A COMPARATIVE STUDY OF DISTRICT INDUSTRIES CENTRE LISTED ENTREPRENEURS OF ASSAM WITH SPECIAL REFERENCE TO JORHAT DISTRICT

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Abstract:
This study aims to examine the trend of assorted DIC registered business enterprise in Jorhat district of Assam. Data of six financial year i.e. 2010-11 to 2015-16 are taken into consideration to measures the various aspects which are related to entrepreneurial growth and employment generation. By comprising four objectives, this study attempts to focus on various areas such as engagement of male and female entrepreneurs in manufacturing and service sector, share of various of agro and non-agro based enterprises, employment generation scenario and impact of investment in plant and machinery in annual turnover. In the study it was found that in the initial three years share of male entrepreneurs was more and from the financial year 2014-15 to 2015-16, share of female entrepreneurs increased drastically. The weightage of non-agro based business is much higher than agro-based business and ratio of annual turnover to investment in plant and machinery marginal except in the year 2012-13 which was 17:1.

Keywords: MSME; District Industries Centre; Agro and Non-Agro Based Enterprise; UAM; Manufacturing and Service Sector.

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1. Introduction

With population of 1299.0 million and unemployment number of 44.85 million and unemployment rate of 3.46 percent (Unemployment rate, 2017), in a developing country like India it is highly needed to have skill development and employment generation programmes which will generate employment in coming years. Various govt. policy such as skill India, make India policy implemented and primarily focusing on developing entrepreneurship zeal in every nook and corner of the country. Ranking of India as compare with other nations like Spain, Turkey, Russia, Brazil, France is in comfortable position and still need to match with the developed countries like Switzerland (3.10) and Japan (2.80), (Unemployment rate, 2017).

Entrepreneurship play a vital role in eradicates unemployment and development of nation. However as compare to developed states like West Bengal, Uttar Pradesh, Maharashtra etc. the
contribution of Assam and other North Eastern states in total number of MSME establishment is negligible. As per the report of MSME report (2016-2017), top 10 states namely West Bengal, Uttar Pradesh, Maharashtra, Tamil Nadu, Andhra Pradesh, Kerala, Rajasthan, Gujarat, Karnataka and Madhya Pradesh accounted for 70 percent of total number of establishment as shown in table 1. Similarly the filling of Udyog Aadhar Memorandum till December 31, 2016 is one of the lowest in the country. Assam contributes 0.02 percent in total UAM fillings whereas Bihar, Uttar Pradesh and Tamil Nadu contributes 24.57, 14.22 and 10.52 percent respectively. Lion’s share of MSME sector is covered by Micro i.e. 20,03,673 enterprises followed by Small enterprises i.e.2,28,008 units. Share of medium scale enterprise is very less and it accounted only 8,781 enterprises (Annual Report 2016-17, 2017). As in India, 70% of population is directly or indirectly engaged to agricultural activities, but the distribution of agricultural and non agricultural establishments are not even. Share of non agricultural establishment is 453,63,786 which is much higher than agricultural establishment i.e. 131,31,573, clearly indicates that there in need to establish more agro based industries for value addition of the raw agro products (Annual Report 2016-17, 2017).

Table 1: Top 10 states in terms of number of MSME establishments

| Rank | State             | Number of establishments | Percentage of share |
|------|-------------------|--------------------------|---------------------|
| 1    | West Bengal       | 5269814                  | 11.62               |
| 2    | Uttar Pradesh     | 5238568                  | 11.55               |
| 3    | Maharashtra       | 4545581                  | 10.02               |
| 4    | Tamil Nadu        | 3282197                  | 7.24                |
| 5    | Andhra Pradesh    | 2781291                  | 6.13                |
| 6    | Kerela            | 2364085                  | 5.21                |
| 7    | Rajasthan         | 2270936                  | 5.01                |
| 8    | Gujarat           | 2218464                  | 4.89                |
| 9    | Karnataka         | 2188860                  | 4.83                |
| 10   | Madhya Pradesh    | 1958550                  | 4.32                |
| Total|                   | 32118346                 | 70.80               |
| All India |                 | 45363786                 | 100.00              |

Source: Data are compiled from MSME report 2016-17.

With a view to generate employment and accelerate economic growth, District Industries centre was formed by the govt. of India in the year 1978 (DIC, 2017), aims to provide 360° support in promoting of small scale and cottage industries in district level. DIC aims to provide financial, technical, legal, marketing and other necessary service under one roof to various small scale industries. District industries centre give full assistance in promoting rural entrepreneurship and provide various schemes for development of rural and cottage industries and also gives the special emphasis on promoting Micro, Small and Medium Enterprise (L & Sowmya, 2017). To shape the backbone of economy, DIC is engaged in promoting Micro, Small and Medium Enterprises and offer range of services under one umbrella and identify various activities like preparation of project profiles, obtaining financial assistance from various banks/financial institutions and statutory clearance from government departments, sanction and disbursement of subsidies under various schemes such as PMEGP, UYEGP, NEEDS etc. for the development of entrepreneurship in district level (Jayalakshmi & Gayathri, 2016). In a study by (Sekar & Ganesan, 2012) found that perception of small scale entrepreneurs towards performance of DIC
is positive. This paper attempts to classified various DIS listed enterprises’ in various categories such as manufacturing, service, agro and non agro based enterprises. Agro-based industries broadly classified into two categories namely food processing and non-food processing industries (Paramasivan & Pasupathi, 2016). Details classifications of agro-based industries are given below in table 2.

| Broad classification | Definition |
|----------------------|------------|
| Agro-produce processing units | Process the raw material so that it can be preserved and transported easily. Eg. Rice Mills, Dal Mills. |
| Agro – produce manufacturing units | Raw materials are converted to a new product. Eg: Sugar factories, Bakery, Textile Mills |
| Agro-inputs manufacturing units | Include the industrial units which are engaged in the mechanization of agriculture or for increasing the agricultural productivity. Eg: seed industries, pump sets, fertilizer and pesticide industries. |
| Agro service center | These are engaged in repairing and servicing of pump sets, diesel engines, tractors and all type of farm equipment. |

Source: Secondary data.

The study is conducted with nineteen parameters i.e. employee behaviour, motivation campaigns, Subsidy given, Loan sanctioned, training conducted etc and all statements are statistically significant.

Both male and female entrepreneurs are engaged in various business units but in terms of ratio, male owned enterprise is more. Female entrepreneurs generally preferred sole proprietorship as legal form of doing business and mostly engaged in service activity (Veena & Nagaraja, 2013).

This paper aims to find out the present status and scenario of DIC4 listed enterprises in Jorhat district of Assam. Data are collected from the period of 2010-11 to 2015-16 in order to know the various dimensions and trend such as number of agro and non agro based business, ratio of male and female entrepreneurs engaged in manufacturing and service sector, employment generation scenario by various male and female owned business and lastly the comparison of investment in plant and machinery with annual turnover by male and female owned business.

1. Prime Minister’s Employment Generation Programme.
2. Unemployed Youth Employment Generation Programme
3. National Economic Empowerment Development Strategy
4. DIC4 is used in place of District Industries Center

2. Objective of the Study

1) To find out the Weightage of male and female entrepreneurs in manufacturing and service activities.
2) To find out the Weightage of various agro and non agro based business activities by male and female entrepreneurs
3) To know the status and scenario of employment generation by male and female entrepreneurs.

4) To find out the ratio of annual turnover with investment in plant and machinery by male and female owned businesses.

3. Research Methodology

Secondary data from District Industries Centre, Jorhat is used as a base to know the various aspect of DIC listed enterprises. Data has been collected for the period 2010-11 to 2015-16. The same data are then grouped and regrouped to fulfill the various objectives. The study primarily uses frequency and trend analysis to figure out various findings as per the objectives. For objective one, data of the six years are compiled and regrouped to know the number of business engaged in manufacturing and service activities by male and female entrepreneurs. For objective two, data related to various business activities are categorized into two major groups i.e. agro based and non-agro based business and weightage of each business is computed to know the percentage of share in the total value. For objective three and four, ratio are computed for a comparative analysis of male and female employee and to know the relation between annual turnover and investment in plant and machinery for the period of 2010 to 2016.

4. Findings and Analysis

Objective 1: To find out the weightage of male and female entrepreneurs in manufacturing and service activities.

The list of enterprise from the period of 6 years i.e. 2010-11 to 2015-16 grouped on the basis of manufacturing and service activity. The data of 2010-11 is taken as a base year to compute the value of percentage change. From the data shown in table 2, it is found that in the year 2010-11, total enterprise registered is 55 out of which 24 are in manufacturing activity and 31 are engaged in service activity. In the year 2010-11, majority of the units i.e. 32 are owned by male owner and 23 is owned by female. However there is a decrease in the unit register in the year 2011-12, number of male owned enterprise is decreased to 93.75 percent while female owned enterprise is come down to 95.65 percent. There is 149% increased in the total unit registered in the year 2012-13, out of which majority i.e. 50 units are in manufacturing sector. In the year 2014-15, number of registered unit continued to increase and manufacturing unit owned by the male owner dominates the ratio. However there is a jump in the involvement in the female owned enterprises which is increased to 23 in manufacturing and 14 in service sector. In the year 2014-15, there is a small decrease in the list registered in DIC Jorhat and the percentage of registered unit come down to 164% from 167%. From the year 2014-15, women entrepreneur dominates the trend and there is a huge jump in the female owned business enterprises mainly in the service sector. Women are involved in various business activity such as parlour, pickle business, restaurant etc, discuss in second objective thoroughly.
Table 3: List of male and female entrepreneurs engaged in manufacturing and service activities

| Nature of activity/Year | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|-------------------------|---------|---------|---------|---------|---------|---------|
| Gender/Activity         | Male    | Female  | Total   | Male    | Female  | Total   |
|                         | M       | F       | T       | M       | F       | T       |
| Manufacturing           | 14      | 10      | 24      | 36      | 14      | 50      |
| Service                 | 18      | 13      | 31      | 17      | 15      | 32      |
| Total                   | 32      | 23      | 55      | 53      | 29      | 82      |

% of change: 10 0 100 10 9 9 9 9 9 16 12 12 9 17 16 16 11 22 6 16 9 4 0 22

Source: Data are compiled from DIC office, Jorhat.

The year 2015-16 have highest number of registered business units with 400% as compared to the year 2010-11. Share of manufacturing activity decreased from the previous year. However, there is a drastic jump in the involvement in the service activity by and female owner and out of 81 registered service enterprises, 69 are registered by women. Graphical representation of the share of male and female entrepreneurs engaged in manufacturing and service enterprise are shown in Figure 1.

Figure 1: Trends of male and female entrepreneurs in manufacturing and service activities

In figure 1 it clearly shows the trend of male and female owned manufacturing and service enterprises. Initially male owned service enterprises are dominated the trend and after this growth of business engaged in manufacturing activities increased and in the last year i.e. 2015-16 service related business increased drastically. From the year 2010-11 to 2013-14, male owned
business enterprise was more, however from the year 2014-15, there is a tremendous growth in the female entrepreneurs mainly in the service sector.

**Objective 2:** To find out the Weightage of various agro and non agro based business activities by male and female entrepreneurs.

As shown in table 3, out of total 215 business enterprises owned by the male entrepreneurs, majority i.e. 155 enterprise are non agro based and 60 enterprises are agro based industries. In agro based industry, wooden furniture business have lion’s share with 17% share, followed by wooden furniture business. Wooden furniture business have 15% share and black teas business have 8% share in the agro based sector. Apart from these, others such as handicraft, bakery business, dalmug, biscuit, mustard oil poultry feed etc jointly contributed majority share i.e. 37% but individual share in the total agro based industry is negligible.

**Table 4: List of agro based and non agro based activity of male entrepreneurs**

| Nature of Business                          | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|--------------------------------------------|---------|---------|---------|---------|---------|---------|-------|
| **Agro based**                             |         |         |         |         |         |         |       |
| Wooden Furniture                           | 1       | 1       | 5       | 2       | 9       |         |       |
| Rice Milling                               | 2       | 2       | 5       | 1       | 10      |         |       |
| Namkeen & Kurkure                          |         | 1       | 3       |         | 4       |         |       |
| Paddy Milling                              | 1       | 1       |         |         | 2       |         |       |
| Black Tea                                  | 1       | 2       | 2       |         | 5       |         |       |
| Handloom cloth                             | 1       |         |         |         | 1       | 2       |       |
| Ayurvedic Medicine                         |         | 1       | 1       |         | 2       | 4       |       |
| Pickles                                    |         | 2       |         |         |         | 2       |       |
| Others include Bamboo handicraft, bakery item, sewai, dalmug & bhujia, spice grinding, poultry feed, bread & cookies, soyabean, Biscuit, Mustard oil, Rice polish, Paddy, Mixtures, etc (each share one enterprise) | 2       | 3       | 9       | 4       | 4       | 22      |       |
| **Total**                                  | 8       | 7       | 20      | 13      | 9       | 3       | 60    |
| **Non Agro based**                         |         |         |         |         |         |         |       |
| Cycle Repairing                            | 2       | 2       | 3       | 2       | 9       |         |       |
| Cement Products                            | 1       |         |         | 4       |         | 5       |       |
| Tailoring                                  | 2       | 1       |         | 3       |         | 6       |       |
| Wire Netting                               | 2       | 1       | 3       | 6       | 12      |         |       |
| Wax candles                                | 1       |         |         | 1       | 2       |         |       |
| D.T.P                                      | 3       |         | 3       | 7       | 3       | 16      |       |
| Printing                                   | 2       | 2       | 3       | 2       | 1       | 1       | 11    |
| Ice block                                  | 1       |         |         |         | 2       | 3       |       |
| Steel Fabrication                          | 1       |         | 2       | 1       |         | 4       |       |
| Hotel & Restaurants                        | 1       |         |         | 1       | 2       | 4       |       |
Aluminium utensils & & & & & 
Steel furniture & Trunk & & & & 
Stone crusher & & & & 
Other includes pole, ice block transport equipments, Disposable cup& plate, batteries, computer related material, Car repairing, Music Center etc & & & & 

|          | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|----------|---------|---------|---------|---------|---------|---------|-------|
| Agro based |         |         |         |         |         |         |       |
| Handloom cloth | 5 | 3 | 4 | 4 | 31 | 47 |
| Pickle Packing | 2 | | | | | |
| Wooden furniture | 1 | 1 | 1 | 3 | | |
| Others include paddy milling, Jute bag, Biscuit shop, Food products, Atta with brand | 1 | 1 | 2 | 1 | 5 | |
| Total | 6 | 4 | 2 | 6 | 6 | 33 | 57 |
| Non Agro based |         |         |         |         |         |         |       |
| Tailoring | 11 | 6 | 11 | 19 | 16 | 12 | 75 |
| Beauty parlour | 2 | | 5 | 20 | 6 | 33 | |
| Readymade garments | 4 | 1 | 8 | 30 | 43 | | |
| Others include consultant, computer related, wax candles, stone crusher, D.T.P etc | 5 | 3 | 1 | 3 | 1 | 2 | 15 |
| Total | 18 | 9 | 16 | 28 | 45 | 50 | 166 |

Source: data are compiled from DIC Jorhat.

In the year 2012-13, record highest number of registered agro based industry in DIC Jorhat with 34\% share followed by 2013-14 with 22\% share in the total agro based industry.

Majority of the enterprise i.e. approx 72\% of the DIC listed enterprise are non agro based. D.T.P and printing press share majority i.e. 10\% & 7\% respectively in non agro based enterprises. Apart from these two, other such as steel fabrication, netting, ice block, car repairing, computer related business share a small margin in the total value as shown in table 3. List of registered business enterprises is highest in the year 2013-14 and 2015-16 with share of 26\% and 21\% respectively.

Table 5: List of agro based and non agro based activity of female entrepreneurs

From table 4, it is found that majority of female owned business enterprise i.e. 82\% of the owner are engaged in handloom business and share of pickle packing and other agro based business like paddy filling, jute bag etc share is negligible in the total value. In the year 2015-16, there is a drastic increase in the registered business which account for 60\% share in the total list. The share
of agro based industry i.e. which is 26 percent is low as compare to non agro based business which is 74 percent.

In non agro based business mainly dominated by three business segment namely tailoring, beauty parlour and readymade garments contributing share of 45, 20 and 26 percent respectively as shown in table 4. In the year 2015-16 registered highest number of business enterprise with 30 percent of share in total non agro based business followed by 2014-15 which is 27 percent.

Objective 3: To know the status and scenario of employment generation by male and female entrepreneurs.

Employment generation is one of the prime objectives of DIC registered enterprise. From table 5, it is found that employment generation by male owned business for all the years are dominated by male worker only. Employment generation by the business enterprise is highest in the year 2013-14 with 491 employees and worker. The ratio of male to female worker is lowest in the year 2011-12 i.e. 2.1:1 and highest in the year 2013-14 which is 14.34:1 and this clearly indicates that although employment is generated but it is not in parallel direction towards gender.

Table 6: Employment generation scenario by male and female owned business enterprises

| Year          | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|--------------|---------|---------|---------|---------|---------|---------|
| Male Owned enterprise | Male Fe | Male Fe | Male Fe | Male Fe | Male Fe | Male Fe |
| Ratio(male:female) | 4.32:1  | 2.1:1   | 3:1     | 14.34:1 | 5.21:1  | 5.30:1  |
| Female owned enterprise | Male Fe | Male Fe | Male Fe | Male Fe | Male Fe | Male Fe |
| Ratio(male:female) | 0.29:1  | 0.30:1  | 0.40:1  | 0.44:1  | 2.55:1  | 0.74:1  |

Source: data are compiled from DIC Jorhat

In the year 2013-14, gender gap related to employment is very high at the ratio of 14.34:1, which indicates that against 14.34 male workers in a business enterprise only 1 female worker is there. In female owned business enterprise, except 2014-15, in all other year it is dominated by female worker. Ratio of female worker is more as compare to male worker but in the year 2014-15, the ratio turned to 2.55:1 which indicates that against 2.55 male worker the business have only one female worker.

Objective 4: To find out the ratio of annual turnover with investment in plant and machinery by male and female owned businesses.

From the table 6, it is found that total investment in plant and machinery is highest in the year 2013-14 with Rs. 1220.25 lakhs and average investment in plant and machinery is also highest in the same year which is Rs. 22.18 lakhs. However in the year 2012-13, the average investment in plant and machinery is at lowest by the male owned business enterprise which is Rs. 2.1 lakhs. The ratio of annual turnover to investment in plant and machinery is highest in the year 2012-13, i.e. 16.57:1 which indicates that annual turnover against investment is approximately 17 times higher. The ratio is lowest in the year 2010-11 i.e. 1.02:1, which indicates that investment in plant and machinery and annual turnover is almost same.
Table 7: Total investment in plant and machinery and annual turnover

| Year      | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|-----------|---------|---------|---------|---------|---------|---------|
| Male owned enterprise (Rs. In lakhs) |         |         |         |         |         |         |
| Total Investment in plant & machinery | 417.94  | 821.38  | 106.05  | 1220.25 | 170.61  | 197.86  |
| No. of entrepreneurs | 32      | 30      | 53      | 55      | 38      | 30      |
| Avg. Investment     | 13.06   | 27.37   | 2.1     | 22.18   | 4.49    | 6.5     |
| Annual Production   | 429.10  | 2824.46 | 1757.73 | 2469.72 | 338.10  | 246.55  |
| Avg. Annual production | 13.40   | 94.15   | 33.16   | 44.91   | 8.89    | 8.21    |
| Ratio (Annual turnover : investment in plant & machinery) | 1.02:1  | 3.43:1  | 16.57:1 | 2.02:1  | 1.98:1  | 1.24:1  |
| Female owned enterprise (Rs. In lakhs) |         |         |         |         |         |         |
| Total Investment in plant & machinery | 23.67   | 34.63   | 27.89   | 33.36   | 19.04   | 387.9   |
| No. of entrepreneurs | 23      | 15      | 29      | 37      | 52      | 92      |
| Avg. Investment     | 1.03    | 2.30    | 0.96    | 0.90    | 0.37    | 4.21    |
| Annual Production   | 356.88  | 44.47   | 86.99   | 75.17   | 110.45  | 629.35  |
| Avg. Annual turnover | 15.51   | 2.96    | 2.99    | 2.04    | 2.12    | 6.85    |
| Ratio (Annual turnover : investment in plant & machinery) | 15.07:1 | 1.28:1  | 3.11:1  | 2.25:1  | 5.80:1  | 1.62:1  |

Source: Data are compiled from DIC Jorhat

Investment in plant and machinery by female owned business is low as compared to male owned enterprise. Total and average investment is highest in the year Rs. 387.9 and 4.21 respectively. Total annual turnover is highest in the year 2015-16, i.e. Rs.629.35 however average annual turnover is highest in the year 2012-11 which is Rs. 15.51 lakhs. The ratio to annual production to investment is highest in the year 2010-11, which is 15.07:1. The ratio is lowest in the year 2011-12, i.e. 1.28:1, which indicates annual turnover is Rs. 1.30 against Rs. 1 investment in plant and machinery.

5. Suggestions and Conclusion

The study contributes to the trend and scenario of DIS listed entrepreneurs in four aspect namely (1) Share of manufacturing and service sector business unit by male and female entrepreneurs, (2) Share of agro and non agro based business unit (3) Status and scenario of employment generation and lastly (4) Ratio of annual turnover of a business with its investment in plant and machinery. The share of male entrepreneurs in manufacturing sector is more as compare to service sector, where as female entrepreneurs account for lion’s share in case of service sector business unit. The list of non agro based industries is high as compare with agro based industries in DIC: Jorhat which indicates that special care should be taken to encourage the youth to establish various food processing and agro based industries. Although employment is generated by both male and female entrepreneurs but it is not equal throughout the gender. Ratio of male to female employees is high except few years. The investment of plant and machinery by male entrepreneurs is much higher than the female entrepreneurs and ratio of annual turnover of a business to investment in plant and machinery is highest in the year 2012-13. In case of female
entrepreneurs the ratio is high in the year 2010-11 and in other year the ratio of annual turnover to investment in plant and machinery is moderate. Proper policy should be taken by state govt. to register more number of business enterprises in the DIC and provide them necessary infrastructure and services for the growth and development.

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