PERFORMANCE OF THE MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs) MANUFACTURING SECTOR IN SELECT STATES IN INDIA: THE CONCEPT OF MSME MANUFACTURING BUSINESS FACILITATOR (MSME-MBF) INDEX

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ABSTRACT

The MSMEs play a very critical role in Indian economy. The growth & development of MSMEs, particularly in the manufacturing space, is aligned with job creation, leading to eradication of poverty, bridging of income inequality, development of backward areas, etc. The MSMEs are widespread and present in almost all the states & union territories in India. However, the success of MSMEs is not even across the states. While in some states the MSMEs are torch bearer of manufacturing activity, in others MSMEs are yet to realise their full potential. The current study on performance of MSME manufacturing sector in different states tries to ascertain the factors behind differences in performance of MSMEs through the prism of an index known as MSME Manufacturing Business Facilitator (MBF) Index. The MSME-MBF index has been proposed by taking into account a host of factors, those, in our belief, significantly impacts the MSME sector in India. These include active labour force in a state as a percentage of active labour force in the country and literacy rate of the state as a measure of employability of the available labour force, a State's share in total installed power in the country and per capita availability of power in a State, Road infrastructure in terms of percentage of total national highways in a state and per capita availability of national highways in a State, Credit flow measured in terms of Credit to Deposits ratio in a State, availability of Port infrastructure in a State, Size of Gross State Domestic Product (GSDP) of a State relative to the national GDP, Fiscal discipline of a State as measured by the fiscal deficit ratio of a State, Ease of Doing Business (EoDB) Index rank of a State and Density of MSME Manufacturing clusters in a state measured in terms of an MSME cluster in sq.km. Absence of these factors or inadequate presence of these factors significantly impedes the growth of the MSME sector. Through the MSME-MBF index, we try to explain the factors behind growth differential of MSME Manufacturing units in different states as well as prescribe the benchmark level for all such parameters. Our study ascertains that the state of Maharashtra has the highest MSME-MBF index value implying that the state is best suited for the growth of MSME manufacturing sector in India. Maharashtra is closely followed by the states of Andhra Pradesh, Gujarat, Tamil Nadu, West Bengal, Uttar Pradesh and Kerala.

INTRODUCTION

India is a union of a number of states and union territories. Some states are industrially developed where as some others are agriculturally advanced. Different parts of the country have different advantages; while west and south India are industrial belts, east and north India have agricultural landscapes. During post reform period i.e., post 1991 employment scenario in the country has become much more complex. While the contribution of the agriculture sector to national GDP has come down, from more than fifty per cent at the time of independence to just over ten per cent now, it is still the largest employment providing sector in the country. The share of industrial sector in both output and employment has remained more or less stagnant. On the other hand while the share of the services sector in national output has increased manifold, its share in employment is low. This anomaly in share of national output without corresponding share in total employment for the agriculture sector and the services sector needs to be corrected and some strategy is needed to transfer surplus labour force in the agriculture sector to other sectors. It is a matter of fact that the services sector is a highly productive sector and it has limited ability to generate enough employment opportunities.

With regard to the industrial sector in the country, we believe that the time is now ripe for it to grow and increase its share in both output and employment. A thriving industrial sector may be an answer to the unemployment problem of the country. For instance, country specific and sector specific studies (Sahoo & Bhunia, 2014) have shown how labour intensive mass-manufacturing enabled China to become a manufacturing powerhouse, providing employment opportunities to millions, helping large segment of the Chinese population to come out of poverty and what other countries including India can learn from China in this regard.

Within the manufacturing space, the MSMEs need special mention for their ability to create large employment opportunities. They are more agile in nature and can act as a catalyst for rapid socio-economic transformation and regional economic integration of different regions within the country. MSME Manufacturing units are vividly active in states and regions that are traditionally prosperous, industrially. When we talk of industrially advanced states in India we generally come across few well-known names such as Maharashtra, Gujarat in Western India, Tamil Nadu, Kerala and Andhra Pradesh in South India, West Bengal in Eastern part of India and Uttar Pradesh in northern India. Based on the available data on MSME manufacturing sector, let us examine how the performance of the MSME sector in different states vary and how performance of the MSME sector in traditionally well off industrially developed states compares among them and also vis-a-vis lesser well off states. We will be considering three related variables namely number of MSME manufacturing units, MSME manufacturing employment and market value of fixed assets of the MSME manufacturing sector for this purpose.

The flow of the paper will be as follows. Section 2 identifies the states which are doing better than other states/UTs in the MSME manufacturing space on the basis of their relative share in the three variables mentioned above i.e., number of MSME manufacturing units, MSME manufacturing employment and market value of fixed assets of the MSME manufacturing sector. Section 3 gives comparative ranks of select states and poor performing states along with a comparative picture of their performance in the MSME sector vis-a-vis the country at large.

It also gives rationale behind the selection of Select States and Poor Performing States. Section 4 discusses the available literature in the subject matter. Section 5 explains the concept of 'The MSME Manufacturing Business Facilitator Index'. It discusses the various criteria, sub-criterion and the weights assigned to them. Sources of data and computation methodology are also enumerated in this section.

The socio-economic profile of both Select States and Poor Performing States are deliberated in this section. Section 6 gives a comparative analysis of socio-economic profile of Select States and Poor Performing States. Section 7 gives the MSME MBF index values for the Select States followed by Section 8 which gives the MSME MBF index values for the Poor Performing States. Section 9 concludes the paper.

STATE WISE MSME MANUFACTURING UNITS, EMPLOYMENT AND THE MARKET VALUE OF FIXED ASSETS

In this section, we will analyse the state/UT wise number of MSME manufacturing units, employment provided by the MSME sector in all the states/UTs and market value of fixed assets of the MSME manufacturing sector in all the states. Most importantly, we will look at the share of different states and UTs in total number of MSMEs manufacturing units, MSME employment and market value of fixed assets of the MSME sector in India.

From the information presented in Table 1, we observe that the country had 214.4 lakh MSME units spread over all the states and union territories as per the fourth MSME census. The state of Uttar Pradesh leads the chart with 2422 thousand MSME units, which forms 11.3 per cent of total MSME units in the country. Uttar Pradesh (11.3%) is being closely followed by the states of West Bengal (9.9%), Tamil Nadu (9.6%), Andhra Pradesh (7.2%), Gujarat (7.2%), Maharashtra (7.2%) & Kerala (6.7%).

Employment by the MSME sector

Information presented in Table 2 shows that the MSME manufacturing units provided employment opportunity to 50193 thousand people spread over all the states and union territories as per the fourth MSME census. The state of Uttar Pradesh leads the chart with 5931 thousand employment opportunities. Uttar Pradesh (11.8%) is being closely followed by the states of West Bengal (11.7%), Tamil Nadu (10.6%), Andhra Pradesh (7.8%), Maharashtra (7.1%), Gujarat (6.9%) & Kerala (6.6%).

Number of MSME Enterprises/Units

Table 1 STATE /UT WISE NUMBER OF MSME MANUFACTURING ENTERPRISES			
S. No	State/UT	Number of Enterprises (In '000')	Percentage of all India total (%)
1	Uttar Pradesh	2422	11.30
2	West Bengal	2123	9.90
3	Tamil Nadu	2055	9.58
4	Andhra Pradesh	1536	7.16

5	Gujarat	1533	7.15
6	Maharashtra	1532	7.15
7	Kerala	1444	6.74
8	Madhya Pradesh	1257	5.86
9	Karnataka	1248	5.82
10	Punjab	1014	4.73
11	Odisha	997	4.65
12	Rajasthan	969	4.52
13	Bihar	798	3.72
14	Haryana	520	2.43
15	Jharkhand	443	2.07
16	Chhattisgarh	301	1.40
17	Assam	234	1.09
18	Uttarakhand	224	1.04
19	Delhi	179	0.83
20	Himachal Pradesh	172	0.80
21	J & K	133	0.62
22	Goa	59	0.28
23	Meghalaya	50	0.23
24	Manipur	48	0.22
25	Chandigarh	29	0.14
26	Tripura	27	0.13
27	Arunachal Pradesh	25	0.12
28	Nagaland	17	0.08
29	Mizoram	14	0.07
30	Pondicherry	14	0.07
31	A & N Islands	8	0.04
32	Dadra & Nagar Haveli	6	0.03
33	Sikkim	6	0.03
34	Daman Diu	2	0.01
35	Lakshadweep	1	0.00
	Total	21440.00	100

Source: Annual Report 2014-15, Ministry of MSME, Government of India

Table 2 STATE/UT WISE MSME EMPLOYMENT			
Sr. No	State/UT	Employment (In '000')	Percentage of all India total (%)
1	Uttar Pradesh	5931	11.82
2	West Bengal	5853	11.66
3	Tamil Nadu	5315	10.59
4	Andhra Pradesh	3898	7.77
5	Maharashtra	3561	7.09
6	Gujarat	3442	6.86
7	Kerala	3319	6.61
8	Karnataka	3047	6.07
9	Odisha	2367	4.72
10	Madhya Pradesh	2030	4.04
11	Rajasthan	1842	3.67

12	Punjab	1832	3.65
13	Bihar	1745	3.48
14	Haryana	1223	2.44
15	Jharkhand	899	1.79
16	Assam	659	1.31
17	Delhi	652	1.30
18	Chhattisgarh	543	1.08
19	Uttarakhand	442	0.88
20	J & K	307	0.61
21	Himachal Pradesh	292	0.58
22	Manipur	158	0.31
23	Goa	120	0.24
24	Meghalaya	117	0.23
25	Nagaland	116	0.23
26	Arunachal Pradesh	87	0.17
27	Tripura	76	0.15
28	Chandigarh	70	0.14
29	Mizoram	57	0.11
30	Sikkim	56	0.11
31	Pondicherry	46	0.09
32	Dadra & Nagar Haveli	33	0.07
33	Daman Diu	29	0.06
34	A & N Islands	24	0.05
35	Lakshadweep	5	0.01
	Total	50193	**100**

Source: Annual Report 2014-2015, Ministry of MSME, Government of India

Market Value of Fixed Assets of MSMEs

Table 3			
STATE/UT WISE MARKET VALUE OF FIXED ASSETS OF MSMES			
Sr. No.	**State/UT**	**Market value of fixed assets (Rs. Billion)**	**Percentage of all India total (%)**
1	Gujarat	1667.5	24.17
2	Tamil Nadu	778.2	11.28
3	Maharashtra	679.4	9.85
4	Uttar Pradesh	561.6	8.14
5	Kerala	443.5	6.43
6	West Bengal	394.3	5.72
7	Punjab	371.3	5.38
8	Andhra Pradesh	327.6	4.75
9	Karnataka	271.6	3.94
10	Haryana	260.0	3.77
11	Rajasthan	254.5	3.69
12	Odisha	122.8	1.78
13	Madhya Pradesh	105.3	1.53
14	Delhi	101.6	1.47
15	J & K	84.8	1.23

16	Bihar	84.1	1.22
17	Assam	69.4	1.01
18	Uttarakhand	60.1	0.87
19	Himachal Pradesh	56.0	0.81
20	Jharkhand	50.2	0.73
21	Goa	38.2	0.55
22	Chhattisgarh	33.0	0.48
23	Daman Diu	18.8	0.27
24	Nagaland	12.7	0.18
25	Pondicherry	11.4	0.16
26	Arunachal Pradesh	9.4	0.14
27	Tripura	6.6	0.1
28	Chandigarh	6.5	0.09
29	Manipur	6.1	0.09
30	Meghalaya	4.7	0.07
31	Mizoram	4.0	0.06
32	Dadra & Nagar Haveli	2.3	0.03
33	A & N Islands	1.0	0.01
34	Sikkim	0.7	0.01
35	Lakshadweep	0.2	0
	Total	6899.5	**100**

Source: Annual Report 2014-2015, Ministry of MSME, Government of India

As per information presented in Table 3, we observe that the market value of fixed assets of all MSME units in the country stood at Rs. 6899.5 billion as per the fourth MSME census. The state of Gujarat leads the table with Rs. 1667.5 billion worth of MSME fixed assets. Gujarat (24.2%) is being closely followed by the states of Tamil Nadu (11.3%), Maharashtra (9.9%), Uttar Pradesh (8.1%), Kerala (6.4%) & West Bengal (5.7%).

RANKING OF STATES

After presenting important data with reference to the MSME manufacturing sector in Tables 1, 2 and 3, the next step is to identify the states where in the MSME sector has major presence. In order to identify these states we will be considering the same three parameters, namely, number of MSME enterprises, size of MSME employment and market value of fixed assets of the MSME sector. On the basis of these three parameters, we have evaluated the state wise position i.e., the share of a particular state in all India total for a particular parameter. Based on this, we selected the states which are having maximum share among all the states in each of the three parameters. Based on the data given in Tables 1, 2 and 3, the Select States having a maximum share in each of the parameters are given here under:

Table 4 POSITION OF SELECT STATES IN MSME MANUFACTURING					
Number of MSME units		MSME Employment		Market value of fixed assets of the MSME sector	
State	All India Rank	State	All India Rank	State	All India Rank
Uttar Pradesh	1	Uttar Pradesh	1	Gujarat	1

West Bengal	2	West Bengal	2	Tamil Nadu	2
Tamil Nadu	3	Tamil Nadu	3	Maharashtra	3
Andhra Pradesh	4	Andhra Pradesh	4	Uttar Pradesh	4
Gujarat	5	Maharashtra	5	Kerala	5
Maharashtra	6	Gujarat	6	West Bengal	6
Kerala	7	Kerala	7	Andhra Pradesh	7

Source: Self-computation

From the information presented in Table 4, we observe that top states in all the three parameters are Maharashtra, Gujarat, Tamil Nadu, West Bengal, Andhra Pradesh, Kerala & Uttar Pradesh. The seven select/top states have experienced higher growth than the national average in MSME sector.

Table 5 POSITION OF POOR PERFORMING STATES IN MSME MANUFACTURING					
Number of MSME units		MSME Employment		Market value of fixed assets of the MSME sector	
State	All India Rank	State	All India Rank	State	All India Rank
Madhya Pradesh	8	Odisha	9	Rajasthan	11
Odisha	11	Madhya Pradesh	10	Odisha	12
Rajasthan	12	Rajasthan	11	Madhya Pradesh	13
Bihar	13	Bihar	13	Bihar	16
Assam	17	Assam	16	Assam	17

Source: Self-computation

In our state wise analysis of performance of the MSME manufacturing sector, we have considered Select seven States vis-à-vis the five larger but Poor Performing States of Odisha, Bihar, Assam, Madhya Pradesh & Rajasthan to ascertain why the performance of the MSME manufacturing sector in the Select States is different from the performance of the MSMEs in the Poor Performing States. It is pertinent to mention here that the Poor Performing States mentioned above are traditionally the states with low level of industrialization. Even in the context of MSME performance, these states occupy lower rank in terms of their share in number of MSME units, size of MSME employment and value of fixed assets in the MSME sector (Table 5). Besides, the poor performing states mentioned above formed part of the 'BIMAROU' acronym which comprised of the states of Bihar, Madhya Pradesh, Rajasthan, Odisha and Uttar Pradesh. The acronym was used to refer to poor economic conditions of these states. Several studies including those by the UN showed that the performance of the BIMAROU states was dragging down the overall GDP growth rate of India. Since we observed better performance of the state of Uttar Pradesh in the spheres of MSME manufacturing sector, we have modified the acronym of relevant grouping to 'BIMARO' (BI: Bihar, M: Madhya Pradesh, A: Assam, R: Rajasthan and O: Odisha). Moreover, the most important reason behind selecting these five poor performing states is the fact that these states are large ones and together they account for more than one

fourth of India's total population (27% as per census 2011, equivalent to the population of US) and if these states continue to remain in perpetual poverty, the very purpose of developmental planning in India will be defeated.

Table 6 COMPARISON OF SELECT STATES AND POOR PERFORMING STATES			
Parameters	Number of MSME units (In lakh)	MSME employment (In Lakh)	Market value of fixed assets of the MSME sector (Rs. Crore)
Total share of Select States (%)	58.98	62.40	70.33
All India (%)	100.0	100.0	100.0
Total share of Poor Performing States (%)	19.85	17.22	9.22
Average of Select States	18.06	44.74	69318
All India average	6.13	14.34	19201
Average of Poor Performing States	8.51	17.29	12723
Median for Select States	15.36	38.98	56161
Median for all India	2.24	5.43	6015
Median for Poor Performing States	9.69	18.42	10530
Coefficient of variation of Select States (%)	21.39	26.28	66.09
Coefficient of variation of all India (%)	119.08	124.95	166.78
Coefficient of variation of Poor Performing States (%)	44.88	37.22	58.18

Source: Self-computation

The information presented in Table 6 provides a comparative picture of the Select States, all India level and the Poor Performing States in number of MSME units, total employment and market value of fixed assets of the MSME sector. We observe that the Select States account for around 59 per cent of total MSME units operating in the country and they are home to around 62 per cent of total employment created by the MSME sector in the country. Together the Select States account for 70 per cent of the fixed assets of the MSME sector in the country. In comparison, the Poor Performing States account for around 19 per cent of total MSME units, 17 per cent of total MSME employment and less than 10 per cent of total MSME fixed assets in the country. The average number of MSME enterprise in the Select States are 1806 thousand which is much higher compared to all India average of 613 thousand and Poor Performing States' average of 851 thousand. On a similar note the median values for all parameters of the Select States are higher than the median values for all India as well as for the Poor Performing States. The coefficient of variation, which may be used as a measure of stability, indicates relative stability in all parameters for the Select States compared to the Poor Performing States (except market value of fixed assets) and the all India average.

LITERATURE REVIEW

Pachouri, A. & Sharma, S. (2016) in their ADBI Working Paper Series, titled 'Barriers to Innovation in Indian Small and Medium-Sized Enterprises' lists availability of labour, credit flows, inadequate infrastructure, information and market constraints are key barriers for innovation and thus growth in Small and Medium Sized Enterprises in India.

Chandra, A. & Pareek, V. (2014) in their article on 'Regulatory Barriers to Micro, Small and Medium Enterprises' opine that Poor Infrastructure, lack of adequate and timely access to finance, inability to market their products, regulatory norms and non-availability of talent pool are the major factors impeding growth of MSMEs in the country.

Nishant, P. & Dr. Zakkariya, K.A. (2014) in their article titled 'Barriers faced by Micro, Small and Medium Enterprises in Raising Finance' have opined that accessing formal channels of finance for raising much needed short term and long term capital has been a challenge for the Indian MSMEs.

Saini, P. (2014) in her article titled 'Study of Micro, Small and Medium Enterprises' has mentioned that factors like access to finance, licensing regime, infrastructure bottleneck are some of the factors that inhibit the growth of MSMEs.

Rajesh Raj, S.N. & Mihir, K.M. (2012) in their article titled "Growth & Productivity: Performance of Small Manufacturing Enterprises (SMEs), Insights from major states in India" observed that there is a general erosion in growth of output in SMEs during the reforms period as compared to the pre reforms period with variation across different categories of states.

Sudha, V. & Krishnaveni, M. (2012) in their article titled SMEs in India: Importance & Contribution' have ascertained that for a developing nation like India, where the labour is abundant and capital is scarce, the small sector is a major source of employment for millions of people. Keeping in view the importance of SMEs, the Indian government has included this sector in its five-year plans. The SMEs are still hampered by the problems of finance, marketing and low quality. Taking into account the enormous potential of the small sector, the entrepreneurs and the policymakers must act collectively to facilitate growth in this sector.

Rakesh, C. (2014) in his article titled 'PEST Analysis for MSMEs Sustainability' opined that MSMEs, before creating business plans or making decisions, it is important to 'scan' the external environment. This can be achieved through a PEST analysis, i.e., an investigation of the Political, Economic, Social and Technological influences on a business. In addition, it is also important to be aware of the actions of your competitors. These forces are continually in a state of change. This PEST external factor analysis helps the MSEMs to list out the number of opportunities available to meet and the threats which causes major damages to their business units.

Dr. Ali Akbar, K. (2016) in his article titled 'Growth & Performance of SMEs in India: An overview' has concluded that India accorded high priority to SMEs from the very beginning and pursued support polices to make these enterprises viable, vibrant and over time, these have become major contributors to the GDP. Moreover, the MSMEs has weathered and overcome stiff competition in the post LPG period in the domestic and international arena. In nutshell, the MSMEs play a leading role in propelling economic growth sustaining livelihood and in promoting equitable regional development.

Dr. Uma, P. (2013) in his article titled 'Role of SMEs in Economic Development of India' has concluded that every industrial and business organization has to take up the responsibility to meet the challenges posed by globalization. Not only the big business, but even

a small business enterprise in India has to take up the responsibility to meet the standards, qualities, technological up gradation, skills technical know-how needed in the global market.

From above, we observe that though variety of literature is available in the domain of the performance of MSMEs in India, no significant literature or studies exist in the areas of comparative analysis of performance of the MSME sector in different states. Besides, there is a lack of studies that makes a holistic analysis of barriers which the MSMEs face in different states which eventually inhibits their growth and development. In this direction, the current study attempts to contribute tangibly to the areas of comparative performance analysis of the MSME sector in major states and also towards a holistic assessment of barriers the Indian MSMEs face in different states.

THE CONCEPT OF 'MSME MANUFACTURING BUSINESS FACILITATOR (MSME-MBF) INDEX'

In this section, we have developed an MSME-MBF Index by identifying the criteria which have made a state suitable for the promotion of MSMEs. We constituted this index based on criteria such as the size of active labour force, literacy rate as a measure of employability of the labour force, availability of power, road and port infrastructure, credit facilities, size of GSDP of respective states, Fiscal discipline in the state, Ease of Doing Business Index of the states and Density of MSME Manufacturing clusters in the state by giving appropriate weights to these criteria. We elaborate these criteria below:

a) Active labour force in the States as a percentage of active labour force in the country and Literacy rate of the State as a measure of employability of the available labour force;
b) State's share in total installed power in the country and per capita availability of power in the State;
c) Road infrastructure in terms of percentage of total national highways in the state and per capita availability of national highways in the State;
d) Credit flow measured in terms of Credit to Deposits ratio in the State;
e) Port infrastructure in terms of availability in the State;
f) Size of Gross State Domestic Product (GSDP) of States;
g) Fiscal discipline of States as measured by the fiscal deficit ratio of the States;
h) Ease of Doing Business (EoDB) Index rank of States;
i) Penetration of MSME Manufacturing clusters in states measured in terms of an MSME cluster in sq.km in a State.

In Table 7, we have specified the criteria and sub-criterion and the weights assigned to them by us. It is seen from Table 7 that labour force criteria has two sub-criterions i.e., size of labour force and the employability of labour force measured in terms of the literacy rate of the state. We have assigned a weight of 7.5 to the first sub-criterion whereas the second sub-criterion is assigned a weight of 12.5. With a total weight of 20, availability of quality labour force is being considered as the most important for the growth of the MSME sector. It has two rationales; manufacturing is a labour incentive activity and it requires certain skills. We consider Power, Road and Credit flow as next important for MSMEs growth. Hence, we assign a weight of 15 to each of the criteria. Power criteria have two sub-criterions. While the first sub-criterion i.e., percentage of total installed power in the country has been assigned a weight of 10, the second one i.e., per capita availability of power has been given a weight of 5, with total weight of 15. Uninterrupted availability of quality power is a very important factor supporting manufacturing growth. Similarly, road criteria also have two sub-criterions with weights of 7.5 to each sub-criterion with a total weight of 15. Credit-Deposits ratio in the state has been assigned a weight

of 15. Next, we assign a weight of 5 to availability of port infrastructure. We assign a weight of 5 each to the size of GSDP of states and also to fiscal management in states measured by fiscal deficit ratio in states. This is because the size of GSDP is directly related to the size of local market which encourages MSMEs to grow. Similarly, better fiscal management, measured in terms of fiscal deficit as percentage of GSDP, attracts potential investors to a particular state. We assign a weight of 10 to the Ease of Doing Business (EoDB) index of states. The Ease of Doing Business (EoBD) Index is the assessment of State Implementation of Business Reforms being prepared by the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India in partnership with the World Bank Group. The Assessment studies the extent to which states have implemented DIPP's 340-point Business Reform Action Plan (BRAP) for States/UTs for a particular year. The BRAP includes recommendations for reforms on 58 regulatory processes, policies, practices or procedures spread across 10 reform areas spanning the lifecycle of a typical business. In short, the EoDB index measures the suitability of a state for setting up a new business from regulatory point of view. Lastly, we assign a weight of 10 to density of MSME clusters measured in terms of the ratio of total geographical area of the state and total number of MSME clusters. We consider that a state having high MSME penetration has greater scope for growth of the MSME sector in that state.

The total labour force in a state has been arrived at by multiplying the total population of the state as per Census 2011 with the workforce participation rate as per the NSSO survey of 68th round, 2011-2012. Similarly, the literacy rate of states has been sourced from the Census 2011 report. Information on total installed power in a state and the state wise length of national highways (NHs) has been sourced from the annual reports of the respective ministries (Ministry of Power and Ministry of Road transport & Highway) for the FY 2015-2016. Per capita availability of power and per capital availability of national highways has been arrived at by dividing the total installed power and total length of national highways in the state with the total population of the state. Similarly, percentage of power and national highway in a particular state has been arrived at by way of dividing the installed power capacity of a state with the total installed power capacity of the country and the length of national highways in a particular state with the total length of national highways in the state.

Table 7 PRINCIPAL CRITERIA AND SUB CRITERIA			
S. No.	Criteria	Sub-criteria	Weight
1.	Labour force	(a)Share of the State in active labour force in the country	7.5
		(b)Literacy rate	12.5
2.	Power	(a) Share of the State in total installed power in the country	10.0
		(b)Per capita availability of power in the State	5.0
3.	Road	(a) Share of the State in total national highway in the country	7.5
		(b)Per capita availability of national highways in the State	7.5

4.	Credit Flow	CD Ratio in the State	15.0
5.	Port	Availability in the State	5.0
6.	GSDP Size	GSDP Size	5.0
7.	Fiscal Management in States	Fiscal Deficit as % of GSDP	5.0
8.	Ease of Doing Business	Rank of States	10.0
9.	Density of MSME Clusters in States	An MSME cluster in sq.km	10.0

Source: Self-computation

State wise credit-deposit ratio has been calculated after obtaining information on bank credit and deposits from RBI's quarterly statistics on aggregate deposits and credit for the year ended March 31, 2016. Port statistics for different states has been sourced from the Annual Report of Ministry of Shipping for the FY 2015-2016. Information on Size of GSDP at current prices of states for the year 2013-2014 has been obtained from RBI's database on Indian Economy. Information on fiscal deficit as a percentage of GSDP has been sourced from RBI's report on analysis of State Finances FY 2015-2016. Data on EoDB index for states has been sourced from 'Assessment of State Implementation of Business Reforms 2016' report being published by DIPP, Ministry of Commerce and Industry, Government of India in partnership with the World Bank Group. Lastly, information on geographical area of states and number of state wise MSME clusters has been sourced from Census 2011 report and UNIDO respectively. We have specified sub-criterion wise weights the details of which are given in Table 8. In case of sub-criterions under labour, power, road, credit-deposit ratio and size of GSDP the average of values for Select States (SS) and Poor Performing States (PPS) is being arrived at and a state having value higher than the average value of Select States (SS) and Poor Performing States (PPS) has been given full marks under that particular sub criterion. States having values less than the average value has been given half of the total marks under that particular sub criteria. In case of Port criteria, availability is assigned full mark whereas non availability attracts zero mark. In case of fiscal deficit ratio, we have set the benchmark as 3 percentage of GSDP since the Fiscal Responsibility and Budget Management Act says that in the long run a fiscal deficit of 3% of GDP for India is in synchronisation with country's development aspirations. States having fiscal deficits of less than and up to 3% of GSDP thus are given full marks under the criteria whereas states having fiscal deficit more than 3% of GSDP are allotted no mark under this criteria. In case of EoDB index, the state having highest rank among the Select States and the Poor Performing States have got full marks while other states have been given marks proportionate to the marks obtained by the highest ranking state. In case of Density of MSME clusters, states have been identified in to two broad categories; the ones having high density and the others having low density. The high density states are the ones where a MSME cluster is located in a sq.km area which is better than the average of the Select States and Poor Performing States. Similarly, the low density states are the ones where an MSME cluster is found in a sq.km which is worse than the average of the Select States and Poor Performing States. The high density states have been given full marks whereas the states with low density of MSME clusters have been given zero mark under this criterion.

Profile of Select States and Poor Performing States

In this sub-section, for studying socio-economic profile of states, we have included six variables namely, Labour Force Participation Rate (LFPR), literacy rate, ratio of Gross State Domestic Product (GSDP) to Gross Domestic Product (GDP), Compound Average Growth Rate (CAGR) of GSDP for last four years, Foreign Direct Investment (FDI) in USD billion and per capita Net State Domestic Product (NSDP) in rupees.

LFPR: Labour force refers to the population which supplies or offers to supply labour for pursuing economic activities for the production of goods and services and, therefore, includes both 'employed' and 'unemployed' persons/person-days. LFPR is defined as the proportion of persons/person-days in the labour-force to the total persons/person-days. These ratios are given in per 1000 of persons/person-days. The LFPR values given in Table 9 are based on 'usual status' 'principal source' of activity approach. The Usual Status approach to measuring unemployment uses a reference period of 365 days i.e., one year preceding the date of the survey of NSSO for measuring unemployment. The first step to estimate employment numbers and unemployment rate through this approach involves determination of the Principal usual activity status of the individuals. Among the Select States, Andhra Pradesh has the highest labour force participation rate at 64.4 per cent followed by Tamil Nadu (59.7%), Maharashtra (58.0%), Gujarat (57.8%), Kerala (53.5%), West Bengal (52.1%) and Uttar Pradesh (47%) as per the 68th round survey of the NSSO, 2011-2012.

Literacy Rate: The total percentage of the population of an area at a particular time aged seven years or above who can read and write with understanding. The literacy rate of a particular state may be used to signify the overall advancement of the society of the state. Among the Select States, literacy rate is the highest for Kerala at 94.0 per cent followed by Gujarat (91.8%), Maharashtra (82.3%), Tamil Nadu (80.3%), West Bengal (76.3%), Uttar Pradesh (67.7%) and Andhra Pradesh (67.0%) as per census 2011.

Table 8 **COMPUTATION OF WEIGHTS FOR SUB-CRITERION**			
Sr. No	**Criteria**	**Sub criteria**	**Weight**
1.	Labour Force (a)	Equal to or less than the average of all the Select States (SS) and Poor Performing States (PPS)	3.75
		More than the average of all the SS and PPS	7.50
	Labour Force (b)	Equal to or less than the average of all the SS and PPS	6.25
		More than the average of all the SS and PPS	12.50
2.	Power (a)	Equal to or less than the average of all the SS and PPS	5.00
		More than the average of all the SS and PPS	10.00
	Power (b)	Equal to or less than the average of all the SS and PPS	2.50

No.	Factor	Criteria	Value
		More than the average of all the SS and PPS	5.00
3.	Road (a)	Equal to or less than the average of all the SS and PPS	3.75
		More than the average of all the SS and PPS	7.50
	Road (b)	Equal to or less than the average of all the SS and PPS	3.75
		More than the average of all the SS and PPS	7.50
4.	Credit Flow	Equal to or less than the average of all the SS and PPS	7.50
		More than the average of all the SS and PPS	15.00
5.	Port	Yes	5.00
		No	0.00
6.	GSDP (a)	Equal to or less than the average of all the SS and PPS	2.50
		Equal to or less than the average of all the SS and PPS	2.50
		More than the average of all the SS and PPS	5.00
7.	GSDP (b)	Equal to or less than 3%	5.00
		More than 3%	0.00
8.	Ease of Doing Business Index	Rank 1	10.00
		Others	Proportionately
9.	Density of MSME Clusters	High Density: Better than the average of all the SS and PPS	10.00
		Low Density: Worse than the average of all the SS and PPS	0.00
Maximum Value the Index Can Give (1+2+3+4+5+6+7+8+9) 100.00			

Source: Self-computation

Profile of Select States

In this sub-section 5.1.A. we depict the profiles of Select States in Table 9.

Table 9 PROFILE OF SELECT STATES					
Parameters	**Uttar** Pradesh	**West** Bengal	**Tamil Nadu**	**Andhra Pradesh**	**Gujarat**
LFPR (%)	47	52.1	59.7	64.4	57.8
Literacy Rate (%)	67.7	76.3	80.3	67	91.8
GSDP to GDP Ratio (%)	7.5	5.9	7.7	3.9	7.1
GSDP CAGR for last 4 years (%)	5.4	6.4	6	5.8	7.2

Source: LFPR: NSSO, 68th Round; Literacy Ratio: Census 2011; GSDP, GDP, Per Capital NSDP: RBI; FDI in State: Ministry of Commerce and Industry

GSDP to GDP Ratio: GSDP to GDP ratio signifies the relative size of the GDP of a state compared to the national GDP and thereby the economic importance of states. The state of Maharashtra which has the largest economy among all the states in India has a GSDP-GDP ratio of 14.1 per cent, followed by Tamil Nadu (7.7%), Uttar Pradesh (7.5%), Gujarat (7.1%), West Bengal (5.9%), Andhra Pradesh (3.9%) and Kerala (3.6%) in that order. The information furnished here pertains to the FY 2013-2014 for which comparable data on state GSDP and GDP, with base year 2004-2005, are readily available with RBI.

CAGR of the GSDP of Select States: While the Indian economy continues to grow at an impressive growth rate, different states within the Indian economy contribute differently to this growth process. Among the Select States, the CAGR growth for the period 2010-2011 to 2013-2014 was the highest for Gujarat at 7.2 per cent. On the other hand, during the period under consideration, Maharashtra recorded 6.5 per cent, followed by West Bengal (6.4%), Tamil Nadu & Kerala (6.0% each), Andhra Pradesh (5.8%) and Uttar Pradesh (5.4%).

Foreign Direct Investment: As per information available with the ministry of commerce and industry, during the period FY 2015-2016, the Maharashtra state has attracted the highest amount of FDI at 9.5 billion USD, followed by Tamil Nadu (4.5 billion USD), Gujarat (2.2 billion USD), Andhra Pradesh (1.6 billion USD), West Bengal (1.0 billion USD) and Kerala & Uttar Pradesh (0.1 billion USD). Higher FDI inflows indicate that the state remains the preferred destination of investment among all the states in the country.

Per Capita Net State Domestic Product: Per capita income of a state may be taken as an indicator of economic well-being of its people. Among the Select States Maharashtra has the highest per capita NSDP of Rs. 69,097 for the FY 2013-14 at 2004-2005 prices. Maharashtra is being closely followed by Gujarat (Rs. 63,168), Tamil Nadu (Rs. 62,361), Kerala (Rs. 58,961), Andhra Pradesh (Rs. 42,170), West Bengal (Rs. 36,293) and Uttar Pradesh (Rs. 19,233).

PROFILE OF POOR PERFORMING STATES

After looking at the profile of the Select States, let us now describe the profile of the Poor Performing States in Table 10.

Table 10 PROFILE OF POOR PERFORMING STATES					
Parameters	Madhya Pradesh	Rajasthan	Bihar	Odisha	Assam
LFPR (%)	55.3	54.6	43.4	54.6	50.2
Literacy Rate (%)	69.3	66.1	61.8	72.9	72.2
GSDP to GDP Ratio (%)	3.5	4.1	2.6	2.3	1.4
GSDP CAGR for last 4 years (%)	8.9	6.5	10	3.2	5.8
FDI in state (USD. Billion)	0.1	0.1	0	0	0
Per Capita NSDP (Rs.)	26853	31836	15506	24929	23392

Source: LFPR: NSSO, 68th Round; Literacy Ratio: Census 2011; GSDP, GDP, Per Capital NSDP: RBI; FDI in State: Ministry of Commerce and Industry, Government of India

LFPR: The LFPR values given in Table 10 are based on 'usual status' 'principal source' of activity approach. Among the Poor Performing States, Bihar has the lowest LFPR at 43.4 percent. Among others, Madhya Pradesh has a LFPR of 55.3%, followed by Rajasthan & Odisha (54.6% each) and Assam (50.2%).

Literacy Rate: Among the Poor Performing States, literacy rate is the lowest for Bihar at 61.8 percent. While Odisha has literacy rate of 72.9%, Assam has 72.2%, Madhya Pradesh (69.3%) and Rajasthan (66.1%), as per census 2011.

GSDP to GDP Ratio: Among the Poor Performing States Assam has the lowest GSDP-GDP ratio of 1.4 percent. Rajasthan has a GSDP-GDP ratio of 4.1% followed by Madhya Pradesh (3.5%), Bihar (2.6%) and Odisha (2.3%) in that order. The information furnished here pertains to the FY 2013-2014 for which comparable data on state GSDP and GDP, with base year 2004-2005, are readily available.

CAGR of the GSDP of Poor Performing States: The GSDP growth rate of Poor Performing States has been impressive. Among the Select States, the CAGR growth for the period 2010-2011 to 2013-2014 was the highest for Bihar at 10.0 per cent. On the other hand, during the period under consideration, Madhya Pradesh recorded a CAGR GSDP growth of 8.9 percent, followed by Rajasthan (6.5%), Assam (5.8%) and Odisha (3.2%).

Foreign Direct Investment: As per the information available with the ministry of commerce and industry, during the period FY 2015-2016, the Poor Performing States have fared poorly when it comes to attracting foreign direct investment (FDI). Among them, Madhya Pradesh has been able to attract USD 0.08 billion of FDI followed by Rajasthan (USD 0.05 billion), Bihar (USD 0.04 billion), Odisha and Assam (USD 0.1 billion each). Lower FDI inflows indicate that these states have failed to attract foreign direct investments.

Per Capita Net State Domestic Product: Among the Poor Performing States, Rajasthan has the highest per capital NSDP of Rs. 31,836 for the FY 2013-2014 at 2004-2005 prices. Rajasthan is being closely followed by Madhya Pradesh (Rs. 26,853), Odisha (Rs. 24,929), Assam (Rs. 23,392) and Bihar (Rs. 15,506).

COMPARISON OF PROFILE: SELECT STATES VIS-A-VIS THE POOR PERFORMING STATES

After having discussed the profiles of Select States and Poor Performing States independently, let us now have a look at the comparative picture.

LFPR

From Table 11 we observe that the average LFPR of Select States stood at 56.1 percent as compared to the national average of 53.9 percent. As against this the Poor Performing States have a lower average LFPR of 51.6 percent.

Literacy Rate

While the average literacy rate for the Select States is 79.9 percent, the national average is 74 percent and the average for Poor Performing States is 68.5 percent.

GSDP to GDP Ratio

The average GSDP-GDP ratio for the Select States stood at 7.1 percent as against Poor Performing States' average of 2.8 percent.

Table 11 COMPARATIVE PROFILES: SELECT STATES VIS-À-VIS POOR PERFORMING STATES			
Parameters	**Average of Select States**	**All India Average**	**Average of Poor Performing States**
LFPR (%)	56.1	53.9	51.6
Literacy Rate (%)	79.9	74.0	68.5
GSDP to GDP Ratio (%)	7.1	NA	2.8
GSDP CAGR for last 4 years (%)	6.2	5.5	6.9
FDI in state (USD. Billion)	2.7	40.0	0.0
Per Capita NSDP (Rs.)	50183	39904	24503

Source: LFPR: NSSO, 68th Round; Literacy Ratio: Census 2011; GSDP, GDP, Per Capital NSDP: RBI; FDI in State: Ministry of Commerce and Industry, Government of India

Growth of the GSDP of Select States

While the average of CAGR growth of GSDP for Select States during the period 2010-2011 to 2013-2014 stood at 6.2 percent, the national average is 5.5 percent and the average of CAGR growth of GSDP for Poor Performing States is 6.9 percent.

Foreign Direct Investment

As far as FDI inflows are concerned, the average FDI inflows for the Select States during FY 2015-2016 stood at USD 2.7 billion. The average for Poor Performing States was USD 0.04

billion. The total amount of FDI inflows to India during FY 2015-2016 stood at USD 40.0 billion.

Per Capita Net State Domestic Product

We observe that for the FY 2013-2014, for which comparable information are available, the average per capita NSDP for the Select States stood at Rs. 50,813 as against the all India average of Rs. 39,904 and the average for Poor Performing States of Rs. 24,503.

From above deliberation, we notice that the performance of the Select States is far better than the performance of the Poor Performing States. For example, while labour force participation of Maharashtra is 58.0 per cent, for Bihar it is only 43.4 percent. Similarly, while the GSDP CAGR for the period under consideration stood at 7.2 percent for Gujarat, for the state of Odisha it is only 3.2 percent.

MSME MANUFACTURING BUSINESS FACILITATOR INDEXES FOR 'SELECT STATES

Using the criteria and scoring matrix given in Tables 7 and 8 respectively, we have arrived at state wise MSME Manufacturing Business Facilitator Index which has a maximum value of '100' and minimum value of '0'. The state with an MSME Manufacturing Business Facilitator Index closer to hundred would be considered most suitable for the growth of MSMEs and viz versa.

Table 12 STATE WISE MSME MANUFACTURING BUSINESS FACILITATOR INDEX FOR THE SELECT STATES								
Criteria	Sub-criterion	Uttar Pradesh	West Bengal	Tamil Nadu	Andhra Pradesh	Gujarat	Maharashtra	Kerala
Labour Force (a)	Percentage of active labour force in the country (%)	14.4	7.2	6.6	8.4	5.5	10.1	2.5
Labour Force (b)	Score obtained	7.50	7.50	7.50	7.50	3.75	7.50	3.75
	Literacy Rate	67.7	76.3	80.3	67.0	91.8	82.3	94.0
	Score obtained	6.25	12.50	12.50	6.25	12.50	12.50	12.50
Power (a)	Percentage of total installed power in the country (%)	11.9	7.0	17.1	9.9	20.4	26.8	1.4
Power (b)	Score obtained	10.00	5.00	10.00	5.00	10.00	10.00	10.00
	Per capita availability of power (KW)	0.2	0.2	0.7	0.3	1.0	0.7	0.1

	Score obtained	2.50	2.50	5.00	2.50	5.00	5.00	2.50
Road (a)	Percentage of total NH in the country (%)	8.4	2.9	5.0	7.8	4.9	7.4	1.8
	Score obtained	7.50	3.75	3.75	7.50	3.75	7.50	3.75
Road (b)	Per capita availability of NH (KM)	43	32	69	93	82	66	54
	Score obtained	3.75	3.75	3.75	7.50	7.50	3.75	3.75
Credit Flow	CD Ratio (%)	43.7	54.2	112.9	103.9	75.1	102.7	61.8
	Score obtained	7.50	7.50	15.00	15.00	15.00	15.00	7.50
Port	Availability	No	Yes	Yes	Yes	Yes	Yes	Yes
	Score obtained	0.00	5.00	5.00	5.00	5.00	5.00	5.00
GSDP Size	GSDP Size (Rs. billion.)	8627	7066	8542	8559	7656	15101	3963
	Score obtained	5.00	5.00	5.00	5.00	5.00	5.00	2.50
Fiscal Management	Fiscal Deficit as %ge of GSDP	2.9	1.7	2.9	3.0	2.2	1.6	3.1
	Score obtained	5.00	5.00	5.00	5.00	5.00	5.00	0.00
EoDB Index	Rank of States	14	15	18	1	3	10	20
	Score obtained	0.71	0.67	0.56	10.00	3.33	1.00	0.50
Density of MSME Clusters	An MSME cluster in sq.km	High	High	High	High	High	High	High
	Score obtained	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Total MS Index score		65.7	68.2	83.1	86.3	85.8	87.3	61.8

Source: Self-computation

The MSME Manufacturing Business Facilitator Index for Select States given in Table 12 reveals that the state of Maharashtra is the leading state with a score of 87.3, closely followed by Andhra Pradesh (86.3), Gujarat (85.8), Tamil Nadu (83.1), West Bengal (68.2) Uttar Pradesh (65.7) and Kerala (61.8) in that order.

MSME MANUFACTURING BUSINESS FACILITATOR INDEX FOR 'POOR PERFORMING STATES'

Let us now have a look at the MSME Manufacturing Business Facilitator Index score of the Poor Performing States (Table 13).

Criteria	Sub-criteria	Madhya Pradesh	Rajasthan	Bihar	Odisha	Assam
Table 13 STATE WISE MSME MANUFACTURINGBUSINESS FACILITATOR INDEX SCORE FOR THE POOR PERFORMING STATES						
Labour Force (a)	Percentage of active labour force in the country (%)	6.3	5.8	6.8	3.5	2.3
	Score obtained	3.75	3.75	3.75	3.75	3.75
Labour Force (b)	Literacy Rate	69.3	66.1	61.8	72.9	72.2
	Score obtained	6.25	6.25	6.25	6.25	6.25
Power (a)	Percentage of total installed power in the country (%)	11.7	12.3	1.9	6.5	1.0
	Score obtained	10.00	10.00	5.00	5.00	5.00
Power (b)	Per capita availability of power (KW)	0.5	0.5	0.1	0.4	0.1
	Score obtained	5.00	5.00	2.50	5.00	2.50
Road (a)	Percentage of total NH in the country (%)	5.2	7.9	4.8	4.6	3.8
	Score obtained	3.75	7.5	3.75	3.75	3.75
Road (b)	Per capita availability of NH (KM)	72	115	47	111	122
	Score obtained	3.75	7.50	3.75	7.50	7.50
Credit Flow	CD Ratio (%)	60.4	73.3	33.1	40.4	41.1
	Score obtained	7.50	15.00	7.50	7.50	7.50
Port	Availability	No	No	No	Yes	No
	Score obtained	0.00	0.00	0.00	5.00	0.00
GSDP Size	GSDP Size (Rs. billion)	4347	5176	3437	2730	1595
	Score obtained	2.50	2.50	2.50	2.50	2.50
Fiscal Manageme	Fiscal Deficit as % of GSDP	2.8	3.2	3.0	3.0	2.4

nt	Score obtained	5.00	0.00	5.00	5.00	5.00
EoDB Index	Rank of States	5	8	16	11	24
	Score obtained	2.00	1.25	0.63	0.91	0.42
Density of MSME Clusters	An MSME cluster in sq.km	Low	Low	Low	Low	Low
	Score obtained	0.00	0.00	0.00	0.00	0.00
Total MS Index score		49.5	58.8	40.6	52.2	44.2

Source: Self-computation

As per information given in Table 13, among the Poor Performing States, the state of Bihar has got the lowest MSME Manufacturing Business Facilitator Index score of 40.6. Among others, the state of Rajasthan has an MSME Manufacturing Business Facilitator Index value of 58.8, followed by Odisha (52.2), Madhya Pradesh (49.5) and Assam (44.2). We also observe that in terms of the MSME-MBF index the performance of the Select States is much better than the performance of the Poor Performing States.

CONCLUSION

There is no denying of the fact that the MSMEs can be aptly identified as the facilitator of sustainable growth. They can provide employment opportunities to large population thereby eradicating unemployment and thus mitigating poverty. They can grow in areas of relative backwardness and become the rope for bridging the inequality. The MSME sector can earn huge amount of forex reserves for the country. In short, the MSMEs can be nurtured to cause positive transformations in the socio-economic milieu of a society. Therefore, the need of the hour is to devise a national policy for nurturing and strengthening the MSME ecosystem in the country. The current study ascertained that the differences in performance of the MSME sector in different states exist due to differences in the presence or absence of adequate enabling factors like labour force, economic infrastructure (roads, ports and power), regulatory framework, size of GSDP and density of MSME clusters etc. While states of Maharashtra, Gujarat, Tamil Nadu, Kerala, Andhra Pradesh, Uttar Pradesh and West Bengal have made a lot of progress in the sphere of MSME manufacturing sector, states like Rajasthan, Madhya Pradesh, Odisha, Bihar and Assam need to do a lot of ground work for the promotion & development of the MSMEs. The study also ascertains that the state of Maharashtra is the leader as far as the performance of the MSME sector is concerned given high endowment of all the identified enabling factors. Maharashtra is closely followed by Gujarat, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, West Bengal and Kerala in that order. Among the poor performing states of Rajasthan, Madhya Pradesh, Odisha, Bihar and Assam, while the first three states have potential to emerge as next MSME hotspots, the states of Bihar & Assam have to manoeuvre a lot for the development and growth of the MSME sector in these states. The study also demonstrates the usefulness of the 'MSME Manufacturing Business Facilitator index' as a yardstick to measure the readiness of different states in creating enabling conditions for the MSME sector in India. Given the importance of eradication of unemployment and poverty in the political economy of India, the policy makers cannot afford to ignore the importance of MSMEs in creating jobs, thereby mitigating economic inequality and poverty from the Indian society. At a time when the nation is giving a clarion call for increasing the share of manufacturing sector in India's GDP and employment opportunities through various policy interventions, both the state and central

governments should give adequate focus on further development of the MSME manufacturing sector in the country.

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