GENDER DISPARITY IN EDUCATION SECTOR IN INDIA: A QUANTITATIVE ANALYSIS

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ABSTRACT

Gender disparity is a worldwide phenomenon and it exists in each country, state, district and even in villages. Various researches have already proved that it is seen in every field such as religious, political, social, biological and even in human development indicators such as standard of living, health and education. Gender issue has drawn attention of economists since 1995 when two new indices of development GDI- Gender Related Development Index and GEM- Gender Empowerment Measure were introduced at international level in UNDP Report 1995.

After independence and implementation of various five-year plans, India is still under developing country and gender inequality and disparities still exists in Indian societies. Indian economy, though one of the fastest growing economy in the world, but still it is far behind in educational development and gender disparity. In recent years, India has shown good progress in the field of education and gender disparity alleviation, but still lot more to do yet. Still there is gap in male and female literacy as well as sex ratio. Central government as well state governments are making serious efforts to fill the gender gap disparity among male and female in education on one hand and implementing various schemes to boast literacy rate especially in female.

The present paper proposes to analyze the problem of gender disparity in India in education. For the purpose the paper is divided into five parts. In the first part introduction of the problem is given, whereas second part gives objectives, in the third part a brief description of methodology has been given, fourth part covers the main content of the paper in which Composite Gender Disparity Indices for education are calculated for the period 2011 and analysis and interpretations are given. Finally in the fifth part suggestions have been given to solve the problem of gender disparity in education.

KEYWORDS: Gender disparity, gender inequality, education.

INTRODUCTION

The primary education system in India suffers from numerous shortcomings, not the least being a dire lack of the financial resources required to set up a nationwide network of schools. Traditionally, the sector has been characterized by poor infrastructure, underpaid teaching staff, disillusioned parents and an unmotivated student population. In light of India’s commitment to the Millennium Development Goal (MDG) of universal primary education, its major challenge is gender disparity -- and the resulting financial and societal blocks that prevent access of girls to primary education. In a society as deeply stratified as India, disparities in education can be
observed through various distributions, such as caste, religion and gender, among others. It is
interesting, however, that even within such disadvantaged communities; a consistent feature is
widespread gender disparity in educational attainment. For scheduled caste and scheduled tribe
girls, the gender gap in education is almost 30 per cent at the primary level and 26 per cent at the
upper primary stage. In India's most depressed regions, the probability of girls getting primary
education is about 42 per cent lower than boys, and it remains so even when other variables, such as
religion and caste, are controlled. It will take a bold and creative policy to bridge this gap.
Acknowledging this, the Indian Government has made female education a priority. Sarva
Shiksha Abhiyan is a flagship programme for the achievement of universal primary education --
Sarva Shiksha Abhiyan (SSA) or "Education for All" -- places special emphasis on female
education and the achievement of gender parity. The question remains, of course, whether this
can be attained before the MDGs deadline in 2015. Let’s try to understand the phenomenon of
gender inequality and search for some solutions.

Gender inequality in education is a persistent problem in Indian society, especially for
girls from rural areas and lower socioeconomic backgrounds. During the past several decades,
India has achieved success in moving toward universal school enrollment and in enacting
policies to address educational inequalities such as those based on gender.

This study considers the gender inequality that exists among every region, social class
and prevents the growth of Indian economy from improving the lives of Indian people. The
reality of gender inequality in India is very complex and diversified, because it exists in every
field like education, employment opportunities, income, health, cultural issues, social issues,
economic issues etc. An attempt has been made to find out those factors which are responsible
for this problem in India. So, this paper highlights the multi-dimensional context of gender
inequalities prevalent in India. Overall, the study indicates the inequality in economic, social,
cultural and legal biasness which are of a great challenge for policy-makers and social scientists
to establish proper equality in the entire social field. The researchers have tried to suggest some
relevant strategies and policies implication for reducing this gender inequality and to promote the
dignified position for Indian women.

HISTORY OF GENDER INEQUALITY

If we highlight ancient India, an Indian woman was in the position of high esteem and
was pronounced by the word of maata (mother) or Devi (goddess) in the Vedas and Upanishads.
Same as Manu Smriti, woman was considered as a precious being and in the early Vedic age,
girls were looked after with care. Then practice of polygamy deteriorated the position of woman
and in the medieval period, the practices of purdha system, dowry system, and sati system came
into being. But with the passage of time, the status of woman was lowered. After the
development of science and technology, female feticides is being practiced by large number of
people .This has also led to a drop in the female ratio. The Indian census 2011 state wise shows
that Kerala represent the highest sex ratio with 1084 females per 1000 males while Haryana
represents the lowest sex ratio with just 877 women per 1000 males. The origin of the gender inequality has been always the male dominance. At least in India, a woman still needs the anchor of a husband and a family. Their dominating nature has led women to walk with their head down. It was all practiced from the beginning and is followed till date. In the case of a woman’s reservation in parliament, the opposing parties believe that women are born to do household tasks and manage children and family. In many parts of India, women are viewed as an economic and financial liability despite contribution in several was to our society, economy and by their families. The crime against women is increasing day by day. Domestic Violence, Rape, Sexual harassment, molestation, eve teasing, forced prostitution, sexual-exploitation, at work places are a common affair today. So, it’s an alarming issue for our country. The major reasons for the gender inequality are identified as the need of a male heir for the family, huge dowry, continuous physical and financial support to girl child, poverty, domestic – violence, farming as major job for poor and the caste system. From the above factors, we can interpret that economic, social, cultural, legal and political factors are responsible for gender inequality in India. India needs to deactivate the gender Inequality. The needs of the day are trends where girls are able not only to break out of the culturally determined patterns of employment but also to offer advice about career possibilities that looks beyond the traditional list of jobs. It is surprising that in spite of so many laws, women still continue to live under stress and strain. To ensure equality of status for our women we still have miles to go. Man and Woman are like two wheels of a carriage. The life of one without the other is incomplete.

**REVIEW OF LITERATURE**

**Dunn, D. (1998),** has focused on the situation of women in scheduled castes and tribes groups which are considered to as „weaker sections of people“ and granted special safeguards and concessions under the Indian Constituents. This paper represented a descriptive picture of scheduled caste and tribe women’s status in Indian society and also suggested that socioeconomic development plays an important role to reduce the disadvantage of scheduled group women

**Rustagi, P. (2005),** has concluded the weal potential of economic growth & increasing women’s economic participation towards eliminating gender inequalities in income & wages, unless supported b concerted efforts at altering attitudes towards women’s role & contribution that are harbored by different agents within the labor market.

**Chaudhary, & Sarkar, D. (2012),** has tried to find out some factors i.e. educational status, work participation, level of gender inequality, of the Cooch Behar, a district of West-Bengal, India and suggested some relevant strategies implication for reducing this gender inequality to promote the deprived women of this district.
Thomas, R.E. (2013), has highlighted his paper with the state of gender based inequality in the modern India. It has presented gender inequality with the help of some facts & figures and representing the inequality practiced in India & its comparison with other Asian & Western countries.

Jayachandran, S. (2014), has presented the roots of gender inequality in developing countries. This paper also discussed the several mechanisms through which the economic development could improve the relative outcomes of women & gender gaps can be reduced as country grows.

Raju, E. (2014), has examined the gender discrimination in India on the basis of demographic, social, economic and political context. The paper has broadly discussed the issue of gender inequality, women empowerment & reproductive health among women of India. Some measures under taken b the International and national organizations were also discussed in this paper.

OBJECTIVES OF THE STUDY

The main objectives of the study are-
1. To calculate Composite Gender Disparity Index CGDI of education for 2011 census for India and its states by using traditional method.
2. To assess the state variations in gender disparity in education and identify backward and most suffered areas in it.
3. To give suggestions for policy makers and planners.

METHODOLOGY

Sources of Data Collection

This is a descriptive research paper based on secondary data. Data have been found out from different websites, books, research paper and journals collected. Simple calculation, graph and tables are used by researcher to explain the facts and finding the results.

GENDER DISPARITY IN INDIA

India is the largest democracy in the world with a population of 1.21 billion (Census of India, 2011). India’s population increased from 1.028 billion (532.2 million males and 496.5 million females) in 2001 to 1.21 billion (623.7 million males and 586.5 million females) in 2011, the decadal absolute growth of population being 181.46 million (91.50 million males and 89.95 million females). Decadal growth rate of population during 2001-2011 was 17.64 per cent (17.19 per cent for males and 18.12 per cent for females) compared to 21.54 per cent during 1991-2001. The population growth rate has decelerated from 1.97 per cent per annum between 1991 and 2001, to 1.64 per cent per annum between 2001 and 2011. The deceleration reflects a decline in the Total Fertility Rate (TFR), which is estimated to have fallen to 2.6 per cent and is expected to decline to 2.3 per cent in the first half of the present decade. Some States have reached, or are close to reaching, the replacement level of fertility. Fertility levels in the other states are also
falling, but still remain much higher than the replacement level. A significant fact is that for the first time, the child population in the age group 0-6 years has come down during 2001-2011 due to a declining trend in Total Fertility Rate. India is a vast country comprising 29 States and seven Union Territories (UTs) with diverse socio cultural contexts and widely varying geographical and climatic conditions. Under a federal structure, the Centre and the States share the responsibilities for the planning and implementation of national development programmes. There are well defined constitutional provisions and mechanisms for sharing of resources and responsibilities between the Centre and the States. The Constitution was amended in 1976 to change education from a State subject to a concurrent one which implies that the responsibility for development of education is shared by the Central and State Governments. The male literacy rates have always been higher than female literacy rates at all levels which can be seen in the following table.

Table 1:  Literacy Rates by sex for Rural and Urban areas in 2001 and 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>Total</td>
</tr>
<tr>
<td>2001</td>
<td>75.26</td>
<td>53.67</td>
<td>64.84</td>
</tr>
<tr>
<td>2011</td>
<td>80.89</td>
<td>64.64</td>
<td>72.99</td>
</tr>
</tbody>
</table>

Source: Census of India, 2011

Similarly there is vast gap between male and female in enrolment ratio at various levels in 2011. So it is realized that there is a gender disparity in education sector of India and it is not uniform in all the states. Therefore it is necessary to solve the problem of gender disparity and regional variations but before this it is important to quantify gender disparity and measure the severity and extent of the problem of the problem, so that problem areas can be identified. The present paper is an attempt in this direction.

TOOLS USED FOR ANALYSIS
Various methods have been suggested to estimate gender disparity which is given below:
1. Traditional Methods.
3. Log Inequality Index.
4. Sopher Variety Disparity Index.
5. Lorenz Disparity Index method.
ANALYSIS & INTERPRETATION:

In the present paper traditional method has been used. Traditional method:

\[
GD_i = 1 - \frac{\text{Female values}}{\text{Male values}}
\]

This satisfies maximum desired properties of the indices and (0-1) interval criterion. By using traditional method Gender Disparity Index for each indicator- literacy rate, combined enrolment ratio have been calculated as GD\(_1\) and GD\(_2\) for the period 2010-11 for India as well for all the states. After calculation GD\(_i\)'s a Composite Gender Disparity Index of education CGDI has been prepared by taking simple arithmetic mean of all the GD\(_i\)'s using the formula:

\[
\text{CGDI} = \frac{\sum_{i=1}^{2} GD_i}{2}
\]

**Indicators of Education**

1. Literacy Rate = Male MLR - Female FLR
   
   Total no. of male literates
   
   \[
   \text{MLR} = \frac{\text{Total no. of male literates}}{\text{Total no. of male population}} \times 100
   \]

   Total no. of female literates
   
   \[
   \text{FLR} = \frac{\text{Total no. of female literates}}{\text{Total no. of female population}} \times 100
   \]

2. Combined Enrolment Ratio = Male MER - Female FER
   
   No. of boys enrolled at pre primary + Primary + Middle + Secondary Class
   
   \[
   \text{MER} = \frac{\text{No. of boys enrolled}}{\text{Total Male population}} \times 100
   \]
Gender Disparity Indices CGDI of education 2010-11 (Traditional Method) and Regional Variations

Table no.2 reveals the fact that there is a gender disparity in education sector in India. The value of CGDI of India is 0.133, but the problem of Gender Disparity is not uniform in all the states, as the values of CGDI range from lowest 0.0005 of Sikkim to highest 0.505 of Jammu & Kashmir. The gap between the two is 0.505 - 0.0005 = 0.5045 which is very high. This explains the regional variations five clusters have been formed on the basis of CGID's Sikkim (0.0005) are on the top followed by Meghalaya (0.0075) and Lakshadweep (0.0065). Similarly the last state suffering from very high gender disparity is Jammu & Kashmir (0.505).

Table2:

Gender disparity indices of Education in India 2010-11 (Traditional Method)

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>States/UTs</th>
<th>GD 1</th>
<th>GD2</th>
<th>CGDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>0.189</td>
<td>0.041</td>
<td>0.115</td>
</tr>
<tr>
<td>2</td>
<td>Arunachal Pradesh</td>
<td>0.214</td>
<td>0.026</td>
<td>0.12</td>
</tr>
<tr>
<td>3</td>
<td>Assam</td>
<td>0.149</td>
<td>0.030</td>
<td>0.089</td>
</tr>
<tr>
<td>4</td>
<td>Bihar</td>
<td>0.297</td>
<td>0.096</td>
<td>0.196</td>
</tr>
<tr>
<td>5</td>
<td>Chhattisgarh</td>
<td>0.259</td>
<td>0.077</td>
<td>0.168</td>
</tr>
<tr>
<td>6</td>
<td>Goa</td>
<td>0.118</td>
<td>0.058</td>
<td>0.088</td>
</tr>
<tr>
<td>7</td>
<td>Gujarat</td>
<td>0.185</td>
<td>0.102</td>
<td>0.143</td>
</tr>
<tr>
<td>8</td>
<td>Haryana</td>
<td>0.212</td>
<td>0</td>
<td>0.106</td>
</tr>
<tr>
<td>9</td>
<td>Himachal Pradesh</td>
<td>0.147</td>
<td>0.074</td>
<td>0.110</td>
</tr>
<tr>
<td>10</td>
<td>Jammu &amp; Kashmir</td>
<td>0.259</td>
<td>0.751</td>
<td>0.505</td>
</tr>
<tr>
<td>11</td>
<td>Jharkhand</td>
<td>0.283</td>
<td>-0.004</td>
<td>0.139</td>
</tr>
<tr>
<td>12</td>
<td>Karnataka</td>
<td>0.179</td>
<td>0.038</td>
<td>0.109</td>
</tr>
<tr>
<td>13</td>
<td>Kerala</td>
<td>0.029</td>
<td>0.104</td>
<td>0.066</td>
</tr>
<tr>
<td>14</td>
<td>Madhya Pradesh</td>
<td>0.253</td>
<td>0.037</td>
<td>0.145</td>
</tr>
<tr>
<td>15</td>
<td>Maharashtra</td>
<td>0.157</td>
<td>0.063</td>
<td>0.110</td>
</tr>
<tr>
<td>16</td>
<td>Manipur</td>
<td>0.150</td>
<td>0.076</td>
<td>0.118</td>
</tr>
<tr>
<td>17</td>
<td>Meghalaya</td>
<td>0.043</td>
<td>-0.028</td>
<td>0.0075</td>
</tr>
<tr>
<td>18</td>
<td>Mizoram</td>
<td>0.050</td>
<td>0.031</td>
<td>0.045</td>
</tr>
<tr>
<td>19</td>
<td>Nagaland</td>
<td>0.081</td>
<td>0.008</td>
<td>0.044</td>
</tr>
<tr>
<td>20</td>
<td>Orissa</td>
<td>0.214</td>
<td>0.052</td>
<td>0.128</td>
</tr>
<tr>
<td></td>
<td>States</td>
<td>No.</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
<td>-----</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Punjab</td>
<td>0.12</td>
<td>0.102</td>
<td>0.111</td>
</tr>
<tr>
<td>22</td>
<td>Rajasthan</td>
<td>0.341</td>
<td>0.161</td>
<td>0.251</td>
</tr>
<tr>
<td>23</td>
<td>Sikkim</td>
<td>0.131</td>
<td>-0.13</td>
<td>0.0005</td>
</tr>
<tr>
<td>24</td>
<td>Tamil Nadu</td>
<td>0.145</td>
<td>0.031</td>
<td>0.088</td>
</tr>
<tr>
<td>25</td>
<td>Tripura</td>
<td>0.095</td>
<td>0.014</td>
<td>0.054</td>
</tr>
<tr>
<td>26</td>
<td>Uttar Pradesh</td>
<td>0.253</td>
<td>0.052</td>
<td>0.152</td>
</tr>
<tr>
<td>27</td>
<td>Uttarakhand</td>
<td>0.189</td>
<td>0.038</td>
<td>0.113</td>
</tr>
<tr>
<td>28</td>
<td>West Bengal</td>
<td>0.142</td>
<td>-0.038</td>
<td>0.052</td>
</tr>
<tr>
<td>29</td>
<td>A&amp;N Island</td>
<td>0.100</td>
<td>-0.074</td>
<td>0.013</td>
</tr>
<tr>
<td>30</td>
<td>Chandigarh</td>
<td>0.107</td>
<td>-0.025</td>
<td>0.041</td>
</tr>
<tr>
<td>31</td>
<td>D &amp;N Haveli</td>
<td>0.258</td>
<td>-0.115</td>
<td>0.071</td>
</tr>
<tr>
<td>32</td>
<td>Daman &amp;Diu</td>
<td>0.170</td>
<td>-0.10</td>
<td>0.035</td>
</tr>
<tr>
<td>33</td>
<td>Delhi</td>
<td>0.123</td>
<td>0.004</td>
<td>0.063</td>
</tr>
<tr>
<td>34</td>
<td>Lakshadweep</td>
<td>0.073</td>
<td>-0.06</td>
<td>0.0065</td>
</tr>
<tr>
<td>35</td>
<td>Pondicherry</td>
<td>0.190</td>
<td>0.069</td>
<td>0.089</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>0.211</td>
<td>0.055</td>
<td>0.133</td>
</tr>
</tbody>
</table>

Source: Computed

Table 3

Clustering of states on the basis of CGDI of education in India (Traditional) method

<table>
<thead>
<tr>
<th>Category</th>
<th>Traditional Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>No.</td>
</tr>
<tr>
<td>VLGD</td>
<td>Meghalaya, Sikkim, Lakshadweep</td>
</tr>
<tr>
<td>LGD</td>
<td>D &amp;N Haveli, Daman &amp;Diu, Delhi, A&amp;N Island, Chandigarh, Tripura, West Bengal, Goa, Assam, Mizoram, Nagaland, Kerala, Tamil Nadu and Pondicherry</td>
</tr>
<tr>
<td>MGD</td>
<td>Arunachal Pradesh, Andhra Pradesh, Manipur, Haryana, Karnataka, Maharashtra, Uttar Pradesh, Uttarakhand, Himachal Pradesh, Punjab, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh and Orissa</td>
</tr>
<tr>
<td>HGD</td>
<td>Rajasthan, Bihar</td>
</tr>
<tr>
<td>VHGD</td>
<td>Jammu and Kashmir</td>
</tr>
</tbody>
</table>

VLGD- Very Low Gender Disparity    LGD- Low Gender Disparity
MGD- Medium Gender Disparity       HGD- High Gender Disparity
VHGD- Very High Gender Disparity
Table no. 3 shows that only 3 states lie in VLGD cluster and 14 states in LGD cluster, 2 states shows HGD, 1 Jammu & Kashmir shows VHGD and remaining all 15 states are suffering from medium gender disparity in education. Mostly desert and hilly region states are showing high gender disparity in education. Eight states show higher CGDI and high level of gender disparity as compared to India’s Index. All other twenty seven states have lower CGDI of education than India’s Index. The main reason for less disparity as compare to 2001 CGDI, Sarva Shiksha Abhiyan, the first ever nation-wide programme for Universal Elementary Education, was launched to reach every child in every hamlet in the country in a prescribed time frame. The Constitution was amended in 2002 to make education a fundamental right of every child. SSA is an effort to universalize elementary education by community ownership of the school system. It is a response to the demand for quality basic education all over the country and increase the enrollment of girl child.

CONCLUSION:

The list of legislations as well as types of discriminations or inequalities may go on but the real change will only come when the mentality of men will change; when the male species of human beings would start treating women as equal and not subordinate or weaker to them. Let’s hope and wish that our participative democracy, in times to come, and with the efforts of both women and men, would be able to found solutions to the problem of gender inequality and would take us all towards our cherished dream of a truly modern society in both thought and action.

1. Jammu & Kashmir is shows very high gender disparity in India with 0.505.
2. Rajasthan is a very backward state in education sector and suffering from a high gender disparity problem in this sector.
3. Gender disparity is seen in each indicator of gender disparity i.e GD\(_1\) = (0.211) GD\(_2\) = (0.055) and finally in CGDI = (.133) which are the indices of Literacy Rate, Enrolment Ratio (combined) respectively.
4. India presents a regionally diversified pattern of gender disparity in education some states like Meghalaya, Sikkim, Lakshadweep show very low level of gender disparity.
5. Jammu & Kashmir show very high level of gender disparity in education and can be identified as problem areas where special attention is required.
6. Rajasthan and Bihar show high level of gender disparity.
7. Arunachal Pradesh, Andhra Pradesh, Manipur, Haryana, Karnataka, Maharashtra, Uttar Pradesh, Uttarakhand, Himachal Pradesh, Punjab, Chhattisgarh, Gujarath, Jharkhand, Madhya Pradesh and Orissa lie in the medium gender disparity class.

SUGGESTIONS:
India is one of the fastest growing economies in the world today, but it is unfortunate that gender disparity in education still exists in Indian societies. Both central and state governments are making their best efforts to fill the gender disparity in education. The outcome of this paper will help academicians and professionals to make gender specific policies and budget allocations to fill the gap in gender disparity in India. The gender disparity is also region specific so that gender disparity alleviation policies should be region specific. This paper will also helpful to understand regional disparities to be addressed. There is a solution of every problem. For reducing gender inequality in India, we should offer high level of education to girls and increase women empowerment. We should also give them opportunity in active politics & social activities so that social integration in Indian society can be made. Government should make policies & strategies regarding stopping the sex identification & abortions. In context of above NGOs can also play an important role to eradicate Gender Inequality. Politicians should frame out policies for increasing social welfare development regarding this issue. The Campaign of our Prime Minister Mr. Narender Modi “Beti Bachao Beti Padhao” can be successful, when the mindset of Indian society will be changed towards women.

POLICY RECOMMENDATIONS:

Based on the above analysis, following are the recommendations to promote gender equity in the field of education in India state:

- Establish active program to encourage girl’s participation in education, with increasing the proportion of women teachers to responsible for the education of the girls in the village.

- Government and NGOs have undertaken to provision annually scholarships to meritorious girls, provision of free text books, and all the education expenses.

- Make awareness about the important of education and how it increases the productivity of individuals and therefore lead to higher earnings, which can change their socioeconomic status especially in the poor communities.

- Gender specific budget, Education budget should be divided for males and females separately, for some period it may be required that higher expenditure should be made for female education to fulfill the vast gap.

- The grass root cause of gender disparity in educations is existing social structure where parents do not allow girl child to go to school, therefore it is necessary to change their thinking, traditions, parameters and customs in the favor of females.

- Vocational and professional Courses should be introduced for the girls. This in future may help them in getting employment, Employment opportunities will work as an incentive to the parents to send their daughter to such institutes.
REFERENCES:


Census 2011


Kabeer, N (1999) 'From Feminist Insights to an Analytical Framework: An Institutional Perspective on Gender Inequality'

Kohli Anju "Gender Comparison and Development An inter country/inter State Analysis" 89th IEA Annual Conference Volume 2006.


