

GENDER GAP IN ASSAM: A SOCIO-DEMOGRAPHIC ANALYSIS

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ABSTRACT

Gender inequality at household and societal level is considered to be important factors that create the socio-demographic disparities in a society or in a family. In developing societies like Assam gender inequality seems to be an acute and persistent problem. In this paper the gender gaps pertaining in education and demographic indicators of Assam has been illustrated. Gender gap in education is considered to demonstrate the social disparities in Assam. Here, Gender Crude Literacy Rate, Gender Education Index, Gender Equity Education index calculated by Sarmah and Hazarika [2015] has been presented. Also Sex Ratios, IMR, MMR etc are considered to indicate the disparities in the demographic indicators.

KEYWORDS: Gender Inequality, Educational Disparities, Sex Ratio, MMR, IMR Etc

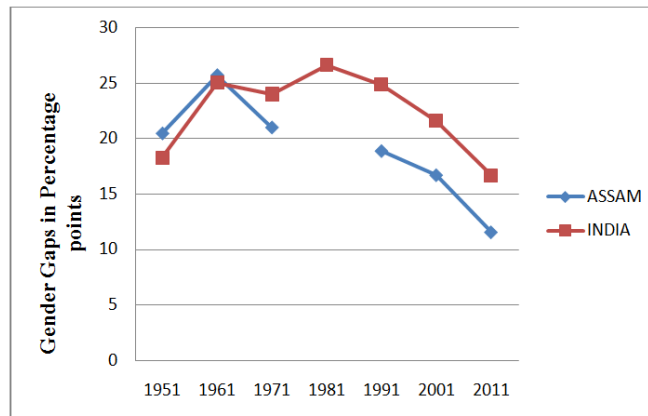
INTRODUCTION

Mason's [1997] concept of gender system is considered as the most vital definition of gender in demographic study. He states "gender systems prescribe a division of labour and responsibilities between men and women and grant different rights and obligations to them". Gender system is the amalgam of two folds namely gender roles and gender equity or inequality. The gender inequality or gender gap is the basic interest of the present study.

The disparities between men and women are termed as gender gap. Strong son preference ideological family processes are supposed to play a vital role in creating gap between men and women. Entwisle et al. [1994, 1997] argue that families typically give young boys more independence than young girls. Nancy Lopez's [2003] ethnographical study of low-income, second generation Dominican, West Indian and Haitians similarly produced evidence that parents give more independence to boys and exert more social control on girls. According to Das and Pathak [2012] gender disparities in India deserve a serious study and discussion among media, academia, researchers and policy maker of country. The Economic Survey [2011-12] has emphasized that much needs to be done to reduce disparities between men and women.

Educational Gender Gap in Assam

The gender gap in literacy rate in Assam during 1951 to 2011 is shown in the following figure1 comparing these values with national figures.



Source: Census Report 2011.

Figure 1: Gender Gaps in Literacy Rate 1951-2011

The Figure 1: shows a huge inequality in literacy rate between men and women in Assam since 1951 to 2011. According to Sarmah and Hazarika [2015] the gender gap in literacy has been reduced but still not attaining zero gap or equal literacy in Assam. The gender gap in literacy in Assam was maximum with 25.66 percentage points in the year 1961 and then has been reducing slightly with present gap 11.54 which is 5.14 percentage points less than the current national figure 16.68.

Crude Female Literacy Rate 2011 for Assam Calculated by Sarmah and Hazarika [2015] is

$$CFLR \text{ for Assam 2011} = \frac{\text{Number of female literate}}{\text{Total female}} \times 100 = 57.51$$

Crude Male Literacy Rate 2011 for Assam Calculated by Sarmah and Hazarika [2015] is

$$CMLR \text{ for Assam 2011} = \frac{\text{Number of male literate}}{\text{Total male}} \times 100 = 67.42$$

On the basis of the census 2011, Sarmah and Hazarika [2015] observed that there is 9.91 percent gender gap in the crude literacy rate.

Gender Education Index

In this subsection of the study we have presented two education indices separately for male and female as proposed by Sarmah and Hazarika [2015]. According to them these education indices measure the state's achievement in both literacy and gross enrolment rate.

- Female Education Index:

$$\frac{2}{3}(0.6727) + \frac{1}{3}(0.7400) = 0.6952$$

- Male Education Index:

$$\frac{2}{3}(0.7881) + \frac{1}{3}(0.7000) = 0.7587$$

Sarmah and Hazarika [2015] observed that the female education index is smaller than the male counterpart. They estimated that gender gap in education index is 0.0635. This reveals that women education in the state is still lacking behind male education.

Gender Equity Education Index

According to Sarmah and Hazarika [2015] this measure of education index is the sub index of gender-related development index (GDI) which measures the average achievement to reflect the inequalities in literacy between men and women. The value of gender equity education index (GEEI) is lies between 0 and 1. If its value is zero then we mean there is maximum inequality between men and women and if 1 then there is no inequality that is equal education achieved for men and women.

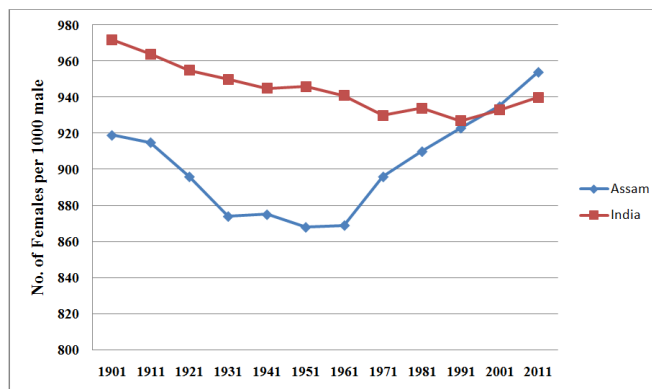
Gender Equity Education Index for Assam according to census 2011 is given by

$$GEEI = \{[0.4881 (0.6952)^{-1}] + [0.5119 (0.7587)^{-1}]\}^{-1} = 0.7263$$

This reveals that the literacy in Assam is not still equally distributed irrespective of men and women. The equal education for men and women will be achieved only when gender equity education index approaches to unity.

Gender Gap in Demographic Indicators

Sex Ratio and Child Sex Ratio are two important demographic indicators for measuring gender inequality in a population. Sex Ratio is defined as the number of females per thousand males in the given population. The Child Sex Ratio is calculated for the age group 0-6 years. Important set back of the census 2011 is that Gender inequality pertaining in these basic demographic characteristics. According to this census, the sex ratio in Assam is 954 against the national average 940. This is an improvement over the Sex Ratio in 2001 by 7 points of all Indian average and for Assam this improvement is of 22 points. The Sex Ratio in India has been historically negative or in other words unfavorable to the females. In the following Figure 2 we have present the trends of Sex Ratio in Assam and compare it with the national figures since 1901 to 2011.



Source: Indian Census Report.

Figure 2: Sex Ratio in Assam and India Since 1901 To 2011

Here the Sex Ratio in Assam for the year 1981 is calculated using Newton’s backward interpolation formula because in this year census was not conducted in Assam. From the figure 2 we have observed that the Sex Ratio in India has been continuously decreasing since 1901 to 2001 excluding one point increment in 1951 than the 1941. But a small

improvement is seen in the year 2011 by 7 points than that in 2001. In case of Assam we found up and downs on this ratio for various census years. The Sex Ratio for the state and the nation was almost coinciding in the census 2001 but state's Sex Ratio is enhanced by 14 points than the national figure in the year 2011. This is the positive sign but not satisfactory till today.

Assam among Its Neighbors in Sex Ratio

The present trend in sex ratio in the neighboring states of Assam is summarized in the following table1

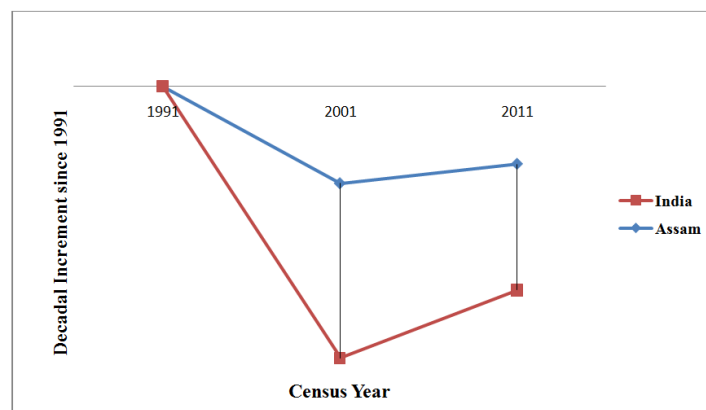
Table 1: Assam among its Neighbors in Sex Ratio

| States | 2001 Census | 2011 Census |
|-------------------|-------------|-------------|
| Arunachal Pradesh | 875 | 889 |
| Assam | 934 | 954 |
| Nagaland | 900 | 931 |
| Meghalaya | 972 | 986 |
| Manipur | 974 | 987 |
| Tripura | 948 | 962 |
| Mizoram | 935 | 975 |

Source: Census 2011

The present trend in sex ratio observed from the above table1, the immediate neighbors of Assam reveals a mixed picture. Mizoram (975), Meghalaya (986) and Manipur (987) have more females in their population on the other hand all other state's Sex Ratio shows females are more dominated than men in the respective states.

The Child Sex Ratio is the number of female children per 1000 male children in the age group 0-6 years. This important demographic indicator of measuring future population structure of our nation is significantly decline to touch the lowest level since independence in 2011 with 914 female per 1000 male children. Also Child Sex Ratio in Assam shows a significant decline from 975 in 1991 to 957 in 2011. This reveals that there is a strong son preference attitude in the state mostly encouraged after development of sex detecting technologies. It is an indicator of female foeticide is being practiced on a large scale and thus a lesser number of girl children are being allowed to born, survive, develop and grown into healthy (?) and productive citizens of our state. The child sex ratio is continuously decreasing in Assam since 1991. The decadal increment in Child Sex Ratio since 1991 in Assam comparing with its national counterpart is given in the following figure 3.



Source: Indian Census Report

Figure 3: Decadal Increment in Child Sex Ratio Since 1991 in Assam and Compared with National Figures

From the Figure 3, we have observed that the negative increment is found in all the census years for both Assam as well India. In 2001 census there is an -10 points increment is observed in child sex ratio in Assam than 1991 census and in India this increment is -18. Similarly in 2011 there is an -8 points increment is observed in Child Sex Ratio in Assam whereas -13 points increment is observed for the national figure as compared to census 2001.

Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) are two demographic indicators closely related to gender issues. According to SRS bulletin 2011, IMR in Assam is 58 per 1000 live births against 47 for the country as a whole. The IMR in Assam has reduced considerably after the year 2000. In 2000, the IMR for the state was 74.5 against the all Indian average 67.8 per thousand live births. Despite a marginal reduction in the IMR by 3 points from 61 per thousand live births in 2009 to 58 per thousand live births in 2010, Assam continues to rank among the four highest IMR states in the country, next only to Madhya Pradesh (IMR 62), Uttar Pradesh and Orissa (IMR 61). IMR in Assam is worryingly biased towards female child with 60 per 1000 live births then 56 per 1000 live births for male child. Four points gender gap in IMR for Assam is observed.

As per the SRS bulletin (July 2011) the Maternal Mortality Ratio (MMR) in Assam (2007-09) of 390 per 100000 live births is the highest in the country corresponding to national figure 212 per 100000 live births. Kerala having 81 per 100000 live births is the most maternal healthy state and Assam with MMR 390 is the lowest maternal healthy state in the nation.

Correlation between Gender Gap in Literacy and Sex Ratio in Assam

In the study of relationship between gender gap in literacy and sex ratio in Assam for various census years Sarmah and Hazarika [2015] found negative correlation about -0.89. They establish the fact that as gender gap in literacy increases sex ratio is decreased. The calculated value of t statistic and probable error for the observed correlation coefficient found by Sarmah and Hazarika [2015] is presented in the following table2.

Table 2: Correlation between Gender Gap in Literacy and Sex Ratio in Assam

| Correlation Coefficient | T-Statistic | Probable Error |
|-------------------------|----------------|----------------|
| -0.89 | $ t = 4.6343$ | 0.0530 |

DISCUSSIONS & CONCLUSIONS

The social thinking, perception, values etc are changed with enhancement in educational level of a society. Educational improvement increases earnings and eliminates the discrimination between men and women at individual and societal level. Thus education is the prime factor that eliminates the gender disparities. According to Sarmah and Hazarika [2015] a huge gender disparities in educational level has been pertaining in the state Assam.

Sex Ratio and Child Sex Ratio are two important demographic indicators for measuring gender inequality in a population. According to census 2011, the sex ratio in Assam is 954 against the national average 940. This is an improvement over the Sex Ratio in 2001 by 7 points of all Indian average and for Assam this improvement is of 22 points. The Sex Ratio for the state and the nation was almost coinciding in the census 2001 but state's Sex Ratio is enhanced by 14 points than the national figure in the year 2011. This is the positive sign but not satisfactory till today.

The Child Sex Ratio is the number of female children per 1000 male children in the age group 0-6 years. This important demographic indicator of measuring future population structure of our nation is significantly decline to touch the

lowest level since independence in 2011 with 914 female per 1000 male children. Also Child Sex Ratio in Assam shows a significant decline from 975 in 1991 to 957 in 2011. This reveals that there is a strong son preference attitude in the state Assam.

The people of both the sexes are equally vital in civilization of a community or a country. So to maintain a balanced society, both men and women should avail the equal status in all spheres of their life. Special importance to be given in women education so that the strong son preference attitude will minimize and reduces the gender gap pertaining in Assam

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