

Women Entrepreneurs in MSME Sector in India

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Abstract: Entrepreneurship is a crucial tool for economic growth, particularly women entrepreneurship in the case of emerging economies like India. Moreover Women Entrepreneurship is considered as a potent tool for empowering women and that their combined forces can solve a wide range of socio-economic issues in developing nations. Although women account for around 50 percent of the world's population, there is a significant discrepancy between male and female entrepreneurship. The present study explores the prevalence of the gender inequality of MSME (Micro, Small and Medium Enterprises) entrepreneurship and, more particularly, the growth of women entrepreneurs under Prime Minister Employment Generation Programme (PMEGP) in India. The study employed statistical tools like two tailed independent large sample and unpaired t-Test, coefficient of variation (CV) and annual growth rate (AGR). The results of data analysis indicate that there are significant differences between the male and female entrepreneurship in MSMEs, with women behind men in this area.

1. Introduction

Entrepreneurship is the act of beginning a new business or renovating an existing one in order to benefit from new prospects. Entrepreneurship is the process through which an entrepreneur begins a new business while taking risks in order to make profits and survive in the marketplace (Panda and Acharya, 2022). The strong positive link between entrepreneurship, economic growth, and employment necessitates promotion of entrepreneurial activity in all countries around the world. (Meyer and Meyer, 2017). India's society is highly diverse in terms of religions, classes, castes, dialects, beliefs and natural environment, posing several problems for and variances in entrepreneurial operations. The most notable variation is found strict division of gender roles which stand as a strong barrier in development of women entrepreneurship resulting in concentration of male owned enterprises in India (Sharma, 2020).

A female entrepreneur is a woman who innovates, imitates, or adopts a commercial activity (Schumpeter, 1982). In a study presented to the World Bank, Frumen (2016) reported that a lower percentage of women than men are active in trade or own registered enterprises; however, they are also more involved in low productivity or informal work. In India, women participation in economic activities is low, however, women employment is concentrated in unorganised sector and in low skilled occupation (Babu, 2021).

With the passage of time, women have become conscious and confident that they are not lagging behind males in every sector of activity anymore. (Singh and Raghuvanshi, 2012). Previously, women were involved in activities relating to Kitchen, Kids, and Knitting (3 Ks), followed by Powder, Papad, and Pickles (3 Ps), and now they promptly prove their potentialities in four Es- Electricity, Electronics, Energy, and Engineering. As women entrepreneurship is an integral part of human resource development, transformation of the society can be possible when women participation increases in the economic activities of a country.

Women Entrepreneurship in MSME Sector of India

Women entrepreneurship is a relatively new notion in India, having first evolved and gained public attention in the late 1970s (Sharma, P. 2020). With the increased participation of women in the field of business and academics have endeavoured to construct a comprehensive definition of a woman entrepreneur. Moreover, women entrepreneurship is defined as the creative activity of starting and running a firm that leads to economic empowerment and social advancement for women. Women entrepreneurs have immense social and economic contributions. (Munshi *et al.*, 2011). In India there are 4,84,50,722 male entrepreneurs as compared to 1,23,90,523 female counter part setting a gender gap of 3,60,60,199 in MSME sector. Though the transition from housewife to skilled businesswoman is not an easy task for women, they are increasingly becoming entrepreneurs in modern India, particularly in micro, small, and medium-sized businesses (Singh and Manisha, 2013). The major concern is that women continue to fall behind men in every profession, particularly in the MSME sector.

This article contributes to four areas of academic literature. First, our work connects to prior studies of the women entrepreneurship and more particularly in MSME sectors. Second, it draws attention towards the existence of gender biasness in MSME entrepreneurship in favour of male entrepreneurs. Third, it assesses the number of women who have benefited from the Prime Minister Employment Generation Programme (PMEGP) of the Government of India. In addition, this paper discusses the problems faced by women to be an entrepreneur in India. Fourth, we put suggestions which may be helpful for policy makers as well as government to encourage the women entrepreneurship in the country.

2. Review of Literature

Research works already under taken earlier have corroborated the fact that MSMEs do play a very important role in creation of employment, generation of revenue through a larger contribution to the export sector. As compared to the development of the MSME sector to that of the larger industrial sector, MSME sector has played a considerable role in Indian economy (Subramanyam and Reddy,

2012). In India, (Lerner *et al.*, 1997) it is also viewed that the size of a firm, profitability, gross revenue, and income of a woman entrepreneur are all reliant on aspects which work together to improve her business behaviour. Through globalisation MSME sector comprised a significant portion of our economy (Kumar and Gugloth, 2012). By encouraging the women entrepreneurs to come forward and take up business activities the sector has led to women empowerment in large scale. But women entrepreneurs in Goa feel frustrated at times because they need to spare their time and energy both towards their business as well as domestic affairs. Because women make up a bigger share of the unemployed population in India, it is important to identify the entrepreneurial obstacles they confront (Reddi, 1991). (Rathore and Chabra, 1991). It also observed that working women are frequently trapped between home and work, causing mental issues since they fail to give justice to family and work. As a result, it becomes difficult, if not impossible, for women to pursue a profession. But in modern India more and more women are becoming entrepreneurs. Indian women had carved out a place for themselves in a world dominated by men. It has also shown that Indian women can effectively handle both domestic and professional deadlines (Singh and Raina, 2013). In Coimbatore the characteristics that encourage women to become successful entrepreneurs are achievement motivation and human relationships (Jayan, 2013). In hill and valley districts of Manipur after the MSME Act, 2006 there is large proportion of women entrepreneurs engaged in manufacturing sectors and the number of women-owned enterprises is more in comparison to male-owned ones (Chanu and Chanu, 2014). After beginning on an entrepreneurial path in northeast India to acquire economic independence and higher standards of living, women are socially and economically empowered, and the standing of female entrepreneurs in northeast India is identical (Sharma and Parida, 2022). On the other hand financial independence is a major strength for female entrepreneurs in Tanzania's Dares Salaam city but lack of education and burden of child care in the family is the main threat for women entrepreneurs (Benard and Victor, 2013). There are various obstacles for female entrepreneurs, including the unfavourable attitudes of society and authorities towards women and there is no framework or model provided by society or the government for Indian women to advance in the entrepreneurial field (Tripathi and Singh, 2018).

3. Objectives

The study has the following objectives;

- To examine the gender inequality of MSME entrepreneurship in India.
- To study the women entrepreneurship in MSMEs under Prime Minister Employment Generation Programme (PMEGP).

4. Hypotheses

H01: There is no significant difference in averages of male and female MSME entrepreneurs in India

Ha1: There is significant difference in averages of male and female MSME entrepreneurs in India

5. Data Sources and Methodology

The present study is based on secondary data collected from Annual reports (2021-22) of Ministry of MSMEs, Government of India and report of 4th all India census of MSME. In order to examine the

significant difference between the male and female MSME entrepreneurs, we have used two tailed independent large sample and unpaired t-Test (Ruxton, 2006).

$$= \frac{\mu_1 - \mu_2}{SE_D}$$

Where μ_1 = Average number of male entrepreneurs

μ_2 = Average number of female entrepreneurs

$$SE_D = \sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}$$

σ_1 = Standard deviation of male data set

σ_2 = Standard deviation of female data set

n_1 = Size of male data set

n_2 = Size of female data set

The null hypothesis (H_0) of t-Test is $\mu_1 = \mu_2$ which and alternative is $\mu_1 \neq \mu_2$. If t-calculated value is less than t-critical value, we fail to reject the null hypothesis. So the difference between two averages is not statistically significant. While t-calculated value is more than t-critical value, alternative hypothesis is accepted which proves the significant difference between averages of two groups.

In order to examine the variability of entrepreneurship in male and female group concerning to different states and union territories (UTs) in India, we used the coefficient of variation (CV). The estimation technique of CV is put forth in following equation.

$$CV = \frac{\text{Standard Deviation of Variable}(\sigma)}{\text{A. Mean (AM) of Variable}(\mu)} \times 100$$

$$\text{Standard Deviation (SD)} = \sigma = \sqrt{\frac{\sum(x_i - \mu)^2}{N}}$$

SD(σ) = Population standard deviation, 'N' = Size of the population and x_i = Values of variables from the population

Similarly to examine growth of women beneficiaries under PMEGP, annual growth rate (AGR) is calculated. The percentage of annual growth rate (AGR) of variable women beneficiaries (X) between two time periods is calculated by the following equation.

Here 't' implies time period.

$$\text{Annual Growth rate(AGR)} = \frac{X_{(t)} - X_{(t-1)}}{X_{(t-1)}} \times 100$$

6. Result and Discussion

Inter-state Gender Disparity in MSMEs

Table 1 depicts the distribution of MSME units owned by male and female in different states and UTs in India expressed both in absolute value as well as in percentage. West Bengal occupies first position in ownership of MSMEs both by male (5583138) and female (2901324) among all states and UTs in India. Among UTs, Delhi has highest ownership of MSMEs by both male and female. On the other hand, the state Arunachal Pradesh has least number of male entrepreneurship (16153) in MSMEs and Sikkim is placed at lowest ladder in terms of female owners of MSMEs among all states. Whereas least number of male as well as female MSMEs entrepreneurs are in Lakshadweep in comparison to other UTs. The gender gap between male and female ownership of MSMEs (2997142) is more in Maharashtra whereas female entrepreneurs outnumber their male counterpart (-221) in Manipur.

However, more variability with a CV of 164.62 is observed for female entrepreneurship than male entrepreneurship with CV equals to 131.0414 among states and UTs. On the other average of female owned MSMEs is 344181.2 which is less than one third average of male owned enterprises i.e.1345853 in India.

Table 1: State Wise and Gender Wise Distribution of MSME Entrepreneurs in India

| <i>State & UTs</i> | <i>Male Owner</i> | <i>Female Owner</i> | <i>Gender Gap</i> | <i>All</i> | <i>Male (%)</i> | <i>Female (%)</i> | <i>GAP (%)</i> |
|------------------------|-------------------|---------------------|-------------------|------------|-----------------|-------------------|----------------|
| WB | 5583138 | 2901324 | 2681814 | 8484462 | 11.52 | 23.42 | -11.9 |
| TN | 3441489 | 1285263 | 2156226 | 4726752 | 7.1 | 10.37 | -3.27 |
| TG | 1459622 | 972424 | 487198 | 2432046 | 3.01 | 7.85 | -4.84 |
| KA | 2684469 | 936905 | 1747564 | 3621374 | 5.54 | 7.56 | -2.02 |
| UP | 8010932 | 862796 | 7148136 | 8873728 | 16.53 | 6.96 | 9.57 |
| AP | 2160318 | 838033 | 1322285 | 2998351 | 4.46 | 6.76 | -2.3 |
| GJ | 2375858 | 826640 | 1549218 | 3202499 | 4.9 | 6.67 | -1.77 |
| MH | 3798339 | 801197 | 2997142 | 4599536 | 7.84 | 6.47 | 1.37 |
| KL | 1647853 | 495962 | 1151891 | 2143816 | 3.4 | 4 | -0.6 |
| RJ | 2261127 | 380007 | 1881120 | 2641134 | 4.67 | 3.07 | 1.6 |
| MP | 2275251 | 370427 | 1904824 | 2645678 | 4.7 | 2.99 | 1.71 |
| JH | 1250953 | 310388 | 940565 | 1561341 | 2.58 | 2.51 | 0.07 |
| OD | 1567395 | 295460 | 1271935 | 1862856 | 3.24 | 2.38 | 0.86 |
| PB | 1183871 | 224185 | 959686 | 1408056 | 2.44 | 1.81 | 0.63 |
| BR | 3239698 | 168347 | 3071351 | 3408044 | 6.69 | 1.36 | 5.33 |
| HR | 831645 | 98309 | 733336 | 929953 | 1.72 | 0.79 | 0.93 |

contd. table 1

| <i>State & UTs</i> | <i>Male Owner</i> | <i>Female Owner</i> | <i>Gender Gap</i> | <i>All</i> | <i>Male (%)</i> | <i>Female (%)</i> | <i>GAP (%)</i> |
|------------------------|-------------------|---------------------|-------------------|------------|-----------------|-------------------|----------------|
| MN | 86383 | 86604 | -221 | 172987 | 0.18 | 0.7 | -0.52 |
| JK | 624056 | 74785 | 549271 | 698841 | 1.29 | 0.6 | 0.69 |
| CG | 727203 | 71201 | 656002 | 798403 | 1.5 | 0.57 | 0.93 |
| AS | 1128411 | 66665 | 1061746 | 1195076 | 2.33 | 0.54 | 1.79 |
| HP | 329595 | 50368 | 279227 | 379963 | 0.68 | 0.41 | 0.27 |
| ML | 72191 | 39462 | 32729 | 111653 | 0.15 | 0.32 | -0.17 |
| TR | 179169 | 28042 | 151127 | 207212 | 0.37 | 0.23 | 0.14 |
| PY | 65350 | 27072 | 38278 | 92422 | 0.13 | 0.22 | -0.09 |
| UK | 380000 | 20964 | 359036 | 400964 | 0.78 | 0.17 | 0.61 |
| NL | 65778 | 20865 | 44913 | 86643 | 0.14 | 0.17 | -0.03 |
| MZ | 20439 | 13698 | 6741 | 34137 | 0.04 | 0.11 | -0.07 |
| GA | 57133 | 10815 | 46318 | 67948 | 0.12 | 0.09 | 0.03 |
| AR | 16153 | 6274 | 9879 | 22427 | 0.03 | 0.05 | -0.02 |
| SK | 20880 | 5036 | 15844 | 25916 | 0.04 | 0.04 | 0 |
| DL | 827234 | 86742 | 740492 | 913977 | 1.71 | 0.7 | 1.01 |
| CH | 44321 | 5560 | 38761 | 49881 | 0.09 | 0.04 | 0.05 |
| AN | 14302 | 4026 | 10276 | 18328 | 0.03 | 0.03 | 0 |
| DH | 12900 | 2629 | 10271 | 15529 | 0.03 | 0.02 | 0.01 |
| DD | 5880 | 1560 | 4320 | 7441 | 0.01 | 0.01 | 0 |
| LD | 1384 | 488 | 896 | 1872 | 0 | 0 | 0 |
| Total | 48450722 | 12390523 | 36060199 | 60841245 | 100 | 100 | |
| Average | 1345853 | 344181.2 | 1001672 | 1690035 | | | |
| SD | 1763625 | 566616.8 | 1391546 | 2219562 | | | |
| CV | 131.0414 | 164.6275 | 138.9223 | 131.3323 | | | |

Source: Annual Report 2021-22, Ministry of MSME, Government of India (As per NSS 73rd Round Report, 2015-16)

Note 1: Male (%) refers to the percentage to total male MSMEs entrepreneurs in India, while female (%) is the percentage to total female MSME entrepreneurs of India.

Note 2: West Bengal (WB), Tamil Nadu (TN), Telangana (TG), Karnataka (KA), Uttar Pradesh (UP), Andhra Pradesh (AP), Gujarat (GJ), Maharashtra (MH), Kerala (KL), Rajasthan (RJ), Madhya Pradesh (MP), Jharkhand (JH), Odisha (OD), Punjab (PB), Bihar (BR), Haryana (HR), Delhi (DL), Manipur (MN), Jammu & Kashmir (JK), Chhattisgarh (CG), Assam (AS), Himachal Pradesh (HP), Meghalaya (ML), Tripura (TR), Puducherry (PY), Uttarakhand (UK), Nagaland (NL), Mizoram (MZ), Goa (GA), Arunachal Pradesh (AR), Chandigarh (CH), Sikkim (SK), A & N Island (AN), Dadra & Nagar Haveli (DH), Daman & Diu (DD), Lakshadweep (LD) (<https://ddvat.gov.in/docs/List%20of%20State%20Code.pdf>).

It is inferred from table 2 that t-Critical value (two-tail) 2.01808 is less than t-stat. value 3.2444 and P (two-tail) 0.0023 is also lower than critical value 0.05. So we fail to accept the null hypothesis of equality between average number of male and female entrepreneurs in India. However alternative hypothesis of significant difference between the male and female entrepreneurship is accepted. The average number of male entrepreneurs is 1345853.333 while that of female is 344181.1944 in India including all states and union territories.

Table 2: Results of t-Test between Male and Female Entrepreneurs

| t-Test: Two-Sample Assuming equal Variances | | |
|---|-------------|---------------|
| | <i>Male</i> | <i>Female</i> |
| Mean | 1345853.33 | 344181.19 |
| Variance | 3.11 | 3.21 |
| Observations | 36 | 36 |
| Hypothesized Mean Difference | 0 | |
| df | 72 | |
| t Stat | 3.24 | |
| P(T<=t) one-tail | 0.001 | |
| t Critical one-tail | 1.681 | |
| P(T<=t) two-tail | 0.0023 | |
| t Critical two-tail | 2.018 | |

Source: Authors' estimation as per table 1.

Rural-urban and Gender Disparity in MSMEs

Gender inequality prevails in MSME entrepreneurship in favor of male in both rural as well as in urban area (table 2) in India. In rural India, 22.24 per cent MSMEs are owned by female and 77.76 per cent by male. Moreover, in urban region male and female owned MSMEs are 81.58 per cent and 18.42 per cent respectively. In both rural as well as urban region, MSME entrepreneurship is characterised by male domination. However high range of gender disparity against female ownership is found in urban regions of India.

Table 3: Rural and Urbanas well as Gender Wise Distribution of MSMEs in India

| <i>Sector</i> | <i>Male</i> | <i>Female</i> | <i>All</i> |
|---------------|-------------|---------------|------------|
| Rural | 77.76 | 22.24 | 100 |
| Urban | 81.58 | 18.42 | 100 |
| All | 79.63 | 20.37 | 100 |

Source: Annual Report 2021-22, Ministry of MSME, Government of India (As per NSS 73rd Round Report, 2015-16)

Category-wise and Gender-wise Disparity in MSMEs

It is observed from table 4 that gender disparity also prevails in every categories of MSMEs. The heist range of inequality in entrepreneurship between male and female is experienced in medium sector enterprises followed by small and micro categories. However, 79.63 per cent MSMEs is owned by male and 20.37 per cent by female in India which indicates the extent of large gender gap in entrepreneurship.

Table 4: Category wise and Gender wise Distribution of MSMEs in India

| Category | Male | Female | All |
|----------|-------|--------|-----|
| Micro | 79.56 | 20.44 | 100 |
| Small | 94.74 | 5.26 | 100 |
| Medium | 97.33 | 2.67 | 100 |
| All | 79.63 | 20.37 | 100 |

Source: Annual Report 2021-22, Ministry of MSME, Government of India (As per NSS 73rd Round Report, 2015-16)

Comparison of Fourth all India census and NSS 73rd Round Report

Table 5 shows extent of gender wise MSME entrepreneurship in 2006-07 (Fourth all India census of MSME) and 2015-16 (NSS 73rd Round Report 2015-16) in India. As per fourth all India census, 86.28 per cent enterprises are owned by male and 13.72 per cent by female indicating 72.56 per cent male-female gender disparity. On the other, this gender gap has been reduced to 59.28 percent as per NSS 73rd Round Report 2015-16. Though it implies a reduction in gender gap in MSME entrepreneurship still the gap is too large.

Table 5: Gender-wise Distribution of Total MSMEs in India

| <i>Fourth all India census of MSME- 2006-07</i> | | | |
|---|-------|--------|-------|
| | Male | Female | Total |
| Percentage | 86.28 | 13.72 | 100 |
| <i>NSS 73rd Round Report 2015-16</i> | | | |
| | Male | Female | Total |
| Percentage | 79.64 | 20.36 | 100 |

Source: Fourth all India census of MSME- 2006-07, Annual Report of MSMEs 2011-12 and NSS 73rd Round, Annual Report of MSME 2017-18, Govt. of India.

Status of Women Beneficiaries under PMEGP

Prime Minister Employment Generation Programme (PMEGP) is a credit-linked subsidy scheme declared on 15th August, 2008 by the Government of India in which beneficiaries get a government

subsidy of 15-35 percent of the project cost. One of the main goals of the PMEGP is to give continuous and sustainable employment to a substantial part of the country's traditional and potential craftsmen, rural and urban jobless youth through the establishment of micro businesses by providing credit facilities at a subsidize rate.

Table 6 depicts the number of women entrepreneur beneficiaries and their annual growth rate from 2008-09 to 2021-22 (up to 31.12.2021). It is observed that annual growth rate of women beneficiaries was 119.98 per cent in year 2009-10. Surprisingly this growth rate has been declined for rest of the years.

Table 6: Micro Enterprise / Projects Owned by Women Entrepreneurs under PMEGP (in numbers)

| <i>Year</i> | <i>Women Entrepreneurs (Beneficiaries) in numbers</i> | <i>AGR of Women Entrepreneurs</i> |
|---|---|---------------------------------------|
| 2008-09 | 4930 | - |
| 2009-10 | 10845 | 119.98 |
| 2010-11 | 12072 | 11.31 |
| 2011-12 | 14299 | 18.45 |
| 2012-13 | 13612 | -4.80 |
| 2013-14 | 13448 | -1.20 |
| 2014-15 | 13394 | -0.40 |
| 2015-16 | 11356 | -15.22 |
| 2016-17 | 14768 | 30.05 |
| 2017-18 | 15669 | 6.10 |
| 2018-19 | 25434 | 62.32 |
| 2019-20 | 24720 | -2.81 |
| 2020-21 | 27285 | 10.38 |
| 2021-22 (up to 31.12.2021) | 20598 | -24.51 |
| Total Since Inception (Up to 31.12.2021) | 222457 | |

Source: Annual Report 2021-22, Ministry of MSME, Government of India

7. Conclusion

It is construed from the above discussion that there is a significant gender gap in MSME entrepreneurship in India. In both rural as well as urban region, MSME entrepreneurship is characterised by male domination. However, more variability is observed for female than male entrepreneurship among states and UTs in India. The highest range of inequality in entrepreneurship between male and female is experienced in medium sector enterprises followed by small and micro categories. So far as PMEGP is concerned the women entrepreneurship experiences a declining trend over the time. The women

entrepreneurs in general face a lot of challenges like financial difficulties, problems of occupational mobility, and complications in obtaining government assistance, marketing difficulties, family responsibility, low level of freedom and mobility, low literacy.

The Government should make necessary arrangements to facilitate door step provision of required facilities for women entrepreneurship. Rural infrastructure should be built so that there is no discernible difference between rural and urban areas in order to support women's entrepreneurship, especially in MSMEs. Though at present governments both at centre and state levels are taking initiative to encourage MSMEs sector in general and women entrepreneur in particular, efficient implementation of the schemes is highly imperative to achieve the goal.

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