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### **An Analysis on Gender Disparity in Work Force Participation in India with Special Reference to Assam**

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#### **ABSTRACT**

Gender equality and women's empowerment are important factors for the social and economic development of a nation. The Indian labour market displays several striking features: very low rates of female labour force participation; considerable variance in rates of female labour force participation across Indian states; and a large share of both women and men working in the informal sector. The paper at first shows the trend of gender disparity in employment in India and in Assam and then a comparison is made between Assam and India. It has been shown that the gender disparity has increased over time both in Assam and India and the gap has not vanished. The situation of Assam is no good when compared to India as a whole.

**KEY WORDS:** gender disparity, economic empowerment, disparity index.

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## **1. INTRODUCTION**

India's labour market is highly dualistic in nature, with a small minority of organized formal workers (7% of the total work force) and a clear majority in unorganized informal sector including those engaged in agriculture as low paying subsistence workers. Female workers largely belong to the latter group which is more susceptible to economic shocks. The decline in female employment in the second half of the decade reflects their declining numbers in agriculture, unorganized sector and those engaged as self-employed

Rural women and girls have many roles and many responsibilities. They are farmers, care-givers, wage labourers and micro-entrepreneurs and they often spend many hours fetching water and collecting firewood. The empowerment of women is fundamental to reduce poverty, hunger and malnutrition. Gender equality and women's empowerment are important factors for the social and economic development of a nation.

A look at the economic development sector indicates that, official data does not reflect the amount of work that women do to enable their families to survive, collecting fuel, fodder or water, keeping poultry, working as unpaid labour on family farms. Women also work in home-based industries, and agarbatti-rolling, bangle-making, weaving, etc. without social security benefits and are lowly paid for this informal work which forms an important part of the family's income. One-third of agricultural workers are women and many crops depend on extensive labour provided by agricultural labour, yet when it comes to wages, on an average, their wages are 30% lower than men's wages.

The Twelfth Plan endeavoured to increase women's employability in the formal sector as well as their asset base. It aims to improve the conditions of self employed women with a focus on women's workforce participation particularly in secondary and tertiary sectors, reaching out to women in agriculture and manufacturing, financial inclusion, and extending land and property rights to women. One of the major impediments affecting women's participation in the workforce is the lack of skills. The Twelfth Plan envisages a major scaling up of skill development to promote skill development of women from traditional skills to emerging skills, which help women break the gender stereotypes and move into employment requiring higher skill sets.

The Global Gender Gap measure was introduced by the World Economic Forum to examine four critical areas of inequality between men and women:

- Economic participation and opportunity – outcomes on salaries, participation levels and access to high-skilled employment
- Educational attainment – outcomes on access to basic and higher level education

- Political empowerment – outcomes on representation in decision-making structures
- Health and survival – outcomes on life expectancy and sex ratio

The Gender Gap Index assesses countries on how well they are dividing their resources and opportunities among their male and female populations, regardless of the overall levels of these resources and opportunities. India ranks 123 in terms of economic participation, 121 in educational attainment, 134 in health and survival and 17 in political empowerment.<sup>1</sup>

Out of 131 countries, India is placed 11th from the bottom in female labour force participation. The Global Gender Gap data on 135 countries shows that women's economic participation and opportunity is worse in India than in 95 per cent of all other countries studied. India is ranked below many sub-Saharan African countries in the UN Gender Inequality Index. Global Gender Gap Index 1 ranks India 105 out of 135 countries. India ranks 123 in gender gaps in economic participation and opportunity, and labour force participation rates for males and females, 121 in gender gaps in educational attainment, and the worst, rank 135, in differences between women's and men's health. Clearly, India has a long way to go in order to enhance women empowerment, achieve gender equality. Ensuring economic independence for women by creating decent and productive employment and entrepreneurship opportunities is needed for a larger and more meaningful role of women in the society.

The Indian labour market displays several striking features: very low rates of female labour force participation; considerable variance in rates of female labour force participation across Indian states; and a large share of both women and men working in the informal sector. The literature on female labour force participation in India has traditionally focused on how demographic characteristics and educational attainment affect the labour force participation decisions of women.

Although gender disparity is often understood as maltreatment against female, but interpreting gender disparity in such a sense is like having a very narrow view of the concept. Gender disparity refers to inequality between males and females in any spheres of life and unequal treatment may be faced by both males and females though the situation is more serious for females. According to Amartya Sen (2001), gender inequality is not one homogeneous phenomenon, but a collection of disparate and interlinked problems<sup>2</sup>

The Twelfth Plan endeavoured to increase women's employability in the formal sector as well as their asset base. It would improve the conditions of self employed women. Focus was on women's workforce participation particularly in secondary and tertiary sectors, ensuring decent work for them, reaching out to women in agriculture and manufacturing, financial inclusion, and extending land and property rights to women.

One of the major impediments affecting women's participation in the workforce, particularly in secondary and tertiary sectors, is the lack of skills. The Twelfth Plan envisaged a major scaling up of skill development from traditional skills to emerging skills, which help women break the gender stereotypes and move into employment requiring higher skill sets. Training of women as BPO employees, electronic technicians, electricians, plumbers, sales persons, auto drivers, taxi drivers, masons, and so on has been incorporated in the skill development programmes. Skill development would be seen as a vehicle to improve lives and not just livelihoods of women.

Women can be powerful change agents. Empowering poor rural women involves three critical and interrelated dimensions: expanding access to assets such as capital, land, knowledge and technologies; strengthening decision-making and their representation in community affairs; and improving women's well-being and lessening their workloads.

The lack of basic amenities affects women more than men, as women are often responsible for a larger share of time-consuming household activities. Better electricity and access to water and sanitation may reduce the burden of women in providing essential household inputs for their families, and allow for more time to be directed toward entrepreneurial activities. Employment in both the public sector and private sector, the number of male employees (749493 in 2012) outnumber their female counterparts (370991 in 2012).<sup>3</sup>

Thus through this paper an attempt has been made to emphasize the level of employment rate between males and females particularly in the economic spheres of life with the help of indicator such as worker population ratio. The paper at first shows the trend of gender disparity in employment in India and in Assam and then a comparison is made between Assam and India. It has been shown that the gender disparity has increased over time both in Assam and India and the gap has not vanished. The situation of Assam is no good when compared to India as a whole.

## **2. OBJECTIVES OF THE STUDY**

The objectives of the study are as follows

1. To examine the trend of work force participation in Assam between the male and female population of the state.
2. To compare gender disparity of Assam with gender disparity of India with regards to work force participation.

## **3. DATA SOURCE AND METHODOLOGY**

The study is based on secondary data. Secondary data were collected from various sources like the Economic Survey of Assam, Statistical Handbook of Assam, reports of the various rounds of the National Sample Surveys on employment and unemployment, Publications of the state

Planning & Development Department etc. The information so collected has been analysed by focussing attention on the changing trend, nature and pattern of employment among the male and female population in our country in general and the State of Assam in particular.

The gender disparity in employment is assessed through Worker Population Ratio i.e. number of persons/person-days employed per 1000 in usual status [principal status (ps) and subsidiary status (ss)] The usual status, determined on the basis of the usual principal status and usual subsidiary economic activity of a person taken together, is considered as the usual activity status of the person and is written as usual status i.e. principal status plus subsidiary status (ps+ss). Accordingly to the usual status (ps+ss), the workers are those who perform some work activity either in the principal status or in the subsidiary status. Thus, a person who is not a worker in the usual principal status is considered as worker according to the usual status (ps+ss), if the person pursues some subsidiary economic activity for 30 days or more during 365 days preceding the date of survey.<sup>4</sup>

To validate the disparity derived from the analysis, an attempt has been made to measure the gender disparity with a Disparity Index. Measuring disparity between two mutually exclusive subsets of population has been an overriding problem. It tends to pose serious methodological problems. However, a number of indices have been developed to measure both absolute and relative disparity.

In this study, the Disparity Index developed by Kundu and Rao (1985)<sup>5</sup> as described by Alam and Raju (2007)<sup>6</sup> is used to measure the disparity between the male and female.

The index is as follows:

$$\text{Disparity Index} = \log \left( \frac{X_2}{X_1} \right) + \log \left( \frac{200 - X_1}{200 - X_2} \right)$$

Where  $X_2 \geq X_1$

and  $X_2$  and  $X_1$  are the value of the two groups between which disparity is calculated. Larger the value, greater is the disparity. Negative value indicates that the reference category has lower value of disparity than that of the group with which comparison has been done. Here, in case of employment indicators, high values are favourable (e.g. high WPR is favourable) and therefore, the reference category is male (as high values are generally seen for males).

#### **4. DISCUSSION**

The gender gaps with respect to employment in rural and urban areas have been discussed as follows.

Women, as half of the human capital of India, will need to be more efficiently integrated into the economy in order to boost India's long term competitive potential. The census does not accurately identify many activities as work that women actually do to enable their families to survive

e.g. collecting fuel, fodder or water, keeping poultry, working on family land etc. Women find it difficult to get credit from banking institutions because they are often unable to provide collateral. They get much smaller loan amounts even though their repayment record is much better than that of men. Women's right to land and other assets is weak. Though legislation has been introduced to ensure that women share equally in ancestral property, enforcing such rights in a patriarchal society requires resources that poor women may not have. The work participation rate and gender gaps have been presented in the following table

### ***Extent of Gender Gap in Employment in India***

The extent of gender gap in employment can be observed from Table 1 and Table 2. The table shows the WPRs in usual status (ps+ss) during 50th (1993-94) and 68th (2011-2012) rounds of NSSO in India for both rural and urban areas. It is clear from Table 1 that male working population is quite higher than female during all the periods. In 50th round both male and female working population were 553 and 328 per 1000 population respectively resulting in a gender gap of (-225) and a value of Gender Disparity Index of 0.29 for the rural areas in India as against 521 and 155 male and female in the urban areas for the same period with gender gap of (-366) and gender disparity index of 0.62. Again during 55<sup>th</sup> round the males' employment further decreased to 531 per 1000, the females' ratio also decreased and was only 299 with a gender gap of (-232) and a Disparity Index of 0.31. During the next two periods i.e. 61st and 66th the males' working population were estimated to be 546 and 547 and females ratio were estimated at 327 and 261 respectively for rural areas. This shows a decrease in gender gap to (-219) and then an increase to (-286) respectively. Likewise the Disparity Index also decreased to 0.28 and then increased to 0.4 respectively for rural areas in India. The 68<sup>th</sup> round reveals that the working population amongst male and female is 543 and 248 respectively with a gap of (-295) and gender disparity index of .42 for rural areas as against 546 and 147 for male and female in urban area with a gap of (-399) and a gender disparity index of 0.68.

**Table 1: Gender Gap in working population in India (in per thousand population)**

Round (year)	Rural				Urban			
	Male	Female	Gender Gap	Value of Gender Disparity Index	Male	Female	Gender Gap	Value of Gender Disparity Index
68th (2011-12) <sup>7</sup>	543	248	-295	0.42	546	147	-399	0.68
66th (2009-10) <sup>8</sup>	547	261	-286	0.4	543	138	-405	0.7
61st (2004-05) <sup>9</sup>	546	327	-219	0.28	549	166	-383	0.62
55th (1999-00) <sup>10</sup>	531	299	-232	0.31	518	139	-379	0.67
50th (1993-94) <sup>11</sup>	553	328	-225	0.29	521	155	-366	0.62

Calculations made on the basis of WPRs in usual status (ps+ss) during 50th (1993-94) and 68th (2011-2012) rounds of NSSO

### ***Extent of Gender Gap in Employment in Assam***

The table shows the WPRs in usual status (ps+ss) during 50th (1993-94) and 68th (2011-2012) rounds of NSSO in Assam for both rural and urban areas.<sup>12</sup> In 50th round both male and female working population were 516 and 159 per 1000 population respectively resulting in a gender gap of (-357) and a value of Gender Disparity Index of 0.6 for the rural areas in India as against 528 and 92 male and female in the urban areas for the same period with gender gap of (-436) and gender disparity index of 0.87. Again during 61<sup>th</sup> round the males' employment further increased to 551 per 1000, the females' ratio also increased and was 209 with a gender gap of (-342) and a Disparity Index of 0.51. During the next two periods i.e. 66 and 68 the males' working population were estimated to be 553 and 540 and females ratio were estimated at 158 and 122 respectively for rural areas. This shows an increase in gender gap to (-395) and (-418) respectively. Likewise the Disparity Index also increase to 0.65 and 0.76 respectively for rural areas in Assam. The 68<sup>th</sup> round reveals that the working population amongst male and female is 542 and 90 respectively with a gap of (-452) and gender disparity index of .0.9 for urban areas in Assam. It is clear from Table 2 that male working population is quite higher than female during all the periods

**Table 2: Gender Gap in working population in Assam (in per thousand population)**

Round (year)	Rural				Urban			
	Male	Female	Gender Gap	Value of Gender Disparity Index	Male	Female	Gender Gap	Value of Gender Disparity Index
68th (2011-12)	540	122	-418	0.76	542	90	-452	0.9
66th (2009-10)	553	158	-395	0.65	528	93	-435	0.87
61st (2004-05)	551	209	-342	0.51	551	109	-442	0.82
50th (1993-94)	516	159	-357	0.6	528	92	-436	0.87

Calculations made on the basis of WPRs in usual status (ps+ss) during 50th (1993-94) and 68th (2011-2012) rounds of NSSO

**Comparison of Gender Gap in Working Population between Assam and India**

We can compare the gender gap in working population between Assam and India from Table 1 and Table 2 itself. Just like Assam the working population of males of India is higher than females for all the Rounds of NSSO. Except during 61<sup>st</sup> Round the working population has shown a downward trend in almost all periods for both rural areas and urban areas in males and females. Now turning to gender gap it is found that during 50<sup>th</sup> round the gender gap of India for rural and urban areas [(-225) and (-366) respectively] were lower than Assam [(-357) and (-436) respectively]. During the remaining periods also the gender gap in India is lower than Assam. Similarly, the value of Disparity Index of India except during 61<sup>st</sup> round the gender disparity has shown an upward trend in Assam and also for India.

**Table 3 Value of Gender Disparity Index all India**

Round (year)	Rural	Urban
	Value of Gender Disparity Index	Value of Gender Disparity Index
68th (2011-12)	0.42	0.68
66th (2009-10)	0.4	0.7
61st (2004-05)	0.28	0.62
50th (1993-94)	0.29	0.62

**Figure 1 Value of Gender Disparity Index all India**

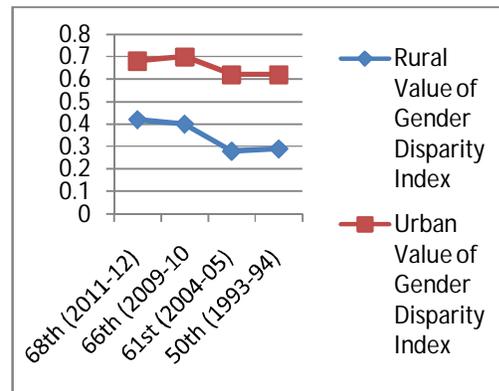


Table 4 Value of Gender Disparity Index Assam

Round (year)	Rural Value of Gender Disparity Index	Urban Value of Gender Disparity Index
68th (2011-12)	0.76	0.9
66th (2009-10)	0.65	0.87
61st (2004-05)	0.51	0.82
50th (1993-94)	0.6	0.87

Figure 2 Value of Gender Disparity Index Assam

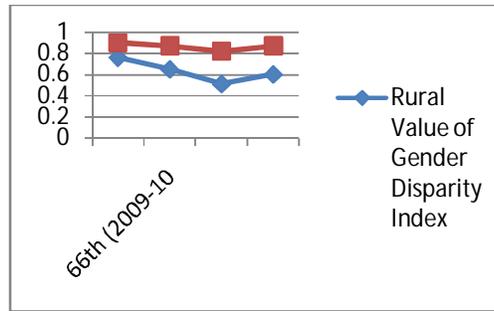


Table 5 Distribution of employed people by category of employment in India and Assam according to the 68<sup>th</sup> Round NSS

68 RoundNSS, per 1000 distribution of usually employed by category of employment				
Region		Self employed	Regular wage/salaried employees	casual labour
Rural Male	Assam	711	104	185
	India	545	100	355
Rural Female	Assam	639	172	180
	India	593	56	351
Urban Male	Assam	556	352	98
	India	417	434	149
Urban Female	Assam	467	444	78
	India	428	428	143

Source- Employment and Unemployment Situation in India NSS 68th ROUND

From the table we can notice that the number of Males is higher for most of the categories of employment in both Assam and India. But its only in case of the Regular wage/salaried employees that then umber of female outnumber the male population . The Diagrammatic Representation of the data from the above ( table5) is as follows

Figure 3a

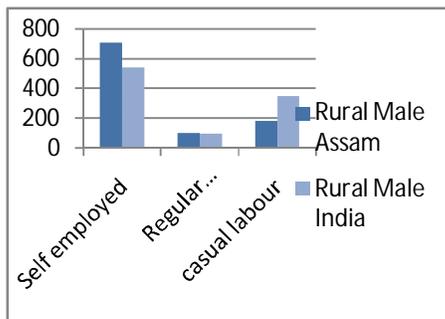
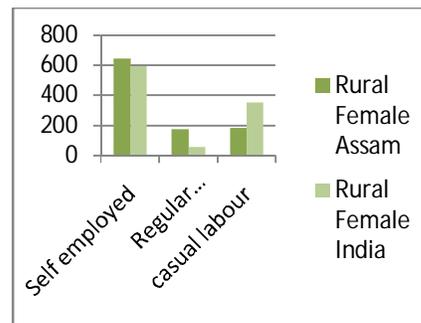
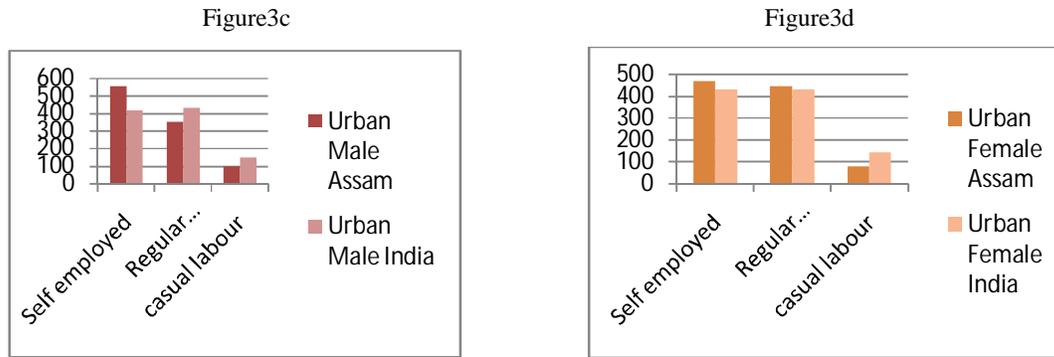


Figure 3b





Distribution of employed people by category of employment in India and Assam according to the 68<sup>th</sup> Round NSS

### Stylized Facts

The following stylized facts emerge from the data:

- Female work force participation rates vary widely between urban and rural areas
- There is also a growing gap between male and female work force participation rates
- Women in rural areas are more likely than women in urban areas to be employed; but the reverse is true for men.

## 5. IMPLICATIONS

The sharp decline in female employment in the last decade has baffled policy makers. Although the gradual decline in female labour force and work force participation rates has been an observable phenomenon for the last three decades, but the sharp decline in female employment in the second half of the last decade – a decade of rapid economic growth has raised concerns among the policy makers regarding gender equality, women empowerment, and women livelihood strategies. It has also raised concerns about inclusion of women in the growth process. In his speech to the Indian Labour Conference on 14 February 2012, Prime Minister Manmohan Singh stated that: ‘One of the most under-utilized resources in our country is our women. Female labour force participation rates are extremely low in our country and have remained more or less constant over the past decades. In order to bring more women into the work force, it is necessary to understand the constraints that they face in balancing their family and work responsibilities.’

Gender equality is considered a critical element in achieving social and institutional change that leads to sustainable development with equity and growth. Inequalities between men and women manifest themselves in all areas of development. Inequalities are most obvious in: health and education, economic development, violence against women, participation in public life and policymaking and social attitudes and gender stereotyping.

## **6. CONCLUSION**

Female labour force participation in India is lower than many other emerging market economies, and has been declining since the mid-2000s. Moreover, there is a large gap in the labourforce participation rates of men and women in India. This gender gap should be narrowed to fully harness India's demographic dividend. In addition, a related literature also finds that greater economic participation of women leads to higher economic growth.

Many policy initiatives can be used to address this gender gap in Indian labourforce participation. These include increased labour market flexibility (which could lead to the creation of more formal sector jobs) allowing more women, many of whom are working in the informal sector, to be employed in the formal sector. In addition, supply-side reforms to improve infrastructure and address other constraints to job creation could also enable more women to enter the labour force. Finally, higher social spending, including investment in education, can also lead to higher female labour force participation by boosting female stocks of human capital.

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