

**SPATIAL DISPARITY IN THE DISTRIBUTION OF EDUCATIONAL INSTITUTIONS AND ITS IMPACT ON GENDER GAP AND LITERACY RATE IN MALDA DISTRICT, WEST BENGAL**

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**ABSTRACT**

Higher the education facility, better the literacy rate and lesser the education facility, lower the literacy rate – it is universal truth and this fact has been represented in this paper by highlighting the total number of educational institutions in comparison to total population of Malda district. To identify the correlation of literacy rate with gender gap, status of various educational institutions across the block has been presented here.

**KEY WORD:** Total Population, Literacy, Gender Gap, Educational Institution

**INTRODUCTION**

Literacy refers to the ability to read for knowledge, write coherently and think critically about the written word. UNESCO defines –literacy “as the ability to identify, understand, interpret, create, communicate, and compute using printed and written material”. High rate of literacy will always ensure and increase the progress of any modern human society. Education does not only mean literacy but also transfer knowledge to improve communication skill and capability to improve the environment and to utilize the scarce resources for the development of the nation. Many policy analysts consider literacy rates as a crucial measure of human capital. For example, literate people can be trained easily than illiterate people and generally have higher socio-economic status. Literacy increases job opportunities and access to higher education. The percentage of literacy in West Bengal is 77.08 percent (2011), it is higher than the literacy rate of India, Among the 19 districts of West Bengal, Malda ranks in lower category in case of literacy. The Literacy rate is also influenced by the number of different educational institution available in an area.

**STUDY AREA**

Malda is called the gateway of North Bengal. It extends between 24°40'30" and 25°32'08" North latitude and 87°45'50" and 88°28'10" East longitude. The geographical area of Malda district is 3733 sq. Km. The District is bounded in the north by North Dinajpur District, in the South by Murshidabad District, in the East is Bangladesh and Santhal pargana of Jharkhand and Purnia of Bihar in the West. The district comprises two Subdivisions: Chanchal and Malda Sadar. Chanchal consists of six community development block: Chanchal I and II, Ratua – I and II, Harishchandrapur – I and Harishchandrapur II. Malda Sadar Subdivision consists of Old Malda Municipality, English Bazar Municipality and nine community development blocks : English Bazar, Gazole, Habibpur, Kaliachak – I, Kaliachak – II, Kaliachak – III, Manikchak, Old Malda and Bamongola. There are 11 police station, 15 community development Blocks, 2 Municipalities, 146 Gram Panchayets and 3701 Villages in the district.

**OBJECTIVES**

The objectives of the paper are:-

- To analyze the population distribution of educational institution in comparison to the total population at different blocks of Malda district.
- To find out the block wise disparity in literacy and Gender Gap in Malda district.
- To examine the correlation between educational institution and literacy rate.

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**METHODOLOGY**

The paper is based on Secondary data. The statistical techniques have been used to analyze to study the correlation between the gender gap and literacy rate.

**RATE OF LITERACY IN MALDA DISTRICT**

Census of India, 2001 represents that Malda district ranks 18 out of 19 districts of West Bengal in case of literacy. The average literacy rate of Malda is 50.28 percent .The Block wise literacy rate (2001) expresses that Bamongola occupies 1st position i.e. 56.67percent, it is lower than the state average the 2<sup>nd</sup> ranking block is Chanchal – 1 (56.61 percent) followed by Kaliachak – 1 (54.92 percent), Gazol (51.80 percent), English Bazar (51.20 percent) , Habibpur (48.89 percent), Ratua – II (48.38 percent) which are higher than the districts average i.e. 48.26 percent.

**TABLE NO. – 1 BLOCK WISE LITERACY RATE AND GENDER GAP IN MALDA DISTRICT**

| Sl.No | Name of Block   | Male  | Female | Total Average | Gender Gap |
|-------|-----------------|-------|--------|---------------|------------|
| 1     | H. C. Pur – I   | 53.60 | 34.95  | 44.48         | 18.65      |
| 2     | H. C. Pur – II  | 47.86 | 33.36  | 40.84         | 14.5       |
| 3     | Chanchal – I    | 64.43 | 48.33  | 56.61         | 16.1       |
| 4     | Chanchal – II   | 51.69 | 37.69  | 44.84         | 14         |
| 5     | Ratua – I       | 53.72 | 36.70  | 45.58         | 17.02      |
| 6     | Ratua – II      | 55.08 | 41.29  | 48.38         | 13.79      |
| 7     | Gazole          | 62.37 | 40.73  | 51.80         | 21.64      |
| 8     | Bamongola       | 68.19 | 44.54  | 56.67         | 23.65      |
| 9     | Habibpur        | 60.50 | 36.87  | 48.83         | 23.63      |
| 10    | Old Malda       | 57.24 | 38.49  | 48.16         | 18.75      |
| 11    | English Bazar   | 58.63 | 43.26  | 51.20         | 15.37      |
| 12    | Manikchak       | 55.95 | 32.09  | 44.40         | 23.86      |
| 13    | Kaliachak – I   | 62.22 | 47.15  | 54.92         | 15.07      |
| 14    | Kaliachak – II  | 51.37 | 38.15  | 46.54         | 16.22      |
| 15    | Kaliachak – III | 51.07 | 31.11  | 41.46         | 19.96      |

Source: - Census of India 2001

The blocks which have higher literacy rate than districts average are old Malda (48.16 percent), Kaliachak -II(46.54 percent), Ratua – 1 ( 45.58 percent), Chanchal – II ( 44.84 percent) , Harishchandrapur – 1 ( 44.48percent) . Large number of educational institutions, Government’s educational policy, concentrated educated families, and consciousness of people help to contribute the large proportion of literacy rates. Rest of blocks of Malda district has lower literacy rates as compared to the district average.

**MALE-FEMALE LITERACY AND GENDER GAP.**

According to census of India, it is clear that proportion of male literate is comparatively higher than the female literate (Table – 1). Among the 15 blocks in the Malda districts, Manikchak has highest gender gap in literacy i.e. 23.86 percent and lowest gender gap is recorded at Ratua – II block (13.79 percent).

**TABLE NO. 2, PEARSON’S CORRELATION BETWEEN LITERACY AND GENDER GAP AMONG THE BLOCK OF MALDA DISTRICT**

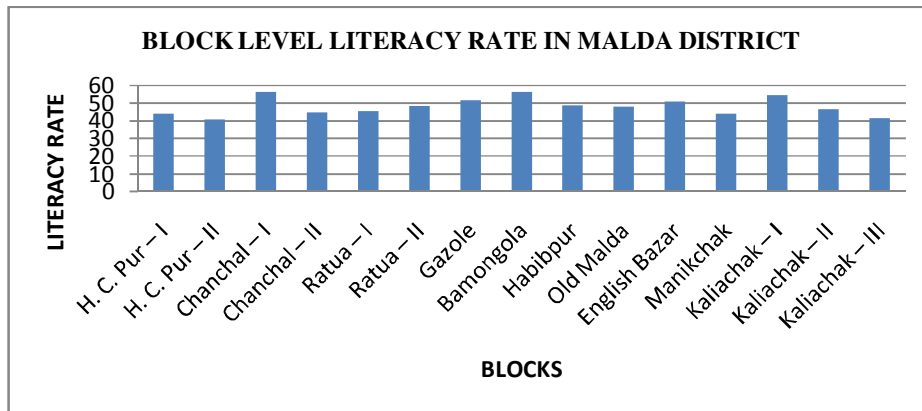
| Sl.No | Name of Block       | Literacy (x)    | Gender Gap (y)  | xy                 | x <sup>2</sup>     | Y <sup>2</sup>  |
|-------|---------------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| 1     | H. C. Pur – I       | 44.48           | 18.65           | 836.27             | 1978.47            | 347.82          |
| 2     | H. C. Pur – II      | 140.84          | 14.5            | 592.18             | 1667.90            | 210.25          |
| 3     | Chanchal – I        | 56.61           | 16.1            | 911.42             | 3204.69            | 259.21          |
| 4     | Chanchal –II        | 44.84           | 14              | 627.76             | 2010.62            | 196.00          |
| 5     | Ratua – I           | 45.58           | 17.02           | 775.77             | 2077.53            | 289.68          |
| 6     | Ratua –II           | 48.38           | 13.79           | 667.16             | 2340.62            | 190.16          |
| 7     | Gazole              | 51.80           | 21.64           | 1120.95            | 2683.24            | 468.29          |
| 8     | Bamongola           | 56.67           | 23.65           | 1340.25            | 3211.48            | 559.32          |
| 9     | Habibpur            | 48.83           | 23.63           | 1153.85            | 2384.36            | 558.37          |
| 10    | Old Malda           | 48.16           | 18.75           | 903                | 2319.93            | 351.56          |
| 11    | English Bazar       | 51.20           | 15.37           | 786.94             | 2621.44            | 236.24          |
| 12    | Manikchak           | 44.40           | 23.86           | 1059.38            | 1971.36            | 569.30          |
| 13    | Kaliachak – I       | 54.92           | 15.07           | 827.64             | 3016.20            | 227.10          |
| 14    | Kaliachak – II      | 46.54           | 16.22           | 754.88             | 2165.97            | 236.09          |
| 15    | Kaliachak – III     | 41.46           | 19.96           | 827.54             | 1718.93            | 398.40          |
|       | $\sum x^2=35372.74$ | $\sum x=724.71$ | $\sum y=272.21$ | $\sum xy=13184.99$ | $\sum y^2=5124.79$ | <b>35372.74</b> |

Source: - Computed By Author

According to Pearson’s product moment correlation co-efficient -

$$r \pm = \frac{n\sum xy - \sum x \cdot \sum y}{\sqrt{[(n\sum x^2 - (\sum x)^2)](n\sum y^2 - (\sum y)^2)}} = 41.04 \text{ (Positive Correlation)}$$

Therefore, it is found that positive correlation exists between literacy and gender gap across the blocks of the district. Table 3 represents the block wise percentage of educational institution in respect of the total population in Malda District. Among the 15 blocks, 9 blocks acquire higher percentage of total primary educational institutions than the percentage of total population. These blocks are Hrarishchandrapur – 1, Chnanchal – 1 , Gazol, Bamongala, Habibpur, Old Malda, English Bazar, Kaliachak – II, Manikchak. Rest blocks have lower percentage of primary school compared to their total population. The percentage of primary school is 7.81 at Habibpur while the percentage of population is 5.70 in the same block.



**TABLE NO.3, BLOCK WISE PERCENTAGE OF POPULATION AND PERCENTAGE OF EDUCATIONAL INSTITUTION IN MALDA DISTRICT**

| Sl. No. | Name of Block   | (A)<br>Percentage of population out of total population of district | (B)<br>Percentage of E.P. School out of total F.P. School of district | Difference (A-B) | (C)<br>Percentage of Middle/high/ H.S. School out of total School of District | Difference (A-C) |
|---------|-----------------|---|---|------------------|---|------------------|
| 1       | H. C. Pur – I   | 4.93  | 5.57  | 0.64             | 4.21  | 0.72             |
| 2       | H. C. Pur – II  | 6.02  | 5.68  | .034             | 7.83  | 1.81             |
| 3       | Chanchal – I    | 5.29  | 5.3   | 0.02             | 5.72  | 0.43             |
| 4       | Chanchal – II   | 5.02  | 4.4   | 0.61             | 4.81  | 0.21             |
| 5       | Ratua – I       | 6.60  | 6.2   | 0.39             | 6.62  | 0.02             |
| 6       | Ratua – II      | 4.89  | 4.4   | 0.48             | 6.32  | 1.43             |
| 7       | Gazole          | 8.95  | 10.30   | 1.35             | 9.93  | 0.98             |
| 8       | Bamongola       | 3.86  | 5.57  | 1.71             | 3.61  | 0.25             |
| 9       | Habibpur        | 5.70  | 7.81  | 2.11             | 3.91  | 1.79             |
| 10      | Old Malda       | 5.90  | 6.37  | 0.47             | 5.12  | 0.78             |
| 11      | English Bazar   | .78   | 12.06   | 0.28             | 17.16   | 5.38             |
| 12      | Manikchak       | 6.50  | 7.75  | 1.25             | 6.62  | 0.12             |
| 13      | Kaliachak – I   | 9.44  | 5.68  | 3.76             | 6.32  | 3.12             |
| 14      | Kaliachak – II  | 6.42  | 6.58  | 0.16             | 6.02  | 0.40             |
| 15      | Kaliachak – III | 8.64  | 6.21  | 2.43             | 6.32  | 2.32             |

Source: - Computed By Author

On the other hand Kaliachak -1 acquires 9.44 percentage of population while it has 5.68 percentage of primary school. In case of secondary school and H.S. school, 7 blocks have more number (Harischandrapur-1, Chanchal-II, Ratua-1, Ratua -II, Gazol, Englishbazar, Manikchak) than their population. Remaining blocks have lower percentage of secondary and higher secondary schools than total population. The highest percentage of such institution is 17.16 percent found at the English Bazar block while it has 11.78 percent of population. On the other hand, Kaliachak -1 occupies 8.64 percent of population while it has 6.32 percent of secondary school.

**STATUS OF EDUCATIONAL INSTITUTES**

Formal education system of West Bengal is followed by the all districts. Three types of educational sectors have been for the micro level clarification i) Primary ii) Junior High, Secondary and Higher Secondary and iii) College, University and others. It is observed that the block wise distribution of educational facilities of different categories of the district. Primary schools play an important role to influence the literacy rate in the district. The total number of primary institutions is about 1779. Among 15 blocks of Malda, Gazol has achieved 1<sup>st</sup> rank having 194 primary institution followed by Habibpur (127), Manikchak (146), English Bazar (186), Kaliachak – II (124). Lowest number of primary school is found at Chanchal – II, Ratua – II i.e. 83 each. To identify the correlation between the number of primary institution and literacy rate of the area, Pearson’s Product moment analysis has been used and from the result, it is clear that there is highly positive correlation between these two variables.

**TABLE NO: 4, PEARSON’S CORRELATION BETWEEN PRIMARY SCHOOL AND LITERACY RATES ACROSS THE BLOCK IN MALDA**

| Sl No. | Name of Block   | Number of Primary School (X) | Total literacy rate (Y) | XY              | X <sup>2</sup> | Y <sup>2</sup>  |
|--------|-----------------|------------------------------|-------------------------|-----------------|----------------|-----------------|
| 1      | H. C. Pur – I   | 105                          | 44.48                   | 4670.4          | 11025          | 1978.47         |
| 2      | H. C. Pur – II  | 107                          | 40.84                   | 4369.88         | 11449          | 1667.90         |
| 3      | Chanchal – I    | 100                          | 56.61                   | 5661            | 10000          | 3204.69         |
| 4      | Chanchal – II   | 83                           | 44.84                   | 3721.72         | 6889           | 2010.62         |
| 5      | Ratua – I       | 117                          | 45.58                   | 5332.86         | 13689          | 2077.53         |
| 6      | Ratua – II      | 83                           | 48.38                   | 4015.54         | 6889           | 2340.62         |
| 7      | Gazole          | 194                          | 51.80                   | 10049.2         | 37636          | 2683.24         |
| 8      | Bamongola       | 105                          | 56.67                   | 5950.35         | 11025          | 3211.48         |
| 9      | Habibpur        | 147                          | 48.83                   | 7178.01         | 21609          | 2384.36         |
| 10     | Old Malda       | 99                           | 48.16                   | 4767.84         | 9801           | 2319.93         |
| 11     | English Bazar   | 136                          | 51.20                   | 6963.2          | 18496          | 2621.44         |
| 12     | Manikchak       | 146                          | 44.40                   | 6482.4          | 21316          | 1971.36         |
| 13     | Kaliachak – I   | 101                          | 54.92                   | 5876.44         | 11449          | 3016.20         |
| 14     | Kaliachak – II  | 124                          | 46.54                   | 5770.96         | 15376          | 2165.97         |
| 15     | Kaliachak – III | 117                          | 41.46                   | 4850.82         | 13689          | 1718.93         |
|        |                 | <b>1770</b>                  | <b>724.71</b>           | <b>85659.62</b> | <b>220338</b>  | <b>35372.74</b> |

Source:- Computed By Author

According to Pearson’s product moment correlation coefficient -

$$r \pm = \frac{n\sum xy - \sum x \cdot \sum y}{\sqrt{[(n\sum x^2 - (\sum x)^2)](n\sum y^2 - (\sum y)^2)}} = 37.96 \text{ (Positive Correlation)}$$

To find out the significance

$$t \pm = r \sqrt{\frac{n-2}{1-r^2}} = -3.61$$

The status of second category of educational institution is such that the number of junior high, high, higher secondary schools is too much lower than the primary school. The number of primary school at Gazol block is 194 where as number of second category of schools is 33. Out of 15 blocks, 9 blocks have recorded above 20 in number of secondary school i.e. Gazol (33), Harishchandrapur- II (26), English Bazar (24), Manikchak (22), Kaliachak-I (21), Kaliachak -III (21), Ratua -II (21), Ratua -I (22), Kaliachak II (20). Remaining blocks belong to less than 20 nos. of such institutions.

**CONCLUSION**

On the basis of above discussion, it is revealed that there is block wise disparity in the distribution of educational institution in comparison to population in Malda district. Blocks having higher percentage of population along with higher percentage of educational facilities have higher percent of literacy rate. Hence, it is concluded that educational facilities help to increase the literacy rate. It is also noticed that, there are positive correlation between number of primary institution and literacy rate. In the study of gender gap with respect to literacy rate, 6 blocks among the 15 blocks in Malda have been suffering from high rate of gender gap. So, it is clear that to achieve the average literacy rate in blocks having lower percentage of educational institutions with respect to their population, more number of such institutions should be established. Thus establishment of

more educational institutions will help to achieve the higher position in respect of literacy of Malda District.

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