

## **Role of District Industries Centre to Promote Business Growth of Micro Small and Medium Enterprises: Empirical Evidence from Mayurbhanj District in Odisha**

Ranjan Kumar Bhuian<sup>1</sup>, Jagannath Lenka<sup>2</sup>, Minati Mallick<sup>3</sup>

<sup>1</sup>(Research Scholar, PG Department of Economics, North Orissa University, Odisha, India)

<sup>2</sup>(Professor, PG Department of Economics, North Orissa University, Odisha, India)

<sup>3</sup>(Asst. Professor, PG Department of Economics, North Orissa University, Odisha, India)

Corresponding Author: Ranjan Kumar Bhuian

---

**ABSTRACT :** *The present study is a humble attempt to assess the role of District Industries Centre to promote business growth of the Micro, Small and Medium Enterprises (MSMEs) in Mayurbhanj district of Odisha. On the basis of primary data collected from 320 industries that include 15 per cent of industries from each category, it is found that there is significant improvement in business growth of the MSMEs registered under DIC in terms of working capital, procurement of raw materials, employment of workers, capacity utilization, cost reduction, annual sales and profit. Thus, it is suggested to strengthen the DICs with more funds and freedom for industrial growth leading to overall economic development of the country.*

**KEYWORDS -** *Business, DIC, Growth, MSMEs*

---

Date of Submission: 24-03-2018

Date of acceptance: 08-04-2018

---

### **I. INTRODUCTION**

Micro, Small and Medium Enterprises (MSMEs) have proved to be crucial factors of development in the globalised economy. Their contribution to economic growth of both developed and developing countries has been well recognised. In order to maintain sustainable growth, the developing economies have to take the latent force of MSMEs sector as their role in economic activities is manifest both in tangible and intangible ways. However, basic requirements for sustainable development of MSMEs, in any area, is contingent upon the availability of resources like raw materials, power, infrastructure facilities, trading centres, educational facilities entrepreneurship and above all in co-ordinating agency such as the District Industries Centre (DIC) for promoting industrialisation at the grass root level.

#### **1.1 Concept of MSMEs**

The Micro, Small and Medium Enterprises have been recognised as engine of growth all over the world. Most of the countries have established a Small Medium Enterprises (SMEs) development agency as the nodal agency to coordinate and oversee all government interventions in respect to the development of this sector. In case of India, MSME development commissioner functions as the nodal development agency under the Ministry of Micro, Small and Medium Enterprises.

Office of the Development Commissioner (DC) provides a wide spectrum of services to the micro, small and medium industrial sector which include facilities for preparation of projects and product profiles, testing, training for entrepreneurship development, techno-economic and managerial consultancy, assistance for exports, pollution and energy audits etc. In view of increased globalisation of the Indian economy, MSMEs are required to face new challenges. Government of India has recognised the changed environment and is currently focusing support in the fields of marketing, credit, technology and infrastructure to MSMEs. Global trends and national development goals have increased DC's role as catalyst of growth of MSMEs in the country. In accordance with the provision of MSMEs development act, 2006, MSMEs are classified as Manufacturing Enterprises and Service Enterprises. In case of Manufacturing Enterprises, an enterprise whose investment in plant and machinery is up to 20 lakh rupees, 20 lakh to 5 crore rupees and 5 to 10 crore rupees are called micro, small and medium enterprises respectively. On the other hand, in service sector whose investment in equipments up to 10 lakh rupees, 10 lakh to 2 crore and 2 crore to 5 crore rupees are called micro, small and medium enterprises respectively as per the gazette of India, 30<sup>th</sup> Sept. 2006.

## **1.2 Review of Past Studies**

The surge in industrial growth in the twentieth century and the contribution of the industrial sector to economic development has brought about renewed interest in research on industrial growth in many countries including India. However, most of the studies on MSME and industrial development in India have been devoted to the analysis of the performance of manufacturing at the aggregate level and the analysis at the disaggregate level has remained relatively unexplored. As per Government of India, Planning Commission (1970)<sup>[1]</sup>, on the Village and Small Scale Industries has stressed the setting up of MSMEs which will be provide employment to the people in the rural areas. Dr. Wu. Jageh (1970) recommends the setting up of SSIs in countries having large unemployment. UNIDO's study (1970)<sup>[2]</sup> on SSIs in Latin America finds that the small enterprises with low-level of investment per worker tend to achieve a higher productivity of capital. Small Industries Extension Training (1972)<sup>[3]</sup> on National Small Industries Corporation on hire purchase scheme has observed that the growth in the number of units and the expansion of capital intensity alone may not create the necessary impetus to the growth unless considerable productivity changes have also been effected through further capacity utilization. Umesh C. Patnaik (1990)<sup>[4]</sup> has made an analysis of Contribution of DIC Programme to SSI in India and found that after launching DIC programme, the growth rate of SSI sector was less, particularly in the case of export and employment generation. Baldwin et al (1994)<sup>[5]</sup> found that small and medium-sized firms have experienced that skilled labor was one of the most important factors contributing to their growth. To be successful in a global market, a small firm needs a highly motivated, skilled and satisfied workforce that can produce at low costs. Roberts (1995)<sup>[6]</sup> opinion was that small industry sector has performed exceedingly well and enabled the country to achieve an extensive measure of industrial growth and diversification. By its less capital intensive and high labor absorption nature, SSI sector has made significant contributions to employment generation and also to rural industrialization. Under the changing economic scenario, SSI has both the challenges and opportunities before them. The business can compete on cost and quality of products at domestic and international level only if ideal investment in technology, innovative production process, R & D and effective marketing are introduced and implemented. The promotional activities for SSI in India need to concentrate on improved credit flows, human resource development, appropriate technology and funds for modernization. This expectation is based on an essential feature of the Indian industry and the demand structures. There will be flourishing and well grounded markets for the same product/process, differentiated by quality, value added and sophistication. Malga Weker (1997)<sup>[7]</sup> found that the infrastructure facilities are either very weak or nonexistent in rural areas. In urban areas with necessary industrial climate and infrastructure facilities, the growth of industries is relatively faster. The scarcity of indigenous raw materials has been a serious bottleneck. Scarce raw materials supplied through quotas are not sufficient to meet the demands of the units and is a delay in the disbursement of the loans due to the existence of procedural delays and instances of tangible securities.

The development of small industry also depends on the size of the market which in turn depends partly on the efficiency of the distribution of machinery. There is a time lag between sales and realization of sale proceeds that affects production of the enterprise. Incentives provided by the state and the centre are not within the reach of all the entrepreneurs in rural areas. Though Bhagavathi committee (1997) opposed fast introduction of mechanization designed to replace human labour but recommended introduction of sophisticated technology in certain selected areas. The committee recommended reduction to the maximum extent possible in the installed capacity in various industries in order to generate employment in the industrial field. Papola, T.S. (1997)<sup>[8]</sup> found evidence of continued spatial concentration and noted a decline in the share of factory employment in five most industrial districts from 57 per cent to 56 per cent. There is a need for a small degree dispersal of manufacturing in favour of backward areas with some degree of industrialization. Though the companies are attaining marketing expertise in short time yet marketing planning techniques are still not sophisticated. S. C. Lahiry (1997)<sup>[9]</sup> revealed that improvement of the economic conditions of the rural population was closely linked to the growth and development of rural industries. Rural industrialization should continue to be a central component of industrial policy and the Khadi and Village Industries Institutions should be strengthened in order to meet the challenges posed by rapid industrialization and intense competition due to the opening of the economy. The growth of the small-scale sector and its contribution to export had been impressive. However, the sector requires further encouragement to be able to grow by tapping both domestic as well as international markets. Himachalam, D. (2000)<sup>[10]</sup> observed that entrepreneurship development and small scale industrial development are the obverse and reverse of the same coin. The government and financial institutions have done a lot in this area through Entrepreneurship Development Programmes (EDP). But they have still failed to attract the class of people for whom these programmes are meant. The growth rates have been considerably lower for the intermediate goods and consumer non- durables while the consumer goods sector, particularly electric and electronic appliances have forged a head reflecting the new high style consumption patterns getting entrenched in richer sections of the society. Such an uneven development would have been avoided, had the needs and wants of the large impoverished class cared for. Singh Nagendra

(2000)<sup>[11]</sup> found that the contribution of both public and private sectors, including large scale and small scale enterprises play a crucial role for economic development. Berna (2001)<sup>[12]</sup> found in the entrepreneurs such as capital, experience of business, technical knowledge and family background and the factors are alone to promote the growth of entrepreneurship. M.R. Narayana (2004)<sup>[13]</sup>, analysis is based on both primary and secondary data and found that low quality and high- cost transport facilities, power, water supply; lack of market information; inadequate credit facility; and low technology have lesser effects on competitiveness of SSIs in Bangalore region than in other regions. A comparison of these results with the World Bank's Business Environment Survey results for India and China shows important factors that affect global competitiveness of SSIs in the State. According to Pushpangadan and Shanta (2006)<sup>[14]</sup>, the outcome of globalization and reforms is to increase competition and efficiency in the economy in all the areas. Competition being multidimensional in nature needs to be looked from different angles. Therefore, stability of size of units may not capture the extent of competition. Some rigidity exists in the expansion of competitive forces in the manufacturing sector. The manufacturing sector of India registered highest growth rate (14.9 per cent) in the year 2006-07, but cyclical slowdown began in the manufacturing sector which led to declining trends in the growth of this sector. Rathod, C. B. (2007)<sup>[15]</sup> analyzed that SSI sector in India has been exhibiting a striking export performance, export had grown up to double digit in the last ten years. Both the opportunities and the challenges have increased due to the impact of globalization on Indian Industry as a whole and the small scale sector in particular and a major portion of our exports would have to gear up to the new era of boundary- less economy. It suggested that there was need for simplified legal and regulatory framework, good governance, sufficient and accessible finance, suitable infrastructure and competitive environment.

As per the Development Commissioner of SSIs (2007)<sup>[16]</sup>, there are 13 million enterprises in India's small scale sector providing employment to about 29 million people, contributing 40 per cent of total industrial production and 34 per cent of total exports. These small enterprises produce about 8000 items ranging from conventional products to hi-tech components. With this economic performance, small businesses (particularly Micro enterprises) have been the major support to India's village / rural economy and small-medium enterprises have been the major counterpart of India's growing urban economy. According to Milind Kumar Sharma and Rajat B. (2007)<sup>[17]</sup>, Performance Measurement System (PMS) is underdeveloped and under researched in Micro Small and Medium Enterprises (MSMEs). It has emerged as a vital decision support tool at the strategic management level in MSMEs in the developing nations. Patricia R. Todd, et.al. (2007)<sup>[18]</sup> have proposed that the primary method for fostering or promoting the growth of entrepreneurship is through the utilization of technology. They concluded with an assessment of challenges and implications for future expansion. Information is provided concerning the current situation for MSMEs in India and the challenges encountered as they face a business environment that is becoming more competitive. Several factors are identified that must be addressed before the MSME can achieve international growth, specifically the utilization of technology. Special attention is given to the gaps in infrastructure that could enable a more efficient use of resources and the impact of entrepreneurship on the economic growth of the MSME. Annual report of Ministry of MSMEs (2008)<sup>[19]</sup> has mentioned that, the primary responsibility for promotion and development of MSMEs lies with the State Government. However, the Government of India has always taken active interest in supplementing the efforts of State Governments through various policies and schemes. The role of the Ministry of Micro, Small and Medium Enterprises is mainly to assist the States in their efforts to promote growth and development of MSMEs, for enhancing their competitiveness in an increasingly market-led economy and for enabling them in generating additional employment opportunities. Besides, the Ministry also attempts to address common concerns of these enterprises and undertakes policy advocacy on behalf of the sector on issues critically affecting their sustenance and growth.

Bodla and Verma (2008)<sup>[20]</sup> reveal that the growth in the share of exports of SSIs in total exports of India was higher in pre-liberalization period than the post- liberalization period. Compound Annual Growth Rate (CAGR), with reference to the number of units, employment level, production, and value of plant and machinery in SSIs were also comparatively higher in the pre-liberalization period. The percentage share of SSI sector in total bank credit and in total outlay of various five year plans has also declined significantly. Moreover, this sector is growing at a rate half of the total industrial growth rate. The SSI sector could not grow to the desired level due to intense competition from large and medium sized domestic and multinational companies. The objective of the policymakers as well as small industry associations was to enable the sector to be vibrant, competitive and to focus on R&D not only to improve the overall quality, but also to deliver a superior product in the market. Under this back drop, the present paper seeks to analyze the business growth of micro small and medium enterprises with special references to Mayurbhanj District in Odisha.

### **1.3 Materials and Methods**

The present study is both descriptive and analytical in approach. For the purpose of the study, primary data have been collected through canvassing well structured and pre-tested schedule on the basis of stratified

random sampling method in the district of Mayurbhanj in Odisha during 2016 - 17. Out of total 2113 registered under DIC, 320 industries have been selected to represent 15 per cent from each category of industry. For comparative analysis the statistical tools such as rank, weighted arithmetic mean, percentage, paired 't' test, Likert's Scale, correlation and reliability test have been used and the calculations have been done with the statistical package SPSS.

## II. RESULTS AND DISCUSSION

Micro Small and Medium enterprises are no doubt the success tools of modern India and their achievements are visible all around. They have emerged victorious in the face of rising threats from large sector inside and from multi-nationals abroad. The DIC not only provides supports and services but also co-ordinates various activities at the state level for promotion and development of MSMEs. Functions of DIC's included conducting industrial potential surveys keeping in view the availability of resources in terms of material and human skills, infrastructure, demand and Preparing action plan for effective implementation of the schemes identified. The business growth of sample MSMEs are observed as discussed below.

### 2.1 Growth of fixed and Working Capital

Table – 1 depicts the opinion of the sample MSMEs' about the business growth experienced in term of working and long term capital after registering in DIC. From the above table it is observed that the sample MSMEs have an average score of opinion equal to 2.74 indicating the fact that their investments in machinery and equipment have significantly improved after joining the DIC. The same pattern of opinion is also found in the case of other fixed assets like furniture, buildings and land so on after joining DIC.

**Table – 1 Business Growth in Terms of Working Capital and Asset Holding by MSMEs**

Sl. No.	Variables	Significantly Improved	Improved	No Improvements	Total Score	Mean Score	Rank
<b>Fixed Capital</b>							
1	Building	174(54.38)	141(44.06)	5(1.56)	809	2.53	3
2	Land	139(43.44)	175(54.69)	6(1.89)	773	2.42	4
3	Machinery and Equipments	240(75.00)	77(24.06)	3(0.94)	877	2.74	1
4	Furniture	172(53.75)	148(46.25)	0(0.00)	812	2.54	2
5	Others	146(45.63)	100(31.25)	74(23.13)	712	2.23	5
<b>Working Capital (Current assets)</b>							
6	Cash	230(71.88)	88(27.27.50)	2(0.63)	868	2.71	2
7	Stock	139(43.44)	108(33.75)	73(22.81)	706	2.21	3
8	Debtors	233(72.81)	85(26.56)	2(0.63)	871	2.72	1
<b>Working Capital (Current liabilities)</b>							
9	Creditors	131(40.94)	188(58.75)	1(0.31)	770	2.41	2
10	Bank over Draft	165(51.56)	127(39.69)	28(8.75)	777	2.43	1
11	Outstanding Expenses	109(34.04)	106(33.13)	105(32.81)	644	2.01	4
12	Others	120(37.50)	121(37.81)	79(24.69)	681	2.13	3
Cronbach's Alpha				0.964			

Source: Compiled from Primary Data

Changes in working capital in assets are recorded as improvement as debtors' i.e. 2.72 on an average score on Likert's three point scale lending, maintaining high cash liquidity positions 2.71 mean score and stock hold status 2.21 mean score. Changes in working in liabilities are recorded as enjoying bank overdraft facilities 2.43 mean score, credit owing capability 2.41 mean score, other liabilities like short term liability owing and repayment capacity 2.13 mean score and outstanding expenses repayment capacity 2.01 mean score. Reliability value of the opinion expressed by the sample MSMEs about the improvement in fixed and working capital position is measured as 0.964. The measure of correlation between the variables of changes in business fixed and working capital position is observed to be significant and the opinion expressed by population is proved to be reliable and valid.

### 2.2 Raw Material Procurement Destination

Table – 2 presents about the business growth experienced in terms of raw material procurement destinations before and after joining DIC by the sample MSMEs of the study area. It is found that the MSMEs raw material procurement sources have significantly improved with the assistance from DIC in the form of entrepreneurial motivation, training and counselling advices. A comparative analysis of MSMEs performances before and after joining DIC depicts that their local sourcing capability of raw materials have significantly

improved as evident from the mean score of 2.56 followed by sample MSMEs entrepreneurs who have extended the raw material sourcing ability outside the states with a mean score of 2.55.

**Table – 2 Business Growth in Terms of Raw Material Procurement Destinations by MSMEs**

Sl. No.	Destination	Significantly Improved	Improved	No Change	Total Score	Mean Score
1	Local	199(62.19)	102(31.88)	19(5.94)	820	2.56
2	Outside the Districts	197(61.56)	91(28.44)	32(10.00)	805	2.52
3	Outside the State	200(62.50)	96(30.00)	24(7.50)	816	2.55
4	Through Import	120(37.50)	105(32.81)	95(29.69)	665	2.08
5	Through Govt. Quota	200(62.50)	90(28.13)	30(9.38)	810	2.53
6	Others	121(37.81)	101(31.56)	98(30.63)	663	2.07
Cronbach's Alpha				0.969		

Source: Compiled from Primary Data

It is also observed that some MSMEs have started procuring raw material through government agencies under the reserved quota system followed by some MSMEs those who have expanded their suppliers' domain in other districts. The import capabilities of some entrepreneurs have increased after joining DIC. Reliability value of the opinion expressed by the sample MSMEs about the improvement in raw material procuring destinations is measured as 0.969 and the measure of correlation between the variables is worked out to be statistically significant and reliable.

### 2.3 Raw Material Procurement Sources

Table – 3 presents of the sample MSMEs' on business growth in terms of raw material procurement sources before and after joining in DIC.

**Table – 3 Business Growth in terms of Raw Material Procurement Sources by MSMEs**

Sl. No.	Sources	Significantly Improved	Improved	No Change	Total Score	Mean Score
1	Govt. agency	210(65.63)	101(31.56)	9(2.81)	841	2.63
2	Producer	217(67.81)	93(29.06)	10(3.13)	847	2.65
3	Wholesaler	214(66.88)	90(28.13)	16(5.00)	838	2.62
4	Retailer	222(69.38)	88(27.5)	10(3.13)	852	2.66
5	Others	206(64.38)	104(32.50)	10(3.13)	836	2.61
Cronbach's Alpha				0.956		

Source: Compiled from Primary Data

It is observed that the average score of MSMEs on a Likert's weighted scale of three stands at 2.66 in procuring raw materials from retailer based agencies followed by 2.65 from producers. On the other hand a mean value 2.63 of the MSMEs indicates that they have improved procurement bases vested with the Government agencies. A batch of smart MSMEs' have significantly shifted to the wholesaler and other sources respectively as evident from the mean score of 2.62 and 2.61. The reliability value of the opinion by the sample entrepreneurs' about the improvement in raw material procuring sources is measured as 0.956. The measure of correlation between the variables is proved to be reliable and valid.

### 2.4 Employment

Table – 4 presents the business growth in terms of employability and daily workers provided before and after joining DIC by the MSMEs of the sample area.

**Table – 4 Business Growth in terms of Employability and daily workers by MSMEs**

Sl. No.	Sources	Significantly Improved	Improved	No Change	Total Score	Mean Score
Number of Workers Employed						
1	Female	199(62.19)	97(30.31)	24(7.5)	815	2.54
2	Male	207(64.69)	89(27.81)	24(7.5)	823	2.57
Number of Daily Workers Employed						
1	Female	187(58.44)	115(35.94)	18(5.63)	809	2.53
2	Male	179(55.94)	129(40.31)	12(3.75)	807	2.52
Cronbach's Alpha				0.910		

Source: Compiled from Primary Data

It shows that the number of workers and daily employment creation of MSME's in Mayurbhanj district has significantly improved after registering their units under the DIC. The MSME's have been able to create

employment to male and female employees after joining DIC on an average score 2.57 and 2.54 respectively. Similarly the MSMEs are able to create employment of male workers and female daily in a year with an average opinion score of 2.52 and 2.53 respectively. The reliability value of the opinion by the sample entrepreneurs about the business growth experienced in term of labour employment and daily workers provided is 0.910. The measure of correlation between the variables is proved to have significantly improved.

## 2.5 Capacity Utilisation

The sample enterprises of the study region have been divided into four categories on the basis of their capacity utilisation after they join DIC. The opinions of these entrepreneurs on a three point scale have been recorded and presented in Table – 5.

**Table – 5 Business Growth in terms of Capacity Utilization by MSMEs**

Sl. No.	Capacity Utilization	Significantly Improved	Improved	No Change	Total Score	Mean Score
1	Up to 30 per cent	15(83.33)	16(16.67)	0(0.00)	51	2.83
2	30 to 50 per cent	62(72.94)	20(23.53)	3(3.53)	229	2.70
3	50 to 70 per cent	78(61.42)	41(32.28)	8(6.30)	324	2.55
4	Above 70 per cent	48(53.33)	40(44.44)	2(2.22)	226	2.51
Cronbach's Alpha				0.901		

Source: Compiled from Primary Data

It is observed that business growth in terms of capacity utilization has significantly increased after joining DIC by the sample MSMEs of the district. The unutilised capacity of the enterprises are found to be progressive that is lower the utilization capacity, higher is the improvement with the assistance from DIC. This pattern is evident from the opinion score of the entrepreneurs.

Reliability value of the MSMEs about the business growth experienced in terms of installed capacity utilization is measured as 0.901 and the measure of correlation between the variables is found to be valid and reliable.

## 2.6 Consumption of Raw Materials

**Table – 6 Business Growth in Terms of Annual Consumption of Raw Materials by MSMEs**

Sl. No.	Value in Rs. Thousand	Before DIC Registration	After DIC Registration	Percentage Change
1	Below 25	27(8.44)	0(0.00)	-08.44
2	25 to 50	117(36.60)	102(31.88)	-04.69
3	50 to 75	92(28.80)	98(30.63)	01.88
4	Above 75	84(26.30)	120(37.50)	11.25
Total		320(100)	320(100)	-
Cronbach's Alpha			0.981	

Source: Compiled from Primary Data

Table – 6 presents the business growth in terms of annual consumption of raw materials before and after registering with DIC by the MSMEs. It is evident that 8.44 per cent of the entrepreneurs were consuming below Rs. 25 thousands worth of raw material yearly and after their registration in DIC the raw material buying capacity of all MSMEs' in this category have significantly improved above Rs. 25,000. Around 37 per cent MSMEs who were procuring raw material worth of 25-50 thousands before registering under DIC had reduced to 31.88 per cent. On the contrary out of 320 MSMEs', 28.80 per cent of MSMEs had been spending between Rs.50-70 thousands on their raw material procurement before joining DIC. It shows an improvement of MSMEs under this category that rose by 1.88 per cent and recorded at 30.63 per cent after the MSMEs' registration in DIC. Similarly, the range above Rs. 75 thousands raw material consumption cost of MSMEs' rose from 26.30 per cent to 37.50 per cent after registration in DIC. Thus, it is found that there is drastic change of raw-material consumption above 75 thousands. Reliability value of the opinion expressed by the sample entrepreneurs' about the business growth experienced in terms yearly raw material consumption expenses is measured as 0.981. The measure of correlation between the variables is highly reliable and significant.

## 2.7 Fixed and Variable Expenses

Table – 7 presents business growth in terms of fixed and variable expenses by sample MSMEs after joining DIC.

**Table – 7 Business Growth in Terms of Fixed and Variable Expenses by MSMEs**

Sl. No.	Expenses	Significantly Improved	Improved	No Change	Total Score	MeanScore
1	Power Cost	180(56.25)	90(28.13)	50(15.63)	770	2.41
2	Labour Cost	167(52.19)	123(38.44)	30(9.38)	777	2.43
3	Other Cost	153(47.81)	103(32.19)	64(20.00)	729	2.28
Cronbach's Alpha			0.903			

Source: Compiled from Primary Data

It shows that the MSMEs' on an average score of 2.43 have their labour cost significantly decreased after joining DIC, followed by 2.41 in power cost and 2.28 in incurring other operation expenses that have reduced to a considerable rate after availing DIC's assistance. Reliability value of the opinion expressed by the sample entrepreneurs' about the business growth experienced in terms of fixed and variable expenses are measured as 0.903. The correlation between the variables is worked out to be reliable and valid.

## 2.8 Sales Destination

**Table – 8 Business Growth in Terms of Annual Sales by MSMEs**

Sl. No.	Sources	Significantly Improved	Improved	No Change	Total Score	Mean Score
1	Local	189(59.06)	101(31.56)	30(9.38)	799	2.50
2	Outside the Districts	204(63.75)	86(26.88)	30(9.38)	814	2.54
3	Outside the State	194(60.63)	86(26.88)	40(12.5)	794	2.48
4	Exports	189(59.06)	77(24.06)	54(16.9)	775	2.42
Cronbach's Alpha				0.886		

Source: Compiled from Primary Data

Table – 8 indicates about the business growth in terms of annual sales after joining under DIC by sample MSMEs of the study area. It is found that entrepreneurs mean opinion score of 2.54 for sale of their products in the outside district market have significantly improved after availing DIC's marketing assistances followed by 2.50 per cent sale in the local market and 2.48 for sale outside. Exports have significantly increased after joining DIC as evident from the opinion score of 2.24 by the entrepreneurs. Reliability value about the business growth experienced in terms of annual sale is measured as 0.886 and the correlation between the variables is proved reliable and valid.

## 2.9 Profit

Table – 9 presents business growth in terms of annual profit or loss after registering under DIC Mayurbhanj by the sample MSMEs.

**Table – 9 Business Growth in Terms of Annual Profit by MSMEs**

Sl. No.	Value in Rs. Thousand	Significantly Improved	Improved	No Change	Total Score	Mean Score
1	Below 50	15(55.56)	9(33.33)	3(11.11)	66	2.44
2	50 to 75	42(52.50)	34(42.50)	4(5.00)	198	2.48
3	75 to 100	65(51.59)	61(48.41)	0(0.00)	317	2.52
4	Above 100	53(60.92)	28(32.18)	6(6.90)	221	2.54
Cronbach's Alpha				0.876		

Source: Compiled from Primary Data

It is observed that sample respondents with profit margin above 100 thousands have an average score of 2.54 while in the range between Rs.75, 000 -Rs. 1,00,000 have this figure 2.52 after joining DIC. Entrepreneurs with score of 2.48 belong to the range between Rs.50, 000 - Rs. 75,000 followed by 2.44 has profit below Rs.50 000. It is observed that profit earning capacity of entrepreneurs in all categories has improved. Reliability value about the business growth experienced in terms of annual profit earning is measured as 0.876. The measure of correlation between the variables is significantly reliable.

**Table – 10 Paired t Test Regarding Opinion on Business Growth before and after Registration in DIC by MSMEs**

Variables	Pairs	Mean	Mean Score Difference	SE	t	Sig.
Working Capital And Asset	Before DIC Registration	2.283	0.140	0.073	1.917	0.040
	After DIC Registration	2.423				
Raw-material Procurement Destinations	Before DIC Registration	1.986	0.399	0.110	3.627	0.000
	After DIC Registration	2.385				
Raw-material Procurement Sources	Before DIC Registration	2.378	0.256	0.061	4.196	0.000
	After DIC Registration	2.634				
No. of Workers Employed	Before DIC Registration	1.698	0.857	0.087	9.850	0.000
	After DIC Registration	2.555				
No. of Daily Workers Employed	Before DIC Registration	2.416	0.109	0.023	4.739	0.000
	After DIC Registration	2.525				
Capacity Utilization	Before DIC Registration	2.218	0.376	0.033	1.394	0.000
	After DIC Registration	2.594				
Fixed and Variable Expenses	Before DIC Registration	2.093	0.280	0.029	9.655	0.000
	After DIC Registration	2.373				

Annual Sales	Before DIC Registration	2.314	0.171	0.026	6.576	0.000
	After DIC Registration	2.485				
Annual Profit	Before DIC Registration	2.140	0.366	0.033	1.091	0.000
	After DIC Registration	2.506				

Level of significance: 5 per cent Source: Compiled from Primary Data

After detail analysis on the performances of MSMEs' before and after registration under DIC Mayurbhanj, its statistical viability is measured with the support of Paired 't' test:

H<sub>0</sub>: The business performance of MSMEs has not improved after registering under DIC Mayurbhanj

H<sub>1</sub>: The business performance of MSMEs has improved after registering under DIC Mayurbhanj

From Table – 4.10 it is evident that 't' value for mean difference in the case of working capital and asset is not statistically significantly. But in all other cases it is found to be statistically significantly. Thus there is a marked improvement in raw material procurement, workers employed, daily workers employed, capacity utilization, fixed and variable expenses, annual sales and annual profit after registration under DIC.

### III. CONCLUSION

Business performances of sample entrepreneurs have significantly improved after their registration in DIC as a member. Noticeable improvement is found in their working capital, sources of raw-materials procurement, number of workers employed, installed capacity utilization, cost reduction, annual sales and profit. The reliability value of the data expressed by the sample entrepreneurs' about the improvement in business performances is proved to be reliable and valid. Further the results of paired "t" test also confirmed that the business performance of MSMEs have significantly increased after registering in DIC Mayurbhanj.

### REFERENCES

- [1]. D G Karve, Report of the committee on village and SSI, *Government of India, Planning Commission*, 1970
- [2]. UNIDO SSI in Latin America, *Publication No: 111337*, 1970, 56
- [3]. Small Industries Extension training (SIET), A study of National small Industries Corporation in Hire – purchase scheme, *Hydrabad, SIET Institute*, 1972
- [4]. Umesh C. Patnaik, Contribution of DIC Programme to SSI in India, *Journal of Rural Development, Hydrabad*, 9( 2),1990, 429-434
- [5]. Baldwin JR, W Chandler, Can Le, and Tom Papailiadis, Strategies for Success: A Profile of Growing Small and Medium-sized Enterprises in Canada, Ottawa:*Statistics Canada, Catalogue61-523-RPE*, 1994
- [6]. Roberts M, Indian public demands industry responsibility, *Chemical Week*, 157(1), 1995, 89
- [7]. Malga Weker P D, *Problems of small Industry - A study in Andhra Pradesh, Hydrabad, SIET*, 1997
- [8]. Papola .T.S., spatial, Diversification of Manufacturing Industries in Uttarpradesh, Lucknow, *Giri Institute of Development studies*, 1997
- [9]. S.C. Lahiry, Industrialization – An Over View, *Kurukshetra, Vol. XLV,( 11)*, 1997, 89-92
- [10]. Himachalam D, Entrepreneurship development in small scale sectors, *Yojana* , 32(18), 2000, 16-18
- [11]. Singh Nagendra, Types of Entrepreneurship, *Yojana*, 32(9), 2000, 37-49
- [12]. Berna, Entrepreneurship in Madras state, *Yojana*, 35(7), 2001, 6-7
- [13]. M R. Narayana (2004); Determinants of Competitiveness of Small-Scale Industries in India, *Small-Scale Industries in India*, 8, 2004, 93-124
- [14]. Pushpangadan K. and Shanta N, Competition in Indian Manufacturing Industries. *Economic and Political weekly*, 30(September), 2006, 4130-4137
- [15]. Rathod C B, Contribution of Indian Small Scale Entrepreneurs to Economic Growth in India: Opportunities and Challenges in Global Economy, *Prabandh- Journal of Management & Research*, 23, June, 2007, 1- 12
- [16]. Development Commissioner, SSI Ministry, Laghu Udyog Samachar, *A Publication of Ministry of Small Industry, Government of India*, 31(3-5), 2007, 62-63
- [17]. Milind Kumar Sharma and Rajat Bhawat , Performance measurement system: case studies from SMEs in India, *International Journal of Production and Quality*, 2(4), 2007, 475-509
- [18]. Patricia R. Todd, Rajshekhar, G Javalgi, Internationalization of SMEs in India: Fostering entrepreneurship by leveraging information technology, *International Journal of Emerging Markets*, 2(2), 2007, 166-180
- [19]. Annual Report , Development Commissioner (MSME), *Ministry of Micro, Small & Medium Enterprises Government of India*, 2007-2008
- [20]. Bodla B. S, and Verma S. R, *An analysis of the performance of SSIs in the era of globalization, The ICFAI Journal of Managerial Economics*, 6(3), 2008, 40-53

Ranjan Kumar Bhuian. " Role of District Industries Centre to Promote Business Growth of Micro Small and Medium Enterprises: Empirical Evidence from Mayurbhanj District in Odisha." *International Journal of Humanities and Social Science Invention (IJHSSI)* 7.04 (2018): 31-38.