	2,25,48,282	1:3.23
5	Non Metallic and Mineral based units	57,22,963	2,57,83,710	1:4.51
6	Paper and Printing based units	32,72,880	56,65,098	1:1.73
7	Repairs and Service based units	57,26,468	92,27,794	1:1.61
8	Textile based units	36,97,814	84,24,063	1:2.28
9	Forest based	41,16,259	1,32,30,047	1:3.21
10.	Miscellaneous	43,22,072	1,52,14,554	1:3.52
Total		8,67,55,388	26,35,98,060	1.3.03

Source: Sample data

The data point out that the input and output ratio is more for the non-metallic and mineral based units, followed by miscellaneous 1:3.52, animal husbandry 1:3.27, agro and allied based units 1:3.25 and engineering based units 1:3.23. Repairs and service based units have the lowest of all units with 1:1.61. T test is calculated for the data available in table 16 and the results are shown in Table 17.

Table 17

t-Test: Two-Sample Assuming Unequal Variances		
	Variable 1	Variable 2
Mean	8675538.8	26359806
Variance	1.0732E+14	1.20134E+15
Observations	10	10
Hypothesized Mean Difference	0	
df	11	
t Stat	-	
	1.545875242	
P(T<=t) one-tail	0.07520172	
t Critical one-tail	1.795884814	
P(T<=t) two-tail	0.15040344	
t Critical two-tail	2.200985159	

The “t” calculated value (0.15040344) is less than the t critical value (Table Value (2.200985159) at 11 df (degree of freedom), Since the null hypothesis is accepted as there is no significant difference between the variables have been taken from the above table.

11. CONCLUSION

The Micro, Small and Medium Enterprises are appropriately regarded as the strength of character of the Indian economy. The procedures recommended above, if implemented authentically, can ease out the problems of Micro, Small and Medium Enterprises and help their expansion to a large extent. What is required most is a positive approach on the part of the Government and financial and other institutions towards the Growth and Performance of Micro, Small and Medium Enterprises in Chittoor District of Andhra Pradesh. MSMEs include huge extent covering activities like manufacturing, servicing, retailing, financing, construction, and infrastructure. Experience shows that nations that support their courageous entrepreneurs have grown and prospered over the last 50 years, while nations that have placed barriers to the growth of their small business enterprises have been rated low on the performance graph. MSEM has performed extremely well and enabled our country to accomplish comprehensive procedures of industrial enlargement and diversification.

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