# GENDER DISPARITIES IN CHAKDAH MUNICIPALITY, NADIA DISTRICT, WEST BENGAL

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*Abstract:* In Social geography gender is an emerging issue. Changing social-economic setup is largely determined by the character of women empowerment in a region whether it is rural or urban.

The present study mainly emphasizes on the gender disparity status. For this analysis municipality town have been chosen and micro level study is done at Chakdah urban area. For this analysis three wards in the urban area are selected that is ward 4, 8, 13. Present paper aims to detect the status of gender disparity in term of male female population, child population, literacy rate, work participation rate, in Chakdah Municipality, Nadia District, West Bengal. Sopher's Disparity Index (1974) modified by Kundu and Rao (1986) has been adopted to measure the gender disparity in total male female population, child population, literacy rate, work participation rate from the period of 2001 and 2011. The lowest composite index of gender disparity has been found in ward no 7 i.e. 0.1887 in 2011 and ward no 18 i.e. 0.1960 in 2001. The highest composite index of disparity has been noticed in ward no 11 i.e. 0.2993 in 2011 and ward no 10 i.e. 0.3266 in 2001. Composite Rank Index also adopted to measure the gender disparity in sex ratio, child sex ratio, literacy gap, work participation gap Rank. Coefficient of Equality has been chosen to determine the gender disparity in primary data analysis and also used the Lorenz Curve for measure the inequality of male female work participation.

*Index Terms-* **Child sex-ratio, Disparity index, Gender, Literacy gap, Sex-ratio, Work participation.**

**Abbreviations:**

Table 1: Abbreviations used in the dissertation to be listed and to be detailed below in alphabetical order.

| Abbreviations | Full Name |
|---|---|
| CEI | Coefficient of equality index. |
| CEICP | Coefficient of equality index in child population. |
| CEIP | Coefficient of equality index in population. |
| CEILR | Coefficient of equality index in literacy rate. |
| CEIWPR | Coefficient of equality index in work participation rate. |
| CIGD | Composite index of gender disparity. |
| CP | Child population. |
| CRI | Composite rank index |
| RICPSR | Rank index of child population sex ratio. |
| RIPSR | Rank index of population sex ratio. |
| RILG | Rank index of literacy gap. |
| RIWPG | Rank index of work participation gap. |
| DiCP | Disparity index of child population. |
| DiP | Disparity index of population. |
| DiLR | Disparity index of literacy rate. |
| DiWPR | Disparity index of work participation rate. |
| WPR | Work participation rate. |
| LR | Literacy rate. |

## I. INTRODUCTION

Gender inequality is a social problem, which affects the gender relations of both rural and urban areas. Gender disparity in term of child population, literacy rate and work participation rate exists within an urban society collectively. Literacy is an important mechanism which creates a learning environment for both male and female. Female literacy rate become a noteworthy part of women empowerment process.

Dreze and Sen (2004) opined that male and female disparity in literacy rate is basically a part of "gender driven inequality" in India. Literacy as a social factor modifies its innate meaning which reflects in its definition also. According to Census of India 1991, 'a person who can both read and write with understanding in any language is taken as literate' and 'children aged 6 years or less are treated as illiterate'. This definition of 'literate' has been followed in Census of India 1991 and onwards. UNESCO (2004) has been modified the definition as "Literacy is the ability to identify, understand, interpret, create, communicate and compute using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential and to participate fully in their community and wider society". Female work participation rate shows an enormously downhearted trend in the rural areas especially in the main sector than the marginal one. Thus the porch of gender discrimination depressingly influenced the urban economy also. This is more evident in the case of girls from urban household lack of elementary education due to enormous poverty (Desai 2010). Women's work is often unpaid in nature when it is home centric. Women participation in informal sector does not show the actual picture of female "work efforts" until it is properly counted (Gaye et al. 2010).

According Dreze and Sen (2004), female literacy as well as female education is the strongest factor regarding the "women voice and agency" both in the intra and inter household level. They also correlate female literacy with the profitable women employment and proper care of female child. Since the 1990's women have been identified as key agents of sustainable development and women's equality and empowerment are seen as central to a more holistic approach towards establishing new patterns and processes of development that are sustainable. In this context the present study aims to identify the different dimensions of gender disparity as well as its spatio-temporal extension with in the study area.

## II. HISTORICAL BACKGROUND

Chakdaha have a rich cultural history behind. Even today remnants of its heritage is scattered all over the town. People from various religious communities have peacefully lived in Chakdaha since its birth. A number of temples, mosques and other archaeological structures are witness of the past. Chakdaha was also an important center of indigo cultivation.

 Many areas within the municipal area and also the surrounding places show the debris of indigo factories. In 1789, a disastrous flood washed away all the factories along the Sukhsagar. It ended the indigo cultivation in Chakdaha. Chakdaha is a prominent urban local body in the district of Nadia – Nadia being one of the southern districts of West Bengal.

 Located on the banks of Bhagirathi River, Chakdaha derived its name from its mythological past. According to one of these stories, when river Bhagirathi was taking Ganga along this path, the wheel (Chaka) of his chariot got stuck in the sand, and from then on, that place became known as chakradaha or Chakdaha

Once predominantly a Panchayat area under the British rules with only 5000 populations in 1885, it became a municipality on May Day 1886. John Beglar, a British Architectural engineer took the initiative to establish Chakdaha as a Municipality with Kazi Mirza Itteshamuddin as its first Chairman.

Nadia region, of which Chakdaha is a part, was heralded as the Oxford of Bengal for 5 centuries due to the available intellectual prowess and great centers of learning.

Chakdaha area which is a part of the Kalyani area was once a seat of education and philosophy of the entire State which earned it international recognition. Not very far from now, Chakdaha would become popular for river-activities such as river-rafting, canoeing, tourist-fishing and boating and camping.

## III. OBJECTIVES

- ➢ To recognize the spatio-temporal disparities of gender inconsistency in term of male female population, child population, literacy rate, work participation rate in Chakdah Municipality, Nadia District, West Bengal during 2001 to 2015.
- ➢ To stumble on the possible factors responsible for the gender disparity in the study area.

- ➢ To suggest effective measures to trim down the existing gender disparity in the study area.
- ➢ Primarily to find out whether there is any change in attitude of people towards urban women.
- ➢ To find out the economic and social discrimination in male female population.

## 1V. SIGNIFICANCE OF THE STUDY

The study has covered diverse aspects of gender disparities i.e. disparity index of male female population, child population, work participation rate, literacy rate and composite rank index which measures the inequality of gender. Primary data analysis by the method of coefficient of equality index. These methods are adopted for male female discrimination and disparity of social and economic sector.

## V. STUDY AREA

Chakdah Municipality, Nadia District in West Bengal has been taken as the study area for this purpose. Chakdaha is located between $23°3'20''$ to $23°6'40''$ North latitude and $88°30'40''$ to $88°32'40''$ East longitudes on the world map. The Municipality is encircled by Gangaprasadpur in the north, national NH – 34 in the east Chanaduria and Rauturi Panchyat in the south. Ganga flows as the western boundary of the Chakdaha town. Buriganga and Churni Flows through the old Chakdaha into the Ganga.

Nearest town within the 10 km radius is Ranaghat; while the district headquarter Krishnanagar is about 38 kms away and 62 kms from state capital Kolkata in the Nadia District, Traffic lifeline of the Chakdaha town mainly the eastern railways connecting Kolkata through Sealdah-Krishnanagar, Sealdah-Ranaghat mainline.

Though agriculture was once a major economic activity, Chakdaha today is totally service sector oriented economy along with business as an unorganized informal sector. People living in this region work in the neighbouring areas and in Kolkata. Industries are almost nonexistent except a few small-scale industries mainly plastic factories. Once Chakdaha was center of jute industry but due to the change in the course of river it lost all its glory and importance.

Population growth in Chakdaha shows a steady rise resulting from migration towards the peri-urban area. This is causing a serious stress on the infrastructure particularly in terms of availability of transport facilities, resulting in congestion and pressures on land and housing. Presently the Municipality consists of 21 wards covering an area of 15.36 sq kms with a population of 95203(Census 2011) persons. Males constitute 51% of the population and females 49%. Chakdaha has an average literacy rate of 79%, higher than the national average of 59.5%; with male literacy of 84% and female literacy of 75%. 9% of the population is under 6 years of age. These problems are often aggravated by lack of planned development through shared understanding and knowledge. Chakdaha depicts typical characteristics of a peri-urban region.

As per municipal record, the soil is sandy with alluvial soil found in certain places. The climate is moderate in nature, raising the summer temperature to $40°C$, while the winter temperature falls down to $10°C$. The average annual rainfall is about 150-160 mm. Based on Climate, Soil and Physiographic the South Asia Project Department.

Soils of this zone are derived from recent alluvial deposits brought down by the river Ganga, and its tributaries hence called inceptisol. Soils are deep, well drained, texturally fine loamy, neutral in reaction, with high base saturation and CEC and medium to medium low NPK.
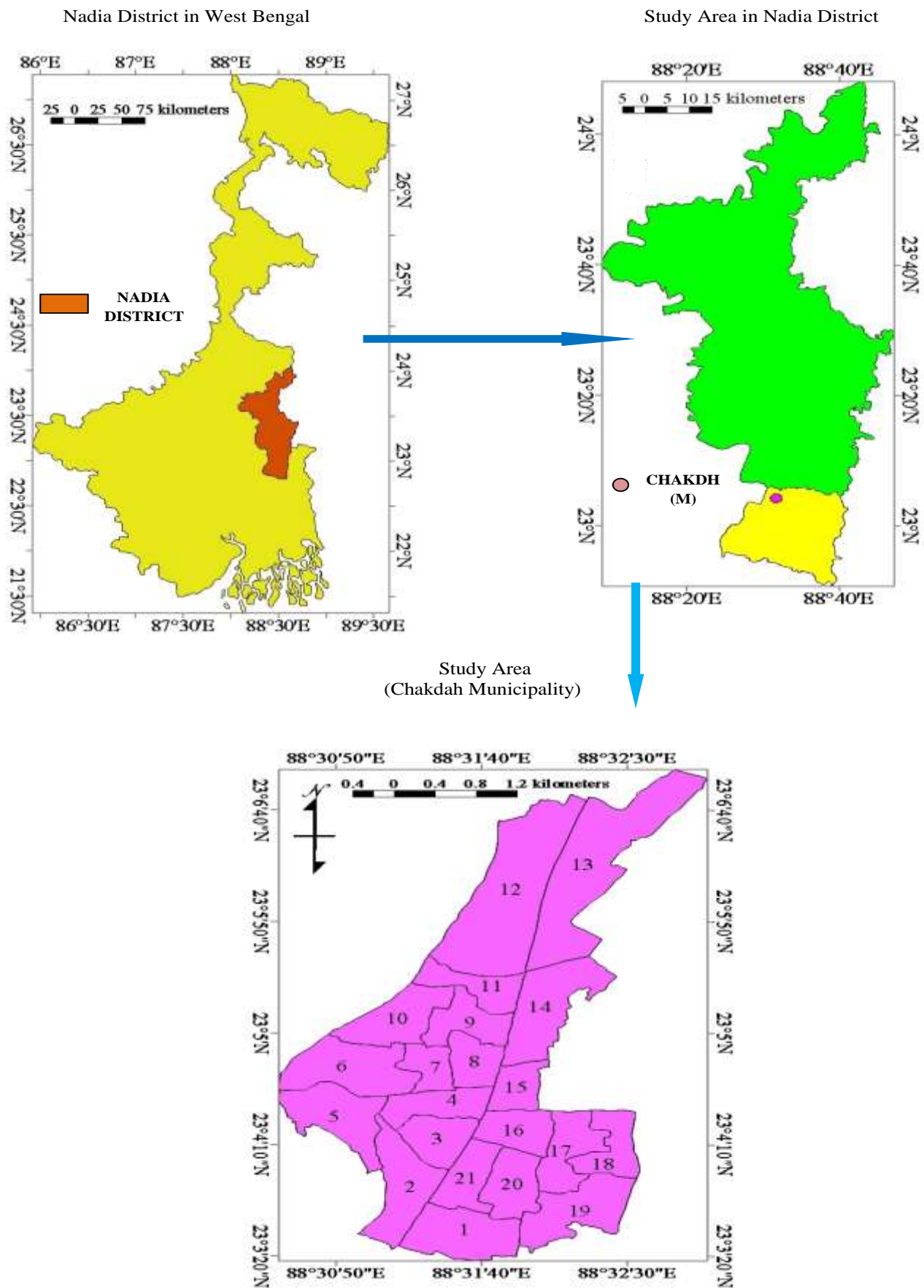
Nadia District in West Bengal

Study Area in Nadia District

Study Area
(Chakdah Municipality)



Fig. 1: Location Map of the Study Area

## VI. DATA BASE AND METHODOLOGY

For this study two types of data are collected primary and secondary. The secondary data are collected from Census of India 2001 and 2011. The primary data are collected through field work and purposive random sampling.

### 6.1 SOURCES OF THE DATA

The study area data have been collected from different centers.

### 6.1.1 SECONDARY DATA

This study mainly based on secondary data which have been collected from Census of India (2001 and 2011), published reports from SIPRD, Kalyani, Nadia District, West Bengal and Chakdah Municipality, Nadia District, West Bengal.

### 6.1.2 PRIMARY DATA

The primary data are collected through field work and purposive random sampling. Primary survey is conducted with scheduled questionnaire, in March 2017 and also data have been collected from observations, household's survey, group discussion and personal interviews.

### 6.2 METHODOLOGY

Gender Disparity in male female population, child population, literacy rate, work participation rate in the study area have been calculated through the method of modified Sopher's Disparity Index (1974) of Kundu and (1986). To satisfy the objectives of the study, mainly descriptive statistics have been incorporated. Work participation rate, literacy rate, sex-ratio, child sex ratio have been used. Relevant cartographic techniques and presentation have been applied.

### 6.2.1 METHODS AND TECHNIQUES

**Disparity Index (Sopher's Method)**

This method of calculating disparities has been developed by David v. Sopher (1974) modified by Kundu and Rao (1986)

- $D_i = \log (X2/X1) + \log [(Q-X1) / (Q-X2)]$………………. (i)

Where, $D_i$ = Disparity index; Q = 200, X2 = Higher value of observed components, X1 = Lower value of observed components, (X2 > or = X1). The value of disparity index ranges from 0 to 2.301.

On the basis of gender disparity indices of male female population, child population, literacy rate, work participation rate, composite index of gender disparity has been computed as –

- CIGD = (Dicp + DiLR + DiP + DiWPR) / 4 ………………. (ii)

Where, CIGD = composite index of gender disparity, DiCP = disparity index of child population, DiP = disparity index of population, DiLR = disparity index of literacy rate, DiWPR = disparity index of work participation rate.

- Composite Rank Index and individuals ranks of sex- ratio, child sex-ratio, work participation gap, literacy gap.
- Disparity showing by Lorenz Curve.

**Coefficient of Equality (CE)**

- Coefficient of Equality (CE) = X1 / X2

$$X2 > \text{or} = X1$$

X1 and X2 are the observed value of two groups of population.

The value of CE always range between 0 and 1. In case of no disparity (i.e. perfect equality) CE will be 1. It may be interpreted as smaller the value of CE higher extent of disparity, higher value of CE lesser the disparity.

**Sex-ratio**

- Sex-ratio = (Total female population / total male population) $\times$ 1000
- Child sex- ratio = (Total female population 0-6 years / total male population 0-6 years) $\times$ 1000

**Work participation rate**

- Work participation rate = (total workers / total population) $\times$ 100
- Male work participation rate = (total male workers / total male population) $\times$ 100
- Female work participation rate = (total female workers / total female population) $\times$ 100

**Literacy rate**

- Literacy rate = [total literate persons (excluding 0-6 years) / total population (excluding 0-6 years) $\times$ 100
- Male literacy rate = [total male literate persons (excluding 0-6 years) / total male population (excluding 0-6 years) $\times$ 100
- Female literacy rate = [total fmale literate persons (excluding 0-6 years) / total fmale population (excluding 0-6 years) $\times$ 100
- Relevant cartographic techniques (using MS Excel 2007, TNT Mips, Q- GIS, Map info Software) have been applied.

**6.2.2 SAMPLE DESIGN**

According to Census of India (2011) 1225, 805 and 937 households have been recorded in ward no 4, 8 and 13 respectively in Chakdah Municipality, out of which 36, 24 and 28 (total 88) households i.e. 3% have been taken for household survey. Selection of households was based on purposive random sampling.

**VII. NATURE OF GENDER DISPARITIES IN CHAKDAH MUNICIPALITY**

In the modern age male female equally participate the all sector of economic activity but Chakdah Municipality gender inequality found in term of child population, literacy rate, work participation rate, sex-ratio etc.

**7.1 GENDER DISPARITY IN CHILD POPULATION**

As per the Census of India 2001, the highest female child population has been recorded in the Ward no. 4 (56.09%) whereas the lowest one is in the ward no. 5 (43.08%). Male child population shows an increasing trend in the Ward no. 5 (56.92%) and lowest male child population is in the ward no. 4 (43.91%).

Table 2: Gender Disparity in Child Population in Chakdah Municipality (2001 And 2011)

| Ward No | 2001 | | | | | 2011 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Child Population | | (%) of Child Population | | DiCP | Child Population | | (%) of Child Population | | DiCP |
| | Male | Female | Male | Female | | Male | Female | Male | Female | |
| 1 | 213 | 185 | 53.52 | 46.48 | 0.0816 | 191 | 181 | 51.34 | 48.66 | 0.0310 |
| 2 | 298 | 275 | 52.01 | 47.99 | 0.0466 | 297 | 296 | 50.08 | 49.92 | 0.0019 |
| 3 | 212 | 185 | 53.40 | 46.60 | 0.0788 | 162 | 173 | 48.36 | 51.64 | 0.0380 |
| 4 | 173 | 221 | 43.91 | 56.09 | 0.1416 | 188 | 170 | 52.51 | 47.49 | 0.0582 |
| 5 | 288 | 218 | 56.92 | 43.08 | 0.1611 | 239 | 243 | 49.59 | 50.41 | 0.0095 |
| 6 | 215 | 196 | 52.31 | 47.69 | 0.0535 | 214 | 235 | 47.66 | 52.34 | 0.0542 |
| 7 | 113 | 115 | 49.56 | 50.44 | 0.0102 | 133 | 129 | 50.76 | 49.24 | 0.0176 |
| 8 | 138 | 112 | 55.20 | 44.8 | 0.1208 | 98 | 108 | 47.57 | 52.43 | 0.0563 |
| 9 | 152 | 153 | 49.84 | 50.16 | 0.0037 | 146 | 151 | 49.16 | 50.84 | 0.0195 |
| 10 | 235 | 245 | 48.96 | 51.04 | 0.0241 | 211 | 208 | 50.36 | 49.64 | 0.0083 |
| 11 | 152 | 131 | 53.71 | 46.29 | 0.0861 | 135 | 122 | 52.53 | 47.47 | 0.0586 |
| 12 | 280 | 268 | 51.09 | 48.91 | 0.0253 | 272 | 273 | 49.91 | 50.09 | 0.0021 |
| 13 | 243 | 243 | 50 | 50 | 0 | 194 | 190 | 50.52 | 49.48 | 0.0120 |
| 14 | 224 | 215 | 51.03 | 48.97 | 0.0239 | 185 | 184 | 50.13 | 49.87 | 0.0030 |
| 15 | 178 | 167 | 51.59 | 48.41 | 0.0368 | 85 | 85 | 50 | 50 | 0 |
| 16 | 153 | 139 | 52.40 | 47.60 | 0.0556 | 118 | 117 | 50.21 | 49.79 | 0.0049 |
| 17 | 203 | 165 | 55.16 | 44.84 | 0.1198 | 214 | 188 | 53.23 | 46.77 | 0.0749 |
| 18 | 276 | 256 | 51.88 | 48.12 | 0.0436 | 109 | 108 | 50.23 | 49.77 | 0.0053 |
| 19 | 176 | 199 | 46.93 | 53.07 | 0.0711 | 179 | 156 | 53.43 | 46.57 | 0.0795 |
| 20 | 162 | 153 | 51.43 | 48.57 | 0.0331 | 156 | 165 | 48.60 | 51.40 | 0.0324 |
| 21 | | | | | | 139 | 130 | 51.67 | 48.33 | 0.0387 |

Source: Computed by the author based on Census of India, 2001 and 2011.

The highest gender disparity in child population is experienced at the Ward no. 5 (DiCP = 0.1611) and the lowest gender disparity is found in the Ward no. 13 (DiCP = 0). [Table 2 and Fig. 2].

Conversely, in 2011, the highest female child population is found is the Ward no. 8 (52.43%), whereas the lowest one is seen in the Ward no. 19 (46.57%). Male child population shows a rising trend in the ward no. 19 (53.43%) and lowest male child population is in the Ward no. 8 (47.57%). The highest gender disparity in child population is observed at the Ward no. 19 (DiCPP = 0.0795) and the lowest gender disparity for the same is found in the Ward no. 15 (DICP = 0) [Table 2 and Fig. 2]. Though female child population shows a rising trend in relation to male child population, but the female child population in percent to total female population shows a notable difference from 2001 to 2011 (8.98% to 7.63%).
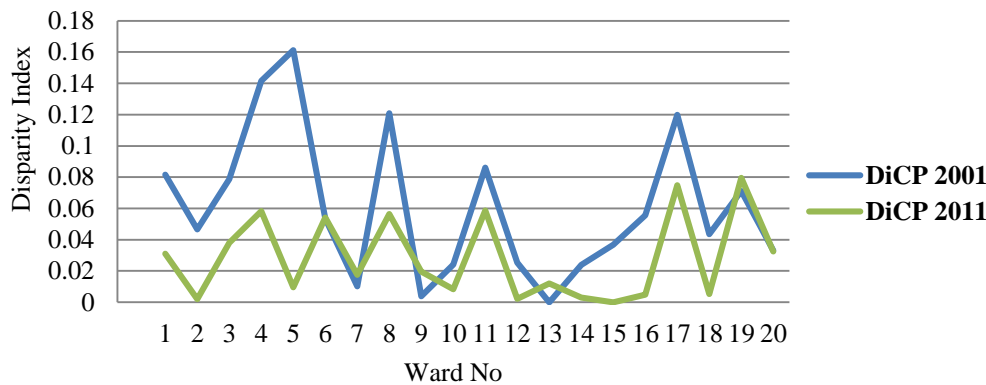
Fig. 2: Gender Disparity in Child Population (2001 And 2011)

Source: Computed by the author based on Census of India, 2001 and 2011.

## 7.2 GENDER DISPARITY IN LITERACY RATE

In 2001, the highest figures of male literacy rate reaches up to 90.36% (ward no. 4) where as both the figures of highest female literacy rate 80.87% (Ward no. 4) and lowest female literacy rate 56.86% (Ward no. 13) shows a despondent trend and lowest male literacy rate 73.71% (Ward no. 5). The highest gender disparity in literacy rate is observed at the Ward no. 13 (DiLR = 0.1765) and the lowest gender disparity is found in the Ward no. 16 (DiLR = 0.0436). [Table 3 and Fig. 3].

Alternatively in 2011, the highest figures of male literacy rate was 92.272% (Ward no. 16) whereas the figures of highest female literacy rate 90.026% (Ward no. 16) and lowest female literacy rate 68.248% (Ward no. 13) where as both lowest male literacy rate 78.300% (Ward no. 13) shows a substandard drift in comparison to male literacy rate. The highest gender disparity in literacy rate is observed at the Ward no. 13 (DiLR = 0.0941) and the lowest gender disparity is noticed in the Ward no. 16 (DiLR = 0.0197). [Table 3 and Fig. 3].

There is an increase in female literacy rate from 2001 to 2011, but it is not so much significant in comparison with male literacy. The average female literacy rate was 68.865% in 2001, which become 79.137% in 2011, so there is only a net increase of 10.272%.
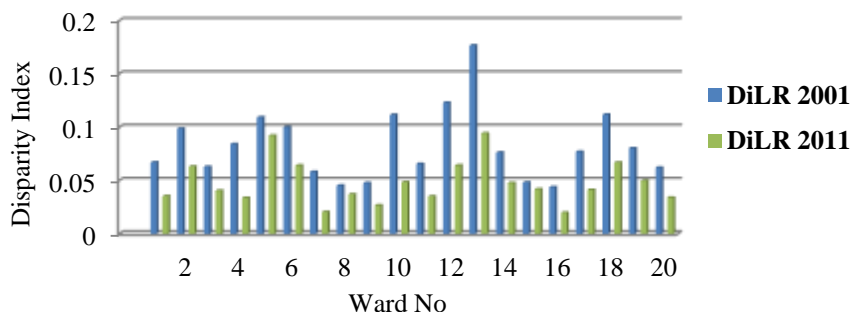


Fig. 3: Gender Disparity in Literacy Rate

Table 3: Gender Disparity in Literacy Rate in Chakdah Municipality (2001 And 2011)

| Ward No | 2001 | | | 2011 | | |
|---|---|---|---|---|---|---|
| | Literacy Rate | | DiLR | Literacy Rate | | DiLR |
| | Male | Female | | Male | Female | |
| 1 | 82.50 | 75.14 | 0.0670 | 89.085 | 85.088 | 0.0353 |
| 2 | 82.96 | 72.19 | 0.0986 | 85.065 | 78.066 | 0.0630 |
| 3 | 87.87 | 80.83 | 0.0627 | 91.061 | 86.470 | 0.0404 |
| 4 | 90.36 | 80.87 | 0.0842 | 89.865 | 86.041 | 0.0337 |
| 5 | 73.71 | 62.45 | 0.1091 | 81.329 | 71.333 | 0.0921 |
| 6 | 83.15 | 72.25 | 0.0998 | 82.854 | 75.804 | 0.0640 |
| 7 | 88.47 | 81.93 | 0.0581 | 88.170 | 85.860 | 0.0204 |
| 8 | 86.39 | 81.31 | 0.0453 | 89.831 | 85.636 | 0.0370 |
| 9 | 86.65 | 81.30 | 0.0477 | 88.909 | 85.896 | 0.0266 |
| 10 | 80.37 | 68.41 | 0.1114 | 84.096 | 78.716 | 0.0484 |
| 11 | 86.56 | 79.24 | 0.0655 | 87.041 | 83.101 | 0.0350 |
| 12 | 74.94 | 62.22 | 0.1229 | 80.100 | 73.142 | 0.0640 |
| 13 | 74.72 | 565.86 | 0.1765 | 78.300 | 68.248 | 0.0941 |
| 14 | 82.75 | 74.40 | 0.0761 | 87.022 | 81.678 | 0.0476 |
| 15 | 88.73 | 83.31 | 0.0480 | 91.142 | 86.393 | 0.0418 |
| 16 | 89.04 | 84.11 | 0.0436 | 92.272 | 90.026 | 0.0197 |
| 17 | 87.05 | 78.47 | 0.0769 | 85.208 | 80.607 | 0.0412 |
| 18 | 80.53 | 68.52 | 0.1117 | 89.760 | 82.233 | 0.0667 |
| 19 | 85.22 | 76.34 | 0.0802 | 86.894 | 81.315 | 0.0497 |
| 20 | 86.74 | 79.81 | 0.0620 | 87.933 | 84.108 | 0.0339 |
| 21 | | | | 89.582 | 87.252 | 0.0205 |

Source: Computed by the author based on Census of India, 2001 and 2011.

## 7.3 GENDER DISPARITY IN WORK PARTICIPATION RATE

The highest female work participation rate was found in the Ward no. 18 (16.84%) and the lowest one is observed in the Ward no. 10 (4.70%) in 2001. The highest male work participation rate was found in the Ward no. 6 (57.92%) and the lowest male work participation rate was found in the Ward no. 7 (50.10%). The highest gender disparity in work participation rate is observed at the Ward no. 10 (DiWPR = 1.1651) and gender disparity in work participation rate is found in the Ward no. 18 (DiWPR = 0.6009). [Table 4, Fig. 4].

On the contrarily, in 2011, the highest female work participation rate was found in the ward no 5(15.555%) and the lowest one is detected in the Ward no 11(6.581%). The highest male work participation rate was 61.349% (Ward No 13) and the lowest male work participation rate found is 56.290% (Ward No 15). The higher gender disparity in work participation rate is observed at the Ward no 18(DiWPR=1.0726) and the lowest gender disparity is found in the Ward no 19(DiWPR=0.6614), [Table 4, Fig. 4]. Both as main and marginal workers the female work participation rate shows a disappointed trend. The average female work participation rate was 10.77% in 2001 which become 11.07% in 2011 with only a net increase of 0.298%.
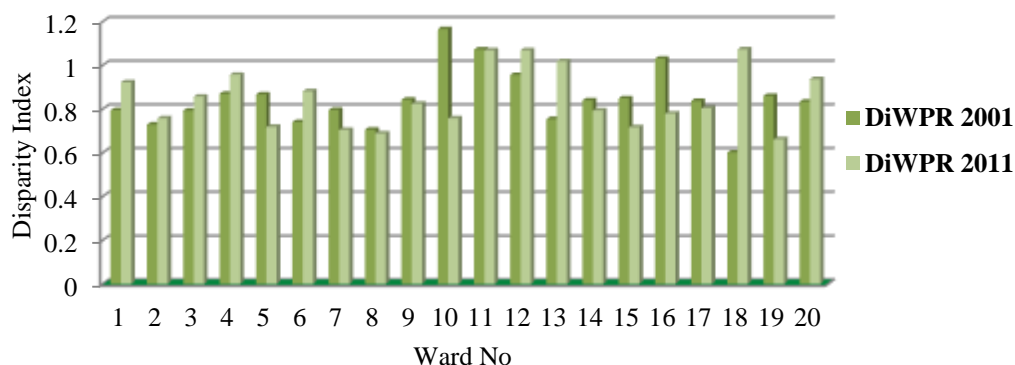
Fig. 4: Gender Disparity in Work Participation Rate (2001 And 2011)

Source: Computed by the author based on Census of India, 2001 and 2011.

Table 4: Gender Disparity in Work Participation Rate in Chakdah Municipality (2001 And 2011)

| Ward No | 2001 | | | 2011 | | |
|---|---|---|---|---|---|---|
| | Work Participation Rate | | DiWPR | Work Participation Rate | | DiWPR |
| | Male | Female | | Male | Female | |
| 1 | 52.27 | 10.75 | 0.7944 | 57.734 | 9.262 | 0.9220 |
| 2 | 51.64 | 12.22 | 0.7282 | 58.149 | 13.391 | 0.7568 |
| 3 | 50.31 | 10.28 | 0.7926 | 60.360 | 11.353 | 0.8563 |
| 4 | 55.51 | 9.86 | 0.8697 | 59.134 | 8.872 | 0.9563 |
| 5 | 51.99 | 9.13 | 0.8659 | 61.221 | 15.555 | 0.7186 |
| 6 | 57.92 | 13.81 | 0.7401 | 59.694 | 10.605 | 0.8807 |
| 7 | 50.10 | 10.16 | 0.7955 | 58.159 | 14.994 | 0.7041 |
| 8 | 53.24 | 13.37 | 0.7045 | 57.815 | 15.400 | 0.6879 |
| 9 | 52.76 | 9.81 | 0.8418 | 57.717 | 11.465 | 0.8242 |
| 10 | 52.07 | 4.70 | 1.1651 | 59.405 | 13.761 | 0.7573 |
| 11 | 52.47 | 5.85 | 1.0720 | 56.821 | 6.581 | 1.0682 |
| 12 | 54.62 | 8.0 | 0.9551 | 59.420 | 6.975 | 1.0681 |
| 13 | 50.92 | 11.37 | 0.7533 | 61.349 | 8.138 | 1.0184 |
| 14 | 52.21 | 9.74 | 0.8389 | 57.400 | 12.163 | 0.7935 |
| 15 | 53.74 | 9.90 | 0.8485 | 56.290 | 12.131 | 0.7162 |
| 16 | 51.31 | 6.64 | 1.0300 | 60.381 | 13.419 | 0.7791 |
| 17 | 55.10 | 10.50 | 0.8365 | 60.251 | 12.687 | 0.8038 |
| 18 | 53.67 | 16.84 | 0.6009 | 57.490 | 6.601 | 1.0726 |
| 19 | 53.29 | 9.56 | 0.8595 | 61.325 | 17.589 | 0.6614 |
| 20 | 50.79 | 9.53 | 0.8327 | 59.433 | 9.340 | 0.9361 |
| 21 | | | | 58.690 | 12.435 | 0.7969 |

Source: Computed by the author based on Census of India, 2001 and 2011.

**7.4 GENDER DISPARITY IN MAIN POPULATION**

The highest female percentage of population was found in the Ward no 15(51.02%) and the lowest one is detected in the Ward no 3(47.33%) in 2001. The lowest male population was observed Ward no 15(48.91%) and the highest population in Ward no 3(52.67%). The highest gender disparity is recognized at the Ward no 3(DiP=0.0619) and the lowest gender disparity is found in the Ward no 16(DiP=0.0012). [Table 5 and Fig. 5].

The highest female percentage of population was found in the Ward no 4(50.89%) and the lowest one is detected in the Ward no 18(47.99%) in 2011. The lowest male population was observed Ward no 4(49.11%) and the highest population in Ward no 18(52.01%). The highest gender disparity is recognized at the Ward no 18(DiP=0.0466) and the lowest gender disparity is found in the Ward no 16(DiP=0). [Table 5 and Fig. 5].The average female population was 49.175% in 2001 which become 49.44% in 2011 with only a net increase of 0.265%.

Table 5: Gender Disparity in Male Female Population in Chakdah Municipality (2001 And 2011)

| Ward No | 2001 | | | | | 2011 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Population | | (%) of Population | | DiP | Population | | (%) of Population | | DiP |
| | Male | Female | Male | Female | | Male | Female | Male | Female | |
| **1** | 2137 | 2120 | 50.20 | 49.8 | 0.0046 | 2657 | 2602 | 50.52 | 49.48 | 0.0120 |
| 2 | 2899 | 2783 | 51.02 | 48.98 | 0.0236 | 3522 | 3465 | 50.41 | 49.59 | 0.0095 |
| 3 | 2415 | 2170 | 52.67 | 47.33 | 0.0619 | 2394 | 2343 | 50.54 | 49.46 | 0.0125 |
| 4 | 2376 | 2384 | 49.92 | 50.08 | 0.0019 | 2447 | 2536 | 49.11 | 50.89 | 0.0206 |
| 5 | 2518 | 2442 | 50.77 | 49.23 | 0.0178 | 2785 | 2700 | 50.77 | 49.23 | 0.0178 |
| 6 | 2291 | 2238 | 50.59 | 49.41 | 0.0137 | 2677 | 2612 | 50.61 | 49.39 | 0.0141 |
| 7 | 1553 | 1555 | 49.97 | 50.03 | 0.0069 | 1716 | 1754 | 49.45 | 50.55 | 0.0127 |
| 8 | 1668 | 1578 | 51.39 | 48.61 | 0.0322 | 1593 | 1643 | 49.23 | 50.77 | 0.0178 |
| 9 | 1992 | 1936 | 50.71 | 49.29 | 0.0164 | 2164 | 2198 | 49.61 | 50.39 | 0.0091 |
| 10 | 2491 | 2466 | 50.25 | 49.75 | 0.0058 | 2754 | 2725 | 50.26 | 49.74 | 0.0060 |
| 11 | 1778 | 1676 | 51.48 | 48.52 | 0.0343 | 1906 | 1793 | 51.53 | 48.47 | 0.0354 |
| 12 | 2638 | 2464 | 51.71 | 48.29 | 0.0396 | 3201 | 3068 | 51.06 | 48.94 | 0.0246 |
| 13 | 1895 | 1750 | 51.99 | 48.01 | 0.0461 | 2106 | 2003 | 51.25 | 48.75 | 0.0290 |
| 14 | 2377 | 2320 | 50.61 | 48.39 | 0.0259 | 2589 | 2598 | 49.91 | 50.09 | 0.0021 |
| 15 | 2192 | 2283 | 48.98 | 51.02 | 0.0236 | 1558 | 1558 | 50 | 50 | 0 |
| 16 | 1871 | 1875 | 49.95 | 50.05 | 0.0012 | 1941 | 1945 | 49.95 | 50.05 | 0.0016 |
| 17 | 2394 | 2239 | 51.67 | 48.33 | 0.0387 | 2312 | 2207 | 51.16 | 48.84 | 0.0269 |
| 18 | 2810 | 2678 | 51.20 | 48.8 | 0.0278 | 1543 | 1424 | 52.01 | 47.99 | 0.0466 |
| 19 | 2111 | 2050 | 50.73 | 49.27 | 0.0169 | 2022 | 1916 | 51.35 | 48.65 | 0.0313 |
| 20 | 1833 | 1753 | 51.12 | 48.88 | 0.0259 | 2221 | 2152 | 50.79 | 49.21 | 0.0183 |
| 21 | | | | | | 1939 | 1914 | 50.32 | 49.68 | 0.0074 |

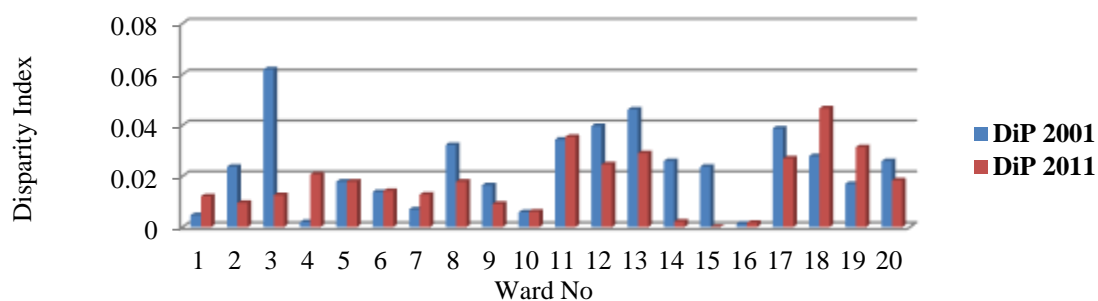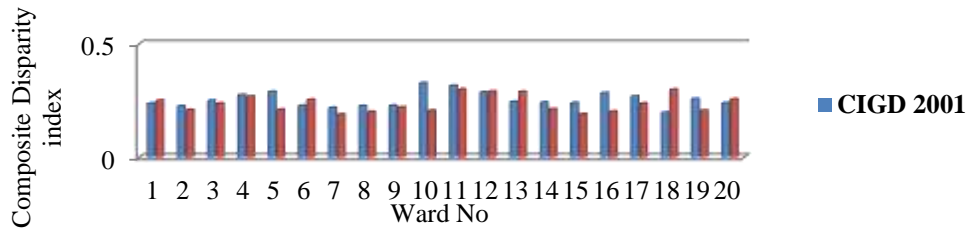Source: Computed by the author based on Census of India 2001 and 2011.

Fig.5: Gender Disparity in Population (2001 And 2011)

Source: computed by the author based on Census of India 2001 and 2011.

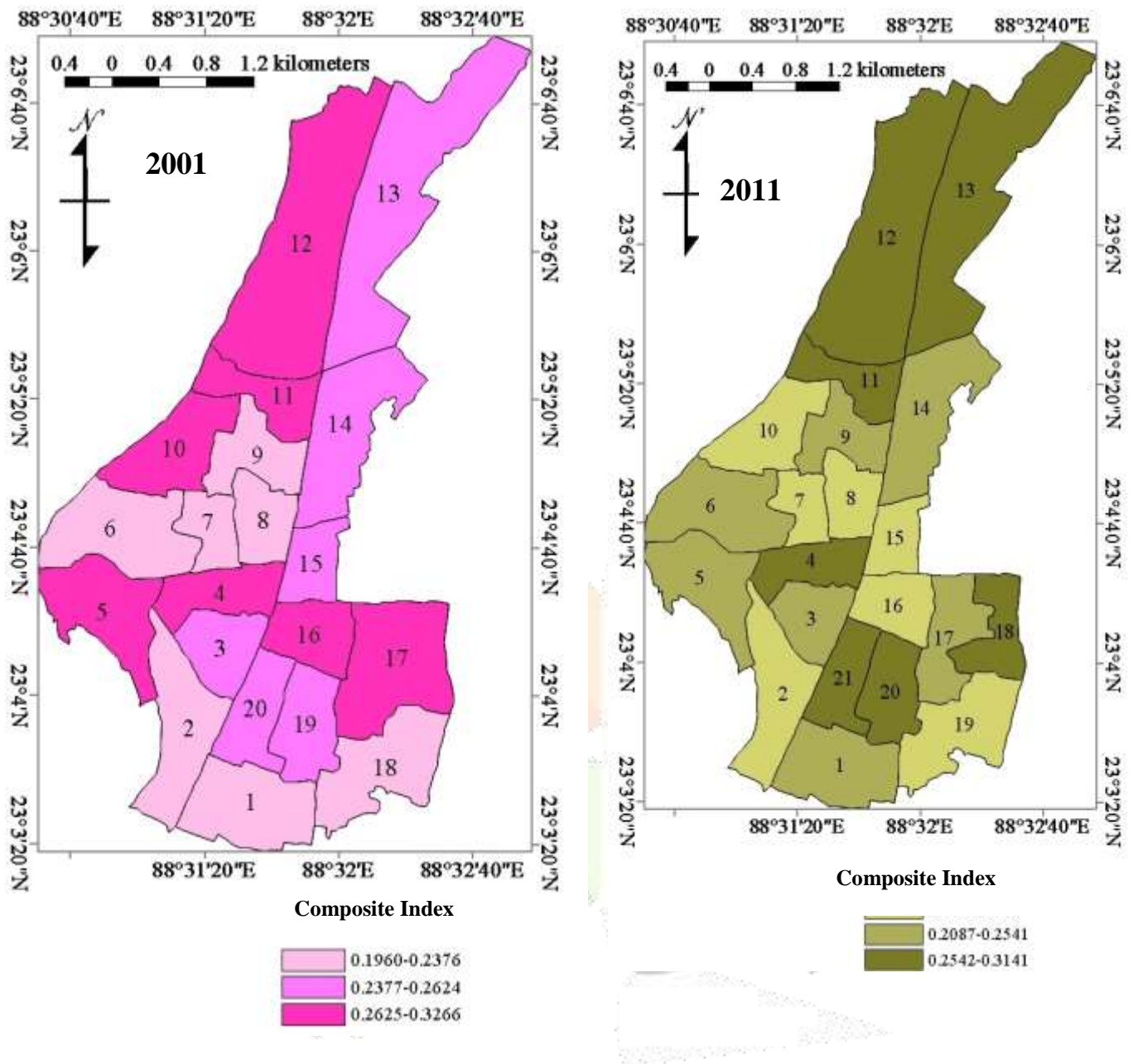## 7.5 COMPOSITE INDEX OF GENDER DISPARITY

In 2001, Ward no. 18, 1, 2, 6, 7, 8 and 9 came into the low gender disparity zone (CIGD< 0.2376). Where high gender disparity zone (CIGD> 0.2625) includes Ward no. 10, 11, 12, 4, 5, 16 and 17. The Disparity index varies from 0.2377 to 0.2624 ward no. 13, 14, 15, 18, 19 and 20, and 3. [Table 6, Fig. 6, 7].

In contrast in 2011, Ward no. 10, 15, 16, 19, 8 and 2 falls in low gender disparity zone (CIGD<0.2086). Whereas Ward no. 11, 12, 13, 20, 21, 4 and 18 came into the high gender disparity zone (CIGD> 0.2542). The composite index of gender disparity varies from 0.2087 to 0.2541 is Ward no. 1, 5, 6, 9, 14, 17 and 3. [Table 6, Fig. 6, 7]

Table 6: Composite Index of Gender Disparity in Population, Child Population,    Literacy Rate, and Work Participation Rate in Chakdah Municipality (2001 And 2011)

| Ward No | 2001 | | | | | 2011 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | DiP | DiCP | DiLR | DiWPR | CIGD | DiP | DiCP | DiLR | DiWPR | CIGD |
| 1 | 0.0046 | 0.0816 | 0.067 | 0.7944 | 0.2369 | 0.012 | 0.031 | 0.0353 | 0.922 | 0.2501 |
| 2 | 0.0236 | 0.047 | 0.0986 | 0.7282 | 0.2243 | 0.0095 | 0.0019 | 0.063 | 0.7568 | 0.2078 |
| 3 | 0.0619 | 0.079 | 0.0627 | 0.7926 | 0.249 | 0.0125 | 0.038 | 0.0404 | 0.8563 | 0.2368 |
| 4 | 0.0019 | 0.142 | 0.0842 | 0.8697 | 0.2744 | 0.0206 | 0.0582 | 0.0337 | 0.9563 | 0.2672 |
| 5 | 0.0178 | 0.161 | 0.1091 | 0.8659 | 0.2885 | 0.0178 | 0.0095 | 0.0921 | 0.7186 | 0.2095 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.0137 | 0.054 | 0.0998 | 0.7401 | 0.2268 | 0.0141 | 0.0542 | 0.064 | 0.8807 | 0.2533 |
| 7 | 0.0069 | 0.01 | 0.0581 | 0.7955 | 0.2177 | 0.0127 | 0.0176 | 0.0204 | 0.7041 | 0.1887 |
| 8 | 0.0322 | 0.121 | 0.0453 | 0.7045 | 0.2257 | 0.0178 | 0.0563 | 0.037 | 0.6879 | 0.1998 |
| 9 | 0.0164 | 0.004 | 0.0477 | 0.8418 | 0.2274 | 0.0091 | 0.0195 | 0.0266 | 0.8242 | 0.2198 |
| 10 | 0.0058 | 0.024 | 0.1114 | 1.1651 | 0.3266 | 0.006 | 0.0083 | 0.0484 | 0.7573 | 0.2048 |
| 11 | 0.0343 | 0.086 | 0.0655 | 1.072 | 0.3145 | 0.0354 | 0.0586 | 0.035 | 1.0682 | 0.2993 |
| 12 | 0.0396 | 0.025 | 0.1229 | 0.9551 | 0.2857 | 0.0246 | 0.0021 | 0.064 | 1.0681 | 0.2897 |
| 13 | 0.0461 | 0 | 0.1765 | 0.7533 | 0.244 | 0.029 | 0.012 | 0.0941 | 1.0184 | 0.2884 |
| 14 | 0.0259 | 0.024 | 0.0761 | 0.8389 | 0.2412 | 0.0021 | 0.003 | 0.0476 | 0.7935 | 0.2116 |
| 15 | 0.0236 | 0.037 | 0.048 | 0.8485 | 0.2392 | 0 | 0 | 0.0418 | 0.7162 | 0.1895 |
| 16 | 0.0012 | 0.056 | 0.0436 | 1.03 | 0.2826 | 0.0016 | 0.0049 | 0.0197 | 0.7791 | 0.2013 |
| 17 | 0.0387 | 0.12 | 0.0769 | 0.8365 | 0.268 | 0.0269 | 0.0749 | 0.0412 | 0.8038 | 0.2367 |
| 18 | 0.0278 | 0.044 | 0.1117 | 0.6009 | 0.196 | 0.0466 | 0.0053 | 0.0667 | 1.0726 | 0.2978 |
| 19 | 0.0169 | 0.071 | 0.0802 | 0.8595 | 0.2569 | 0.0313 | 0.0795 | 0.0497 | 0.6614 | 0.2055 |
| 20 | 0.0259 | 0.033 | 0.062 | 0.8327 | 0.2384 | 0.0183 | 0.0324 | 0.0339 | 0.9361 | 0.2552 |
| 21 | | | | | | 0.0074 | 0.0387 | 0.0205 | 0.7969 | 0.2159 |

Source: computed by the author based on census of India, 2001 and 2011



Fig. 6: Gender Inequality in Composite Disparity Index (2001 And 2011)

Source: Computed by the author based on Census of India 2001 and 2011.

Fig. 7: Composite Index of Gender Disparity in Chakdah Municipality

Population, Child Population, Literacy Rate, Work Participation Rate (2001 And 2011)

Source: Computed by the author based on Census of India, 2001 and 2011.

**7.6 COMPOSITE RANK INDEX OF RIPSR, RICPSR, RILG, RIWPG**

In 2001, high inequality in sex ratio, child sex ratio, literacy gap and work participation gap has been recorded in the Ward no. 5, 6, 11, 12, 13 and 17. Low inequality in sex ratio, child sex ratio, literacy gap and work participation gap found in the Ward no. 4, 7, 9, 16 and 20. [Table 7, Fig. 8 and 9]

Conversely in 2011, high disparity i.e. RIPSR, RICPSR, RILG, RIWPG observed in the Ward no. 11, 12, 13, 17, 18 and 19. Low inequality has been recorded in the Ward no. 7, 8, 9, 3 and 16. [Table 7, Fig. No. 8 and 9]
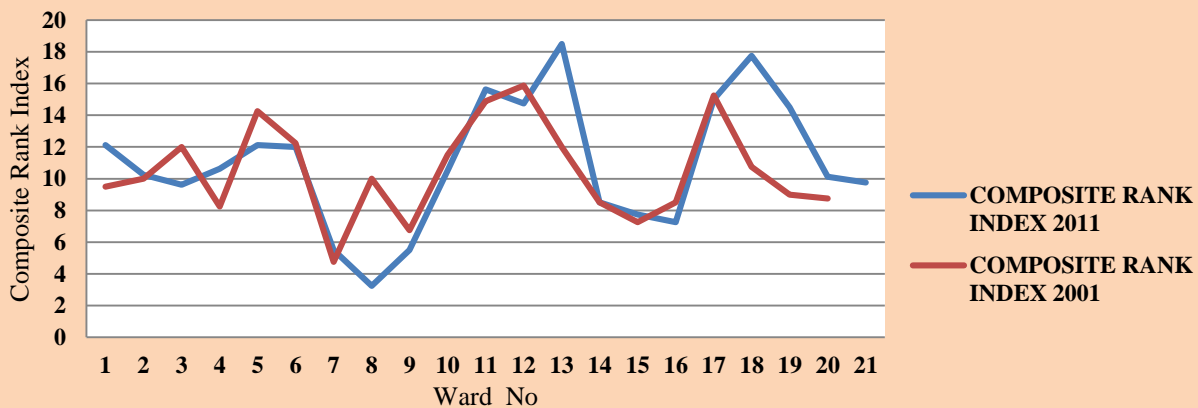


Table 7:
Composite Rank Index of Gender Disparity in Male Female Population, Literacy Rate, Child Population, Work Participation Rate, 2001 And 2011

| WARD NO | 2001 | | | | | 2011 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | RIPSR | RICPSR | RILG | RIWPG | CRI | RIPSR | RICPSR | RILG | RIWPG | CRI |
| 1 | 5 | 16 | 9 | 8 | 9.5 | 11.5 | 16 | 8 | 13 | 12.125 |
| 2 | 12 | 12 | 14 | 2 | 10 | 10 | 9 | 17 | 5 | 10.25 |
| 3 | 20 | 15 | 7 | 6 | 12 | 11.5 | 3 | 10 | 14 | 9.625 |
| 4 | 2 | 1 | 13 | 17 | 8.25 | 1 | 18.5 | 5 | 18 | 10.625 |
| 5 | 11 | 20 | 16 | 10 | 14.25 | 14.5 | 6 | 20 | 8 | 12.125 |
| 6 | 7 | 13 | 15 | 14 | 12.25 | 13 | 2 | 18 | 15 | 12 |
| 7 | 4 | 5 | 5 | 5 | 4.75 | 3 | 15 | 2 | 2 | 5.5 |
| 8 | 15 | 19 | 2 | 4 | 10 | 2 | 1 | 9 | 1 | 3.25 |
| 9 | 9 | 4 | 3 | 11 | 6.75 | 4 | 5 | 4 | 9 | 5.5 |
| 10 | 6 | 3 | 17 | 20 | 11.5 | 8 | 13 | 14 | 7 | 10.5 |
| 11 | 16 | 17 | 8 | 18.5 | 14.875 | 20 | 18.5 | 7 | 17 | 15.625 |
| 12 | 18 | 8 | 19 | 18.5 | 15.875 | 16 | 7 | 16 | 20 | 14.75 |
| 13 | 19 | 6 | 20 | 3 | 12 | 18 | 14 | 21 | 21 | 18.5 |
| 14 | 8 | 7 | 10 | 9 | 8.5 | 5 | 10 | 13 | 6 | 8.5 |
| 15 | 1 | 11 | 4 | 13 | 7.25 | 7 | 8 | 12 | 4 | 7.75 |
| 16 | 3 | 14 | 1 | 16 | 8.5 | 6 | 11 | 1 | 11 | 7.25 |
| 17 | 17 | 18 | 11 | 15 | 15.25 | 17 | 20 | 11 | 12 | 15 |
| 18 | 14 | 10 | 18 | 1 | 10.75 | 21 | 12 | 19 | 19 | 17.75 |
| 19 | 10 | 2 | 12 | 12 | 9 | 19 | 21 | 15 | 3 | 14.5 |
| 20 | 13 | 9 | 6 | 7 | 8.75 | 14.5 | 4 | 6 | 16 | 10.125 |
| 21 | | | | | | 9 | 17 | 3 | 10 | 9.75 |

Fig. 8: Composite Index of Gender Disparity in Literacy Rate, Child Population, Work Participation Rate, 2001 And 2011

Source: computed by the author based on census data of India, 2001 and 2011
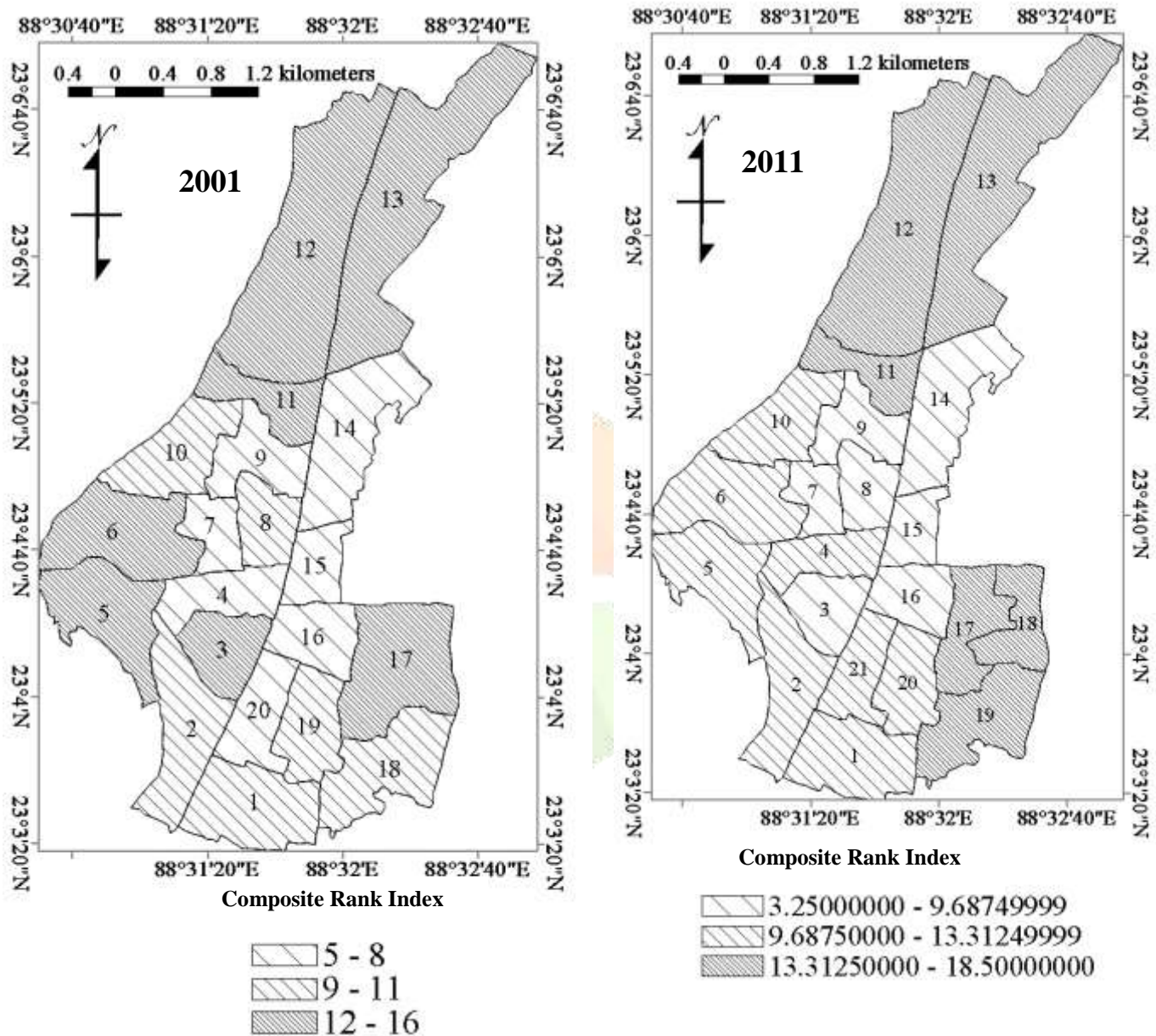


Fig. 9: Composite Rank Index of Gender Disparity in Chakdah Municipality
(Sex-Ratio, Child Sex-Ratio, Literacy Gap, Work Participation Gap in 2001 and 2011)

Source: Computed by the author based on Census of India, 2001 and 2011.

**7.7 STATUS OF WORKERS IN CHAKDAH**

**MUNICIPALITY**

Main workers in the study area create the actual Disparity in gender (Fig 10). Here clearly show male better involved in main work than female in Chakdah Municipality according to Census of India in 2011. Women play a great role in over all development and progress but their participation in decision making is very less in different field. In many cases they are not getting proper freedom in their family, and their life restricted within four walls of the houses. Although more women are assuming
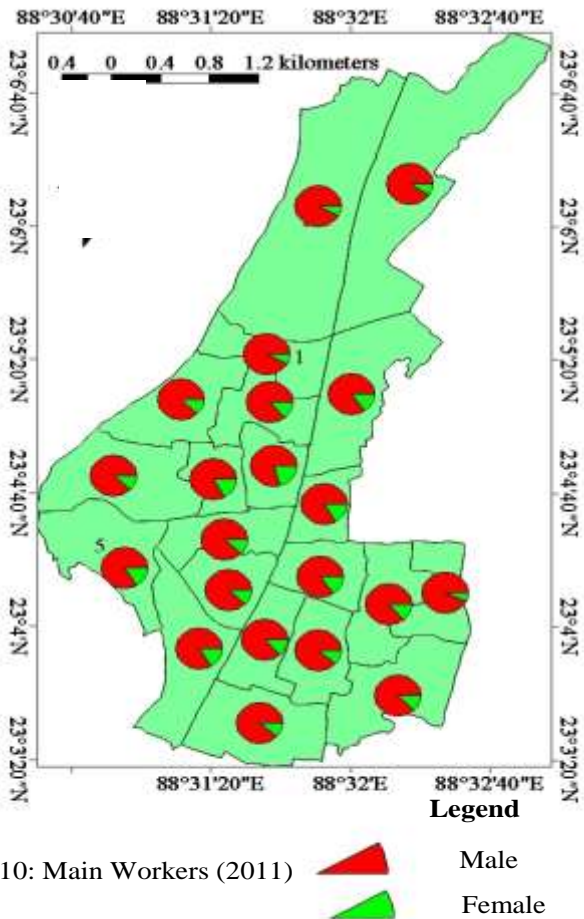


Fig. 10: Main Workers (2011)
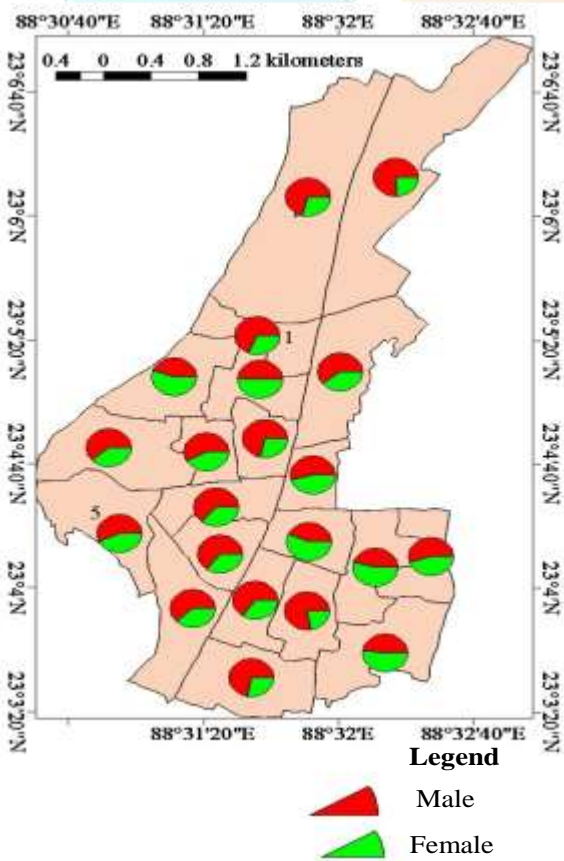


Fig. 11: Marginal Workers (2011)

Leadership roles today than before, the notion of a woman as a leader is still foreign to many individuals, male and female alike. Changes in perception are difficult to achieve because the traditional norms of leadership are firmly entrenched. In our society, as in most others, leaders have customarily been males. Here marginal work difference also found in male female population in the study area. (Fig. 11)

Source: Census of India 2011.

The changes that are occurring in the workplace are, according to Riane Eisler (1991), reflections of a larger societal transformation. Eisler describes two types of social organization models-i.e., the dominator and the partnership models. Dominator societies are marked by rigid male dominance, a generally hierarchic and authoritarian social structure, and a high degree of institutionalized violence. The partnership model is marked by more equal partnership between women and men.

Here non worker found in different ward mainly females population. (Fig. 13)
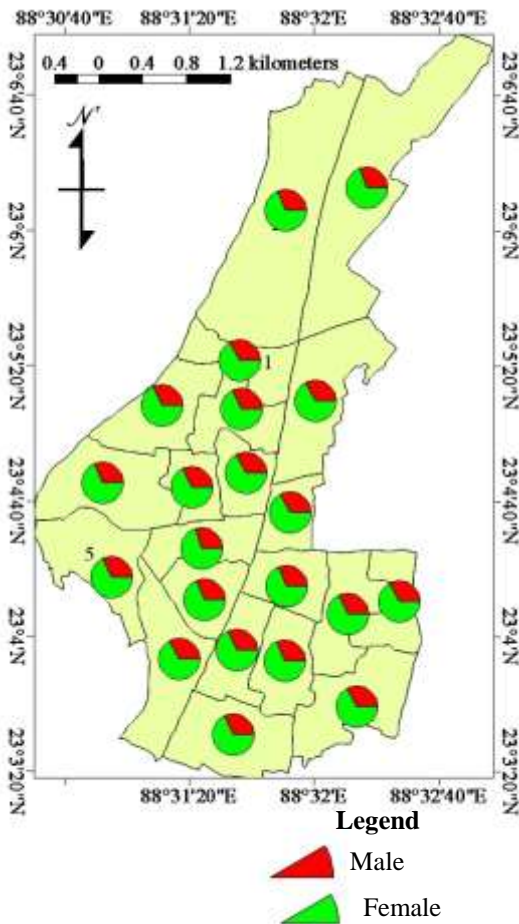


Fig. 12: Workers (2011)



Fig. 13: Non Workers (2011)



Fig. 14: Work Participation Gap

Source: Census of India 2011
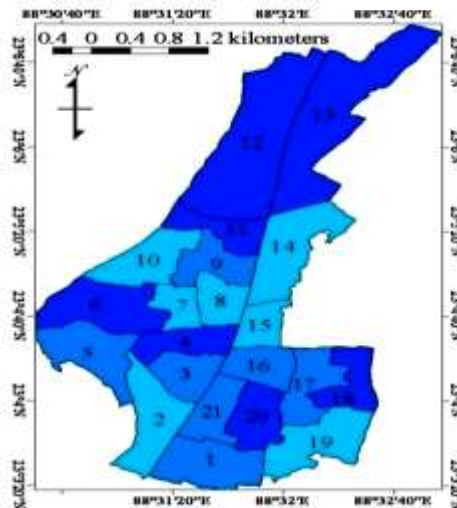
**7.8 GENDER DISPARITIES, CASE STUDIES IN SELECTED WARD NO. 4, 8 AND 13 IN CHAKDAH MUNICIPALITY**

The female sex role stereotype labels women as less competent and warmer emotionally than men, but the stereotype of the effective manager matches the masculine stereotype of competence, toughness, and lacking in warmth (Bass, 1981). Recent research (Powell & Butterfield, 1989) shows that the "good manager" is still described as masculine despite the growing number of women managers. This overlap between "good manager" and typical male has been found in other studies. Again, the inference is that "maleness" equates with leadership and "femaleness" does not.

Powell and Butterfield warn of the possible hazardous effects on one's career of deviating from the dominant management style in an organization.
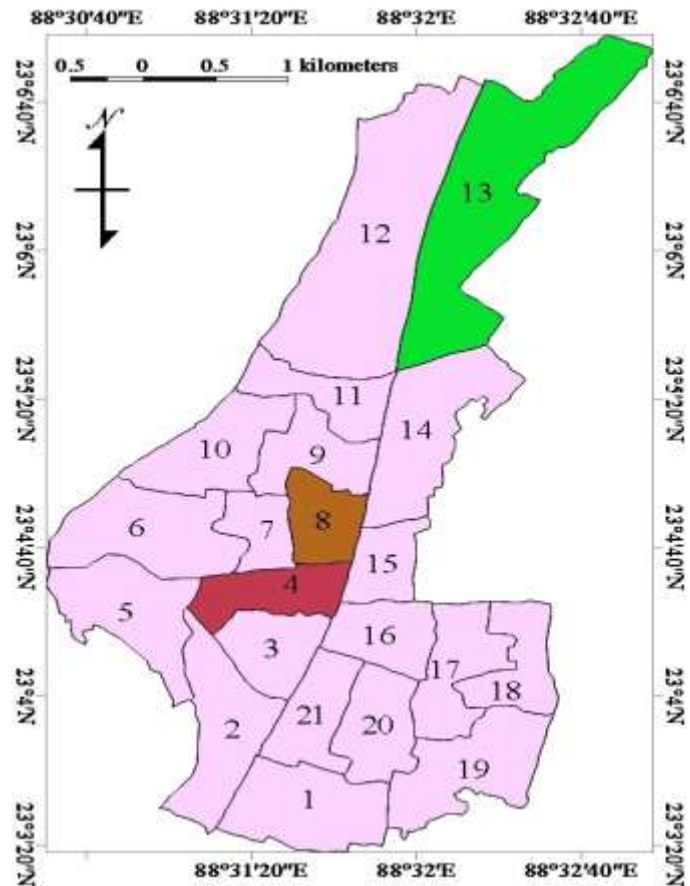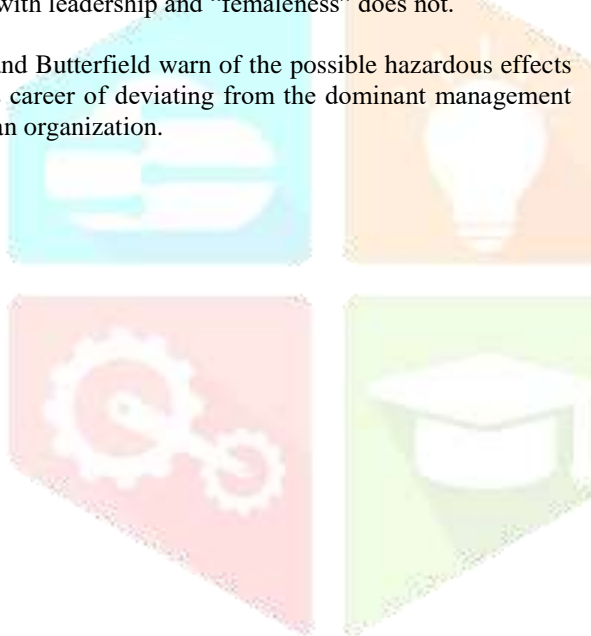


Fig. 15: Selected Sample Ward (2017)

Complicating matters is the fact that subordinates respond differently to the same behavior depending on whether it is exhibited by a male or female leader (Russell et al., 1988).

These gender stereotypes, based on historical roles, often lead to a substantial bias against women and present a major problem for those trying to function as leaders in organizations.

Finding these problem and the role of women in a society has been observed by sample survey in the ward no. 4, 8 and 13. Primary data has been collected from observations, household's survey, and personal interviews.

Table 8: Calculation Table for Lorenz Curve

| Ward No | Male Workers (X) | Female Workers (Y) | Percentage of X | Percentage of Y | % of Y (Ascending Order) | % of X (in order to % of Y) | Cumulative Percentage | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | X | Y |
| 4 | 58 | 7 | 40 | 38.89 | 16.67 | 34.48 | 34.48 | 16.67 |
| 8 | 37 | 8 | 25.52 | 44.44 | 38.89 | 40 | 74.48 | 55.56 |
| 13 | 50 | 3 | 34.48 | 16.67 | 44.44 | 25.52 | 100 | 100 |
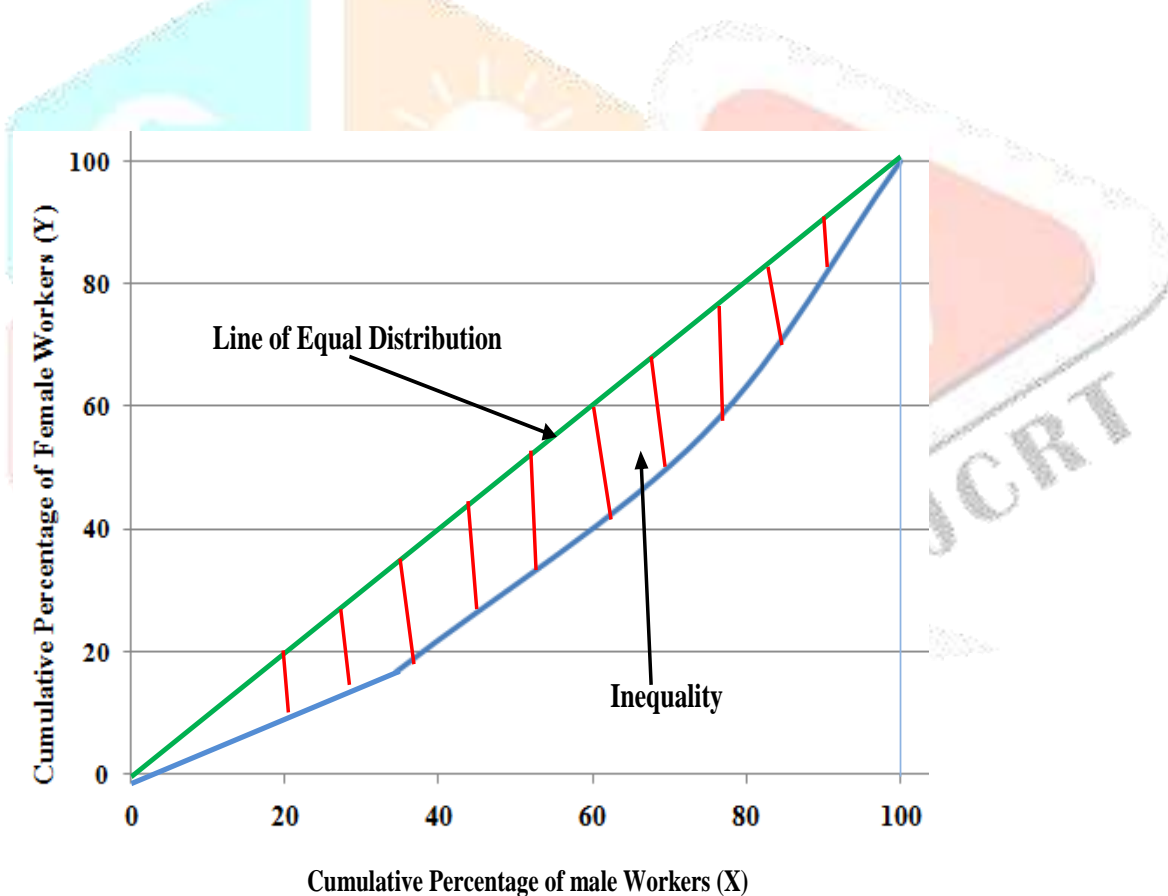


Fig. 16: Gender Inequality Represented by Lorenz Curve

Source: Field Survey in March 2017

Lorenz curve showing the inequality of workers in Chakdah Municipality. Highest male workers found in the Ward no. 4 (40%) and highest female workers identified in ward no. 8 (44.44%). Maximum work disparity is observed in the Ward no. 8 i.e. 18.92. [Table 8, Fig. 16]

Table 9: Gender Inequality in Population (2017)

| Ward No | Population | | % of Population | | Coefficient of Equality Index |
|---|---|---|---|---|---|
| | Male | Female | Male | Female | |
| 4 | 84 | 91 | 48 | 52 | 0.92 |
| 8 | 53 | 52 | 50.48 | 49.52 | 0.98 |
| 13 | 75 | 68 | 52.45 | 47.55 | 0.91 |
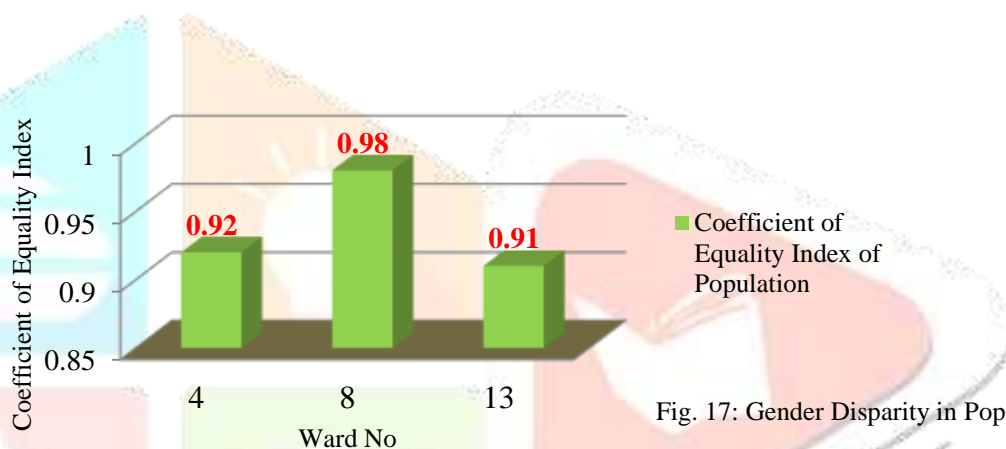


Fig. 17: Gender Disparity in Population

In the Ward no. 8 Coefficient of equality index is 0.98 i.e. low disparities .And high disparity in population is identified in the Ward no. 13 i.e. CEI value is 0.91. [Table 9, Fig. 17]

Table 10: Disparity in Child Population (2017)

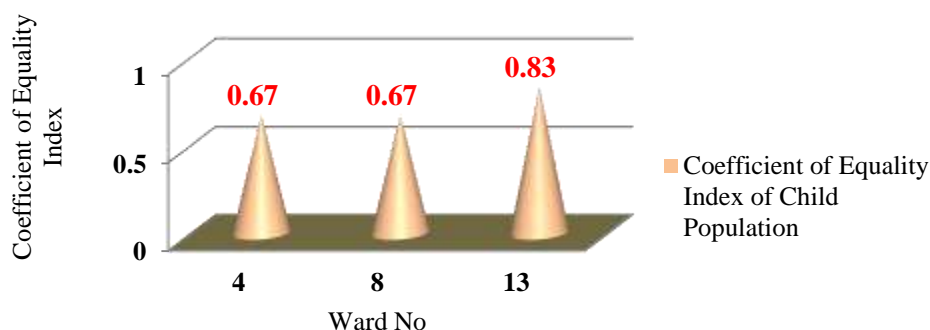| Ward No | Child Population | | % of Child Population | | Coefficient of Equality Index |
|---|---|---|---|---|---|
| | Male | Female | Male | Female | |
| 4 | 6 | 9 | 40 | 60 | 0.67 |
| 8 | 3 | 2 | 60 | 40 | 0.67 |
| 13 | 6 | 5 | 54.55 | 45.45 | 0.83 |

Fig. 18: Child Population Disparity

In child population Ward no. 4 and 8 are both same value of CEI (0.67) that's mean high disparity of child population. Conversely the low disparity in child population is observed in the Ward no. 13 (CEI = 0.83). [Table 10, Fig. 18]

Source: Field Survey March 2017.

Table 11: Literate Population (2017)

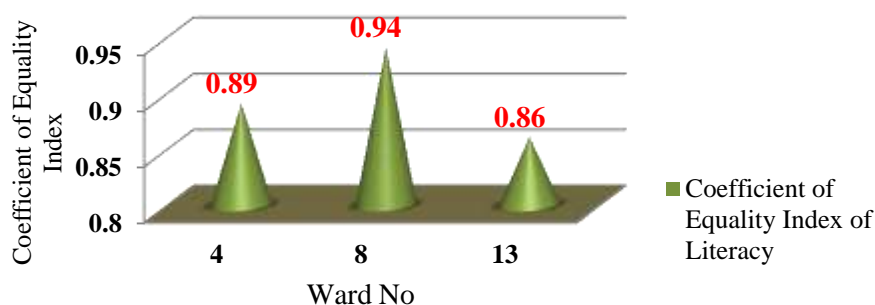| Ward No | Literate Population | | % of Literate Population | | Coefficient of Equality Index |
|---|---|---|---|---|---|
| | Male | Female | Male | Female | |
| 4 | 79 | 76 | 94.05 | 83.52 | 0.89 |
| 8 | 51 | 47 | 96.23 | 90.38 | 0.94 |
| 13 | 67 | 52 | 89.33 | 76.47 | 0.86 |



Fig. 19: Gender Disparity in Literacy Rate

High CEI value was found in the Ward no. 8 (0.94) that's mean low literacy gap in this Ward. Similarly ward no. 13 observed high disparity in literacy (CEI = 0.86) in 2015. [Table 11, Fig. 19]

Table 12: Work Population (2017)

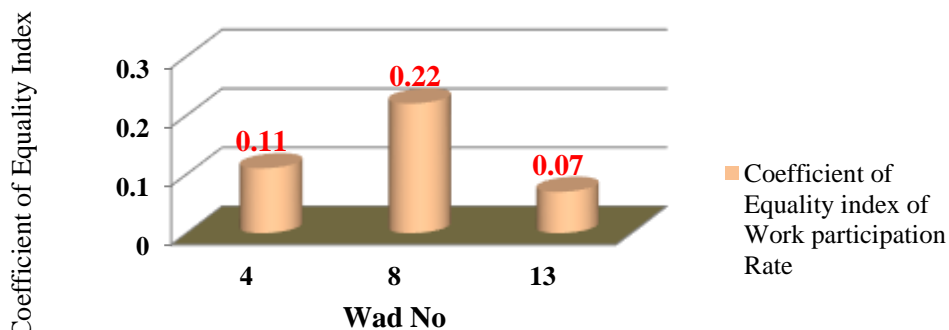| Ward No | Worker Population | | % of Worker Population | | Coefficient of Equality Index |
|---|---|---|---|---|---|
| | Male | Female | Male | Female | |
| 4 | 58 | 7 | 69.05 | 7.69 | 0.11 |

Fig. 20: Coefficient of Equality Index of Work Participation Rate

Inequality of workers is very high in Ward no. 13 (CEI = 0.07). [Table 12, Fig 20]

Source: Field Survey in March 2017.

## VIII. STRATEGY FOR REDUCTION OF GENDER DISPARITY

There is no space for complacence on the situation at hand concerning gender disparity in the Chakdah Municipality, Nadia District, in West Bengal. In term of child population in all most all the ward the gender disparity index shows a positive trend from 2001 to 2011 but in the case of female child population all the ward show a significant decrease. So, there must be a bump up in female child population through proper nutrition, health care facilities and social wakefulness. Again in the segment of literacy rate , the gender disparity index of literacy shows a momentous decrease for all the ward during 2001 to 2011, but the average female literacy rate 79.137% (2011) is significantly lower than average male literacy rate 85.286% (2011) .So, a raise in female literacy rate is urgent through the development of proper infrastructure. In connection with this process of "Alternate Learning System" (Dutta, 2001) may be useful. The gender disparity index of work participation rate also shows a lessening trend for the time period 2001 and 2011. The gender discrimination in work participation rate should be reduced through the equal distribution of occupational facilities among both genders.

### IMPROVEMENT OF FACILITIES

- ✓ Early marriages should be discouraged. Marriage customs and traditions should be changed to provide greater opportunities for educating females.
- ✓ On line programs should be launched to increase the literacy rate in higher education generally for all and particularly for females.
- ✓ Strengthening existing institutional structures in the ULB created by the various Government plans and programmes such as Swarna Jayanti Shaheri Rojgar Yojana (SJSRY),SVSKP, Prime Minister Rojgaar Yojana (PMRY), Youth Welfare schemes, schemes for minority communities, etc.

## IX. CONCLUSION

Chakdah Municipality shows an increasing trend in child population, literacy rate and work participation rate for both the male and female but silent existence of gender disparity, affects the social structure in its root. On the other hand broke rate of female work participation rate and the female literacy rate affects each other in a parallel way. Equal count of both genders eventually help in societal progress. Finally, it demands accountability or else the female population as an eminent part of society remains sterile.

## X. ACKNOWLEDGEMENT

### REFERENCES

[1] Census of India 2001 and 2011. Government of India.

[2] Desai, M. 2010. Hope in Hard Times: Women's Empowerment and Human Development. United Nations Development Programmes, Human Development Reports, Research Paper: 1-75.

[3] Drez, J. and Sen, A. 2004. Gender Inequality and Women's Agency in Reading in India Government and Politics 5: Class, Gender, Manoranjon Mohanty (Eds), Sage Publications India Pvt. Ltd, New Delhi,338-387.

[4]  Dutt, S. 2010. Girls Education as Freedom in Indian Journal of Gender Studies, Sage Publications in India, New Delhi, 14(1): 25-48.

[5]  Garrett, J.H.E. 2001. Bengal District Gazetteers, Nadia, Published by K.R. Biswas (IAS), Kolkata, 1-256.

[6]  Gaye, A., Klugman, J., Kovacevic, M., Twigg,S. and Zambrano, E. 2010. Measuring Key Disparities in Human Development: The Gender Inequality Index. Published by United Nations Development Programmes, Human Development Reports, Research Paper, 2010/46, 1-37.

[7]  Gupta, K. and Kishor, S. 2004. Women Empowerment in India and its status. Economic and Political Weekly, 694-707.

[8]  Kundu, A. and Rao, J.M. 1986. Inequality in educational development: Issue in measurement, changing structure and its socio-economic correlation with special reference to India in Raja, M. (Ed.), Educational Planning: A long term perspective, New Delhi, NIEPA and Concept Publishing Company, 435-466.

[9]  Nangia, S. 2006). Presidential Address: Women Empowerment and Gender Equity, Anals, 26(1).

[10] Parsons, T. and Knight, P. G. 2005. How to do your Dissertation in Geography and Related Disciplines, Routledge (Taylor and Francis Group), London and New York.

[11] Sopher, D.E. 1974. Measurement of Disparity, the Professional Geographers, 26(4): 389-392.

[12] Suman, A.K. 2009. Empowerment of Women in India some critical issues, Published by Department of Physiology and religion, Faculty of Arts, 16: 71-76.