

# Entrepreneurial Intensity among Rural Women Entrepreneurs

Dr. Ayekpam Ibemcha Chanu<sup>1</sup>, Anup Karmakar<sup>2</sup>

<sup>1</sup>Assistant Professor (Sr), Department of Commerce, Assam University Diphu campus Diphu, Assam India.

<sup>2</sup>Research Scholar, Department of Commerce, Assam University Diphu campus Diphu, Assam India.

Email - ibemchac6@gmail.com anp\_karmakar@rediffmail.com

**Abstract:** *Though a large number of women in rural areas of India take up entrepreneurial activities, only few of them become successful. It is assumed in the present study that if there is an entrepreneurial society and higher entrepreneurial intensity among the entrepreneurs, there will be more number of successful women entrepreneurs. The present study is conducted in order to identify the factors influencing women entrepreneurs for taking up and continuing entrepreneurial activities and to examine the entrepreneurial intensity among the women of different communities of rural area. A sample of 50 women who belong to the age group of 25-69 years of Chakchaka Development Block of Barpeta District of Assam, India have been selected by using snow balling method. The paper which is descriptive in nature is based on both primary and secondary data. The primary data have been collected through schedule from 50 women entrepreneurs. The data have been analyzed through descriptive statistics like tabulation, percent, mean, etc.*

**Key Words:** *Women entrepreneurs, rural India, entrepreneurial intensity, entrepreneurial activities*

## 1. INTRODUCTION:

The term 'entrepreneurship' is defined in various aspects by different scholars. Some define it as an activity; some define it as a process. Schumpeter, (1939) defines it as purposeful and systematic innovation whereas Holt (2010) considers it as one of the four mainstream economic factors: land, labor, capital, and entrepreneurship. Though there are different opinions on definition of entrepreneurship and entrepreneur, the importance of entrepreneurship development in an economy is widely accepted in most of the studies on entrepreneurship. There are studies which reveal the positive relationship between entrepreneurship and economic development (Chanu and Terangpi 2016, 2012, Rocha 2004). The industrial revolution, the rise of the United States and Israel to a powerful state, and China's status of developed economy have all been driven by entrepreneurship. To become a develop nation, India also needs entrepreneurship development and for entrepreneurship development there must be an entrepreneurial society and in order to have an entrepreneurial society a deep study on entrepreneurial intensity is highly needed.

According to Heilbrunn (2005), the term 'Entrepreneurial Intensity' refers to the degree and frequency of the entrepreneurial activity. Degree is measured in terms of innovativeness, risk taking ability and pro-activeness of an individual and Frequency is understood as the number of entrepreneurial events undertaken. Frequency and degree constitute the variables of entrepreneurial intensity. Innovativeness is widely referred to the ability to generate new ideas that will conclude in the creation of new products or services and risk taking involves the determination to work and to face the challenges which have certain outcomes. Pro-activeness specifies the attitude towards opportunities and confidences in pursuing enhance competitiveness. Hence entrepreneurial intensity refers to the variable nature of entrepreneurship within an individual. In this background *entrepreneurial intensity among women refers to the variable nature of entrepreneurship in a woman.*

According to Morris, & Sexton (1996), Entrepreneurial Intensity is conceptualised as a measure of the level of entrepreneurship within a firm and comprises of both degree and frequency of entrepreneurship activities. As mentioned the degree of entrepreneurship consists of three key dimensions: innovativeness, risk-taking, and pro-activeness. The first dimension, innovativeness, according to them, refers to the creation of new products, services and technologies; the second dimension, risk-taking, involves the willingness to commit significant resources to opportunities which have an uncertain outcome and return on the investment. And the third dimension of entrepreneurship, pro-activeness reflects top management's orientation to pursuing enhanced competitiveness and includes initiative, competitive aggressiveness and boldness and the frequency refers to the number of times organisations act entrepreneurially such as develop new products, services, processes or businesses. In this paper, an attempt is made to find out the factors as well as the degree of entrepreneurial intensity amongst the women of rural area of Barpeta district of Assam. Literatures on entrepreneurial intensity have also been reviewed and some of them are presented below.

## 2. REVIEW OF LITERATURE:

Entrepreneurial attitudes and behaviors are necessary for firms of all sizes to prosper and flourish in competitive environments. It is supported in the study of Barringer & Bluedorn (1999) in 'The Relationship between

*Corporate Entrepreneurship and Strategic Management*'. There are studies like Gundry & Welsch (2001) that labeled the group of high-growth-oriented entrepreneurs as "ambitious," According to them such type of entrepreneurs have distinct characteristics like strategic intentions that emphasize market growth and technological change, stronger commitment to the success of the business, greater willingness to sacrifice on behalf of the business, earlier planning for the growth of the business, utilization of a team-based form of organization design, concern for reputation and quality, adequate capitalization, strong leadership, and utilization of a wider range of financing sources for the expansion of the venture. Such type of entrepreneurs are mainly of innovative in nature. Choo & Wong (2006) in their study '*Entrepreneurial Intention: Triggers and Barriers to New Venture Creations in Singapore*' reveals different motivating factors and barriers to starting an enterprise. According to them, the motivating factors of would-be entrepreneurs to start a business are intrinsic/extrinsic rewards, autonomy/independence and the barriers to starting a business for the non-starters are lack of capital, lack of skills, complaint costs, and lack of confidence, etc.

Regarding the relationship between various factors and entrepreneurial intensity, in the study of Scheepers, *et al.*, (2007) in '*Entrepreneurial Intensity: A Comparative analysis of established companies in South Africa*' has found that the size of a company shows no relation to entrepreneurial intensity, but age is negatively correlated to entrepreneurial intensity. Further it is also found that organizational factors influence entrepreneurial intensity and that entrepreneurial intensity is industry specific. The findings of Anshu (2012) in '*Women in family business*' clearly reveals that entrepreneurial intensity of women entrepreneurs is significantly different from men entrepreneurs and women entrepreneurs are less inclined to expansion and growth of business as compared to men entrepreneurs and they face more operational problems than men entrepreneurs. Gundry, *et al.*, (2014) in "*Women-owned family businesses in transitional economies: key influences on firm innovativeness and sustainability*" have found that in newer family firms run by women, opportunity recognition and innovation are critical to survival and growth and they often need to be very competitive and make bold decisions, and the challenge of being women in a turbulent environment adds to the necessity for taking calculated risks. The study further shows that Russian women are very capable of exhibiting those behaviours in order to sustain their self-identified family firms.

According to Baoshan & Haohan (n.d.), entrepreneurial intensity has a positive relationship with both incremental innovation and radical innovation. In their study '*The Effect of Entrepreneurial Intensity on Innovation Strategy in Uncertain Environment*', they argued that that in uncertain environment, the entrepreneurial intensity will be negative with incremental innovation and there won't be significant relationship between entrepreneurial intensity and radical innovation. According to them, increase in entrepreneurial intensity will promote the innovation strategy to pursue a competitive advantage.

Though there are studies on entrepreneurial intensity, most of the studies are based on established firms which are operated in developed countries. The characters of rural areas of India in general and Assam in particular are different from the developed countries. All the above, Indian villages are inhabited by a number of communities which have different socio-cultural characteristics. However, studies which are based on such areas are missing in the present literature. The present study is conducted with an objective to fill up the existing gap .

### 3. OBJECTIVES:

1. To identify factors that influence women of Chakchaka Development Block of Barpeta District of Assam in taking up and continuation of entrepreneurial activities.
2. To examine the degree of entrepreneurial intensity among the women of different communities in Chakchaka Development Block of Barpeta District of Assam.

### Hypotheses:

**H<sub>1</sub>:** The women of the study area are influenced by various factors in taking up and continuation of entrepreneurial activities.

**H<sub>2</sub>:** There is significant difference in the degree of entrepreneurial intensity among the women of different communities of the study area.

### 4. RESEARCH METHODOLOGY:

The study is descriptive in nature and based on both primary and secondary data. The primary data was collected from the women entrepreneurs of Chakchaka Development Block of Barpeta district of Assam through schedule. There was a set of questions which was both open and close ended. The secondary data has been collected from secondary sources, i.e. from Books, Newspaper, Magazine, E-resources etc. The sample size is 50 and 25 women entrepreneurs each from Schedule Caste and General category who belong to the age of 25-69<sup>1</sup> years have been

<sup>1</sup> In India, generally, persons aged 15 to 59 years are supposed to form the population of working ages (CSO, 2011). Since, the questions will be asked for the past performance of the respondents during the last 10 years, the women who are currently belong to the age group of 25-69 will be taken into consideration.

selected by following snow balling technique. Five point scale from highly disagree (1) to highly agree (5) has also been used to measure the degree. The data have been analyzed through descriptive statistics like tabulation, percentage, mean, standard deviation, etc.

#### 4. PROFILE OF THE STUDY AREA:

Chakchaka Development Block of Barpeta district of Assam has an area 141.77 sq. km. The block comprises of eight Gaon Panchayat namely Madulijhar GP, Nichuka GP, Kalahbhanga GP, Kamargaon GP, Meda GP, Puthimari GP, Fewrakhowa GP and Suliakata GP. According to Census 2011, the total population of the block is 101192 which is 0.32% of total population of Assam, out of which 51172 are male (51 percent) and 50020 (49 percent) are female. The literacy rate of male and female are 65.61% and 56.69% respectively.

#### 5. FINDINGS:

##### 5.1 Profile of Respondents

From Table: 1, it is revealed that a large number of respondents (46 percent) belong to age group of 35-44 years. In case of SC category, the majority (52 percent) of the respondents but in case of General category, less than majority (40 percent) of respondents belong to this age group. While analyzing the marital status of the respondents, it is found that the majority (90 percent) of the respondents are married. In case of SC, 88 percent and in case of GEN, 92 percent are found to be married. Regarding educational qualification, 6 percent of the respondents have education up to HSLC level; there is not a single respondent who studied beyond HSLC. In case of SC, 72 percent respondents have education upto LP level whereas in case GEN, 56 percent respondents have education upto LP level. The table 1 also reveals that majority of the respondent (80 percent) belong to BPL; out of the total SC respondents 76 percent and in case of GEN GEN 84 percent respondents belong to BPL category.

##### 5.2 Motivational factors for taking up entrepreneurial activities by respondents

From table 2, it is clearly revealed that there are multiple factors which motivate respondents to take up entrepreneurial activities. However, the highest influencing factor is 'to earn money' (88 percent) which is followed by 'self dependent' (86 percent). Majority of the respondents (54 percent) are also motivated by the factor 'utilize own skill'. The other two factors 'own boss' and 'unemployment' do not influence majority of the respondents to take up entrepreneurial activities. Since, the social system in the study area, be it in case of SC community or General community, is found to be patriarchal system<sup>2</sup>, the majority of the respondents might not think beyond the social norm and do not consider themselves as own boss. Since, most of the respondents are from economically backward family, they have taken up entrepreneurial activities to earn money. The caste wise distribution clearly reveals that none of the respondents who belong to SC is influenced by the factor 'own boss; but, all the respondents are influenced by the factor 'to earn money'. In case of Gen, two factors 'utilize own skill' and 'to earn income' have the same influence on the respondents. It clearly indicates that there is positive relationship between economic condition of the family and entrepreneurial activities among the women.

##### 5.3 Factors responsible for continuing entrepreneurial activities

In order to find out the reasons for continuation of entrepreneurial activities by the respondents, four factors have been taken up and the response of respondents are shown below in table 3. It is found that 'to continue as self dependent' is the main factor to influence majority of the respondents (76 percent) in continuing their entrepreneurial activities. The product factor has also influenced 58 percent of the total respondents. 'Social recognition' doesn't have strong influence on the respondents in continuation of their entrepreneurial activities. The community wise distribution result shows that though for majority of respondents who belong to GEN (56 percent), 'want to be an entrepreneur' as continuing factor, it is not in case of SC respondents. In case of 'only alternative to earn money,' it is the most influential continuing factor of SC respondents (88 percent), but, this factor does not have any influence on respondents who belong to GEN.

The findings from table 2 and 3 clearly reveal that *multiple factors influence the respondents of the study area to take up entrepreneurial activities as well as multiple factors influence the respondents to continue their entrepreneurial activities*. Hence, the working hypothesis 'the women of the study area are influenced by various factors in taking up and continuation of entrepreneurial activities' is accepted.

##### 5.4 Degree of entrepreneurial intensity among the respondents

In order to measure the degree of entrepreneurial intensity among the respondents, three variables have been considered in the present study. They are innovativeness, risk taking, and pro-activeness. Further five factors under each variables have been considered and based on respondents' rank on each and every variables, (5 point scale, 1- highly disagree, 2-disagree, 3-neutral, 4- agree and 5 – highly agree) the degree of entrepreneurial intensity has been measured and comparative result is shown in table 4, 5 and 6.

<sup>2</sup> It is male dominated society. In such society, male are the head of family. Women are mainly engaged in child bearing and hardly involved in taking decision for family matters.

It is found from table 4 that the degree of innovativeness among respondents is very low. Out of five factors, a common innovative factor which is not applicable to both the communities is the 'use of new technology'. The result also indicates that respondents who belong to GEN spend more time to produce new products, hence, do produce new products. But, the result is different in case of respondents who belong to SC. However, the overall result reveals that the respondents who belong to SC are less innovative than the respondents who belong to GEN of the study area.

With regard to 'risk taking', from table 5, it is clearly revealed that there is high degree of risk taking among the respondents of the study area. The respondents who belong to both SC and GEN have the courage to take risk in borrowing money from others to expand their entrepreneurial activities. Though the respondents who belong to GEN take higher risk of introducing new product (calculated overall mean value is 4.04), it is not in case of respondents who belong to SC. The findings clearly reveal that the degree of risk taking among the respondent who belong to GEN is higher than the respondents who belong to SC.

With regard to 'Pro-activeness', from table 6, it is found that there is high degree (mean value 3.84) of pro-activeness among the respondents of the study area. In some of the factors like 'Always believe that diligence and hard work lead to success' and 'Often sacrifice personal comfort in order to take business opportunities' there is higher mean score (4.54 and 4.08) which indicates higher degree in such factors. From the result, it is clearly revealed that though there is higher degree of pro-activeness, the degree of pro-activeness among the respondent who belong to GEN is higher than the respondents who belong to SC.

Descriptive statistics result on overall degree of combination of three factors innovativeness, risk-taking and pro-activeness shows that the mean score and std deviation is found to be as 2.88 and 0.1951 in case of SC and 3.561 and 0.0669 in case of GEN respectively. The result clearly reveals that there is different score in the degree of entrepreneurial intensity between the SC and GEN community. Hence the second working hypothesis '*the degree of innovativeness, risk-taking and pro-activeness among the women entrepreneurs of different communities of the study area is different*' is accepted.

## 6. CONCLUSION:

In the present day context entrepreneurial intensity is an important area of discussion because higher degree of entrepreneurial intensity in a society can produce number of successful entrepreneurs. From the case studies on successful entrepreneurs, it is found that such entrepreneurs possess certain entrepreneurial traits which make them as successful one. Out of such traits, innovativeness, risk-taking, and pro-activeness are important traits of successful entrepreneurs.

However, such traits have positive relationship with the social and economic system which the entrepreneurs exist. The present study also narrates the same story and confirms the previous findings in this regard. As mentioned, most of the women entrepreneurs who were taken as respondents are not educated in terms of modern education and most of them are economically backward family. Since, the respondents' do not have educational degree as demanded by the authorities in case of government jobs, and poor in nature, entrepreneurial activities become the alternative solution to earn money. The findings also clearly depicts that the degree of entrepreneurial intensity is higher among those who belong to socially upward communities' than those who belong to socially backward communities. In all the factors of entrepreneurial intensity, innovativeness, risk taking and pro-activeness, higher degree is found among the women entrepreneurs who belong GEN than the women entrepreneurs who belong to SC.

The present study has certain limitation which are (a) the study area is limited to only a block which in rural area of Assam; (b) the analysis is done based on the Informations provided by the respondents which are contemporary in nature. However, there is wide scope of future studies in this area. A comparative analyses on entrepreneurial intensity among the women entrepreneurs of rural and urban area, male and women entrepreneurs, etc may be taken up to study.

**Table: 1 Distribution of respondents based on socio-economic variables**

Age	SC		GEN		Total	
	Frequency	%	Frequency	%	Frequency	%
25-34	4	16	9	36	13	26
35-44	13	52	10	40	23	46
45-54	7	28	6	24	13	26
55 & Above	1	4	0	0	1	2
Total	25	100	25	100	50	100
Marital Status	SC		GEN		Total	
	Frequency	%	Frequency	%	Frequency	%
Married	22	88	23	92	45	90
Unmarried	0	0	1	4	1	2

Widow	3	12	1	4	4	8
Total	25	100	25	100	50	100
Educational qualification	SC		GEN		Total	
	Frequency	%	Frequency	%	Frequency	%
LP	18	72	14	56	32	64
UP	5	20	10	40	15	30
HSLC	2	8	1	4	3	6
Total	25	100	25	100	50	100
Economic Status	SC		GEN		Total	
	Frequency	%	Frequency	%	Frequency	%
APL	6	24	4	16	10	20
BPL	19	76	21	84	40	80
Total	25	100	25	100	50	100

Source: field study

Note: SC: Schedule Caste, GEN: General, LP: Lower Primary, UP: Upper Primary, HSLC: High School Leaving Certificate/Matriculation, HS: Higher Secondary, PG: Post Graduate, APL: Above Poverty Line, BPL: Below Poverty Line.

**Table: 2 Motivational factors for taking up entrepreneurial activities**

Factors	SC		GEN		Total	
	Yes	No	Yes	No	Yes	No
Own Boss	0	25 (100)	11 (44)	14 (56)	11 (22)	39 (78)
Self dependent	21 (84)	04 (16)	22(88)	03(12)	43 (86)	07 (14)
Utilize own skills	05 (20)	20 (80)	22(88)	03 (12)	27 (54)	23 (46)
To earn money	25 (100)	0 (00)	19(76)	06 (24)	44 (88)	06 (12)
Unemployment	04 (16)	21 (84)	12 (48)	13 (52)	16 (32)	34 (68)

Figure in bracket denote percentage

Source: field study

**Table: 3 Factors responsible for continuing entrepreneurial activities**

Factors	SC		GEN		Total	
	Yes	No	Yes	No	Yes	No
Always want to be an Entrepreneur	0 (0)	25 (100)	14 (56)	11(44)	14(28)	36 (72)
Opportunity for the product that I produce	12 (48)	13 (52)	17 (68)	8(32)	29(58)	21(42)
Only alternative to earn good amount of money	22 (88)	3 (12)	0 (0)	25 (100)	22 (44)	28(56)
To continue as self dependent	21(84)	4(16)	17(68)	8 (32)	38 (76)	12(24)
I can get higher social recognition	0(0)	25 (100)	4 (16)	21(84)	4(8)	48 (92)
Apart from this I can't do anything	5(20)	20(80)	15(60)	10(40)	20(40)	30 (60)

Figure in bracket denote percentage

Source: field study

**Table: 4 Degree of Innovativeness among the respondents**

Variables	SC		GEN		Total	
	Mean	Std	Mean	Std	Mean	Std
Always create new business ideas	2.7200	1.02144	2.5600	1.00333	2.6400	1.00529
Always introduce new product and service	2.5200	.71414	4.0000	.70711	3.2600	1.02639
Always explore new market	2.5600	.91652	2.4800	.77028	2.5200	.83885
Always follow new technology	1.4000	.64550	1.4400	.71181	1.4200	.67279
Always spend some quality time for developing new ideas	3.0800	.64031	3.6400	1.15036	3.3600	.96384
Result of all variables	2.456	0.172181	2.824	0.198664	2.64	0.147045

Source: computed based on the findings of field study

**Table: 5 Degree of Risk-taking among the women entrepreneurs**

Variables	SC		GEN		Total	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Always take the risk of introducing new products	2.5600	.91652	4.0400	.61101	3.3000	1.07381
Always take the risk of exploring new market	2.4800	.91833	2.6800	.74833	2.5800	.83520
Always take risk with money by investing in stock or by purchasing materials	3.8400	.37417	3.8800	.72572	3.8600	.57179
Have the courage to borrow money from others to introduce additional capital in the business	3.7200	.67823	4.0000	.64550	3.7400	.96489
Like to invest money in speculative business	1.1200	.33166	2.5600	.71181	4.5400	.50346
Overall Result	2.744	0.283311	3.604	0.246424	3.604	0.246424

Source: computed based on the findings of field study

**Table: 6 Degree of Pro-activeness among the respondents**

Variables	SC		GEN		Total	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Often sacrifice personal comfort in order to take business opportunities	3.5200	.50990	4.6400	.56862	4.0800	.77828
Always develop strategy to detect opportunities	3.0800	.57155	3.7600	.59722	3.4200	.67279
Always try to improve on past work performance	3.1600	.37417	3.7600	.59722	3.4600	.57888
Not satisfy unless reached the desired level of result	3.1200	.72572	4.3600	.75719	3.7400	.96489
Always believe that, diligence and hard work lead to success	4.3200	.47610	4.7600	.43589	4.5400	.50346
Overall Result	3.44	0.130013	4.256	0.114298	3.848	0.180508

Source: computed based on the findings of field study

#### REFERENCE:

1. Anshu. : Women in family business. *International Journal of Computer Science & Management Studies* , 34-40. (2012).
2. Baoshan, G. E., & Haohan, T. (n.d.). The Effect of Entrepreneurial Intensity on Innovation Strategy in Uncertain Environment. 953-957.
3. Barringer, B. R., & Bluedorn, A. C. : The Relationship Between Corporate Entrepreneurship and Strategic Management. *Strategic Management Journal* , 421-444. (1999).
4. Central Statistics Organisation, : Situation Analysis Of The Elderly in India, (2011) Retrieved from [http://mospi.nic.in/mospi\\_new/upload/elderly\\_in\\_india.pdf](http://mospi.nic.in/mospi_new/upload/elderly_in_india.pdf) Accessed on 22/8/2016

5. Chanu, AyekpamIbemcha; Terangpi, Monalisha (2012). Role of Women Entrepreneurs Development of conflict areas with reference to KarbiAnglong district of Assam. In A. IbemchaChanu(ed) *Entrepreneurship Development in Conflict Regions: Issues and Challenges*, Vishakhapatnam: Global Publisher,191.
6. Chanu, AyekpamIbemcha; Terangpi, Monalisha : Women Entrepreneurship Development in Tribal Areas of Assam- An alternative Approach towards Poverty Allevation. *The Utkal Business Review*, XXIV, 276. (2012).
7. Choo, S., & Wong, M. : Entrepreneurial Intention: Triggers and Barriers to New Venture Creations in Singapore. *Singapore Management Reveiw* , 47-62. (2006).
8. Gundry, L. K., Kickul, J. R., Iakovleva, T., & Carsrud, A. L. : Women-owned family businesses in transitional economies: key influences on firm innovativeness and sustainability. *Journal of Innovation and Entrepreneurship* , 1-17. (2014).
9. Gundry, L. K., & Welsch, H. P. : The ambitious entrepreneur: high growth strategies of women-owned enterprises. *Journal of Business Venturing* , 453-470. (2001).
10. Heilbrunn, S. (2005), "The impact of organizational change on entrepreneurship in communitysettings", *Journal of Small Business and Enterprise Development*, 12(3), 422-36.
11. Holt, David. H. : *Entrepreneurship New Venture Creation*. New Delhi: PHI Learning. 3. (2010).
12. Morris, M., & Sexton, D. : The Concept of Entrepreneurial Intensity Implications for Company Performance.*Journal of Business Research*, 36(1), 5-13. (1996).
13. Pathak, R. K., & Kalwar, M. C. : *Business Organisation and Entrepreneurship Development*. Guwahati: Abhilekh Publication and Production, 147-148. (2011).
14. Rocha, H. : "Entrepreneurship and Development: the role of clusters", *Small Business Economics*, 9(3), 44-47. (2004)
15. Sarkar, S. S., Sharma, R. K., & Gupta, S. K. : *Business Organisation and Entrepreneurship Development*. New Delhi: Kalyani Publishers, 143. (2015).
16. Scheepers, M. J., Hough, J., & Bloom, J. Z. : Entrepreneurial Intensity: A Comparative analysis of established companies in South Africa. *SAJEMS* , 238-255. (2007).

#### WEB REFERENCES:

- Retrieved from <https://cambridgempa.files.wordpress.com/2011/01/lecture-1-introduction-jan2012.pdf> accessed on 05/07/2017
- Retrieved from <https://core.ac.uk/download/files/979/39671225.pdf> accessed on 12/07/2017.
- Retrieved from [http://www.censusindia.gov.in/2011census/dchb/1804\\_PART\\_B\\_DCHB\\_BARPETA.pdf](http://www.censusindia.gov.in/2011census/dchb/1804_PART_B_DCHB_BARPETA.pdf) accessed on 19/07/2017.