# The Role of Women Education in Economic Development 

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#### Abstract

Women education is a great instrument to shape the family and future development of India. The enrollment of women education is not increased in India for many years due to economic and social causes like lack of facilities, lack of awareness, early marriage, and family situation. In 1951 only 8 per cent of Indian women were literate, by the end of 2011 the percentage of female literacy level is increased in above 60 per cent. In 2011 men literacy rates were 82.14 per cent and 65.46 per cent for women. In both rural and urban areas female education is not in par with men's education. Because the awareness of women education is very low in our country. This paper suggests that the government should create awareness about the significance of women education and provide the necessary facilities, so as to increase their part in the economic development of our country.


Keywords - Literate rate , Men Education, Women Education.

## I.INTRODUCTION

A women education aim is improving the knowledge and skill of women and girls. It includes general education at schools and colleges, vocational and technical education, professional education, soft skill development and health education. Women education is an important factor in economic development as women contribute in many sectors. Education helps women in their development especially to improve their health, to choose the best profession, decision-making power which in turn helps in the betterment of their family. Education is also encouraging the women to participate in alleviating poverty. The primary and secondary education is useful for girls to improve their basic knowledge. Professional and technical education helps to improve their skill and employment opportunities. Health education helps in maintaining their health properly.

The $86^{\text {th }}$ Constitutional Amendment Act, 2011, has been a path-breaking step towards the growth of education, especially for females. According to this act, elementary education is a fundamental right for children between the ages of 6 and 14. The government has undertaken to provide this education free of cost and make it compulsory for those in that age group. This undertaking is more widely known as Sarva Shiksha Abiyan (SSA). Since then, the SSA has come up with many schemes for inclusive as well as the exclusive growth of Indian education as a whole, including schemes to help foster the growth of female education ${ }_{(1)}$.

## II.STATEMENT OF THE PROBLEM

The education of girls and women are interrelated to economic development. The women education, as well as the women workforce participation, is playing a very vital role important in the economic development of our country. Many factors are affecting the rate of enrollment in women education. The rural girls or women also avoid to study in co-education institutions and studying at the long distance from their native. Some social factors like early marriage, lack of awareness about education also affects the education of girls.

Inadequate school facilities can sometimes serve as a deterrent for the girl child's participation in formal schooling. A report by the International Programs Centre for the U.S. Department of Commerce (Velkoff, 1988) lists the chief barriers to women's education in India as inadequate sanitary facilities, shortage of female teachers and gender bias in the curriculum. A BBC news report by Kaushik Basu (2004) notes that a study of 188 government-run primary schools found that $59 \%$ of the schools had no drinking water and $89 \%$ had no toilets. Another report in the Times of India (2005) cites 2003/2004 data by National Institute of Educational Planning and Administration that reported only $3.5 \%$ of primary schools in Bihar and Chhattisgarh had toilets for girls. In Madhya Pradesh, Maharashtra, Andhra Pradesh, Gujarat, Rajasthan and Himachal Pradesh, the rates were 12-16\%. Lack of toilets can be particularly detrimental to girl's school attendance, where the only option of attending to nature's call out in the open can pose both a physical as well as a psychological barrier ${ }_{(2)}$.

## III.OBJECTIVES

The specific objectives are

1. To study the literacy rate of females post-independence (after 1950).
2. To analyze the number of females enrolled in different stages of education.
3. To discuss the females percentage in higher education in major disciplines.

## IV. REVIEW OF LITERATURE

Many authors studied the women education in economic development. They pointed out that women education is not on par with their counterpart.

Neena Aneja (2015) study explains a nation's cultural, social and economic development is highly dependent on higher education of women. As a result of spending money on educating women will not go a waste, it will provide for and improve the economy and development of nations. For example, if the nation is aiming at abolishing poverty, they must be at the helm and be involved in policy making and
implementation. Because of their basic quality to be economical, they will not only drive the country towards economic self- sufficiency but also development ${ }^{(3)}$.

Nisha Nair (2010) study provides an overview of the state of education with respect to women and highlights some of the issues and barriers to women's education. Women and girls receive far less education than men, due to prevailing social norms and sometimes fears of violence. Education for women is an important determinant of their enhanced self-esteem and self-confidence, helping to build a positive image, developing their ability to think critically, fostering better decision making and helping them make more informed choices about health, employment and even the education of their children. Education will not only ensure more participation in developmental processes but also enhance awareness of rights and entitlements in society so that women can enhance their participation in society on an equal footing in all areas. The economic independence that education brings is an added incentive. Economic independence and awareness will help curtail the vicious cycle of reinforcing negative stereotypes and aid women in chartering paths as individuals in their own right, contributing to society, polity and the economy ${ }^{(4)}$.

Cameron et al (2001) study analyzed Education and LMP of women in Asia. The determinants of women's labor force participation ratio in Asia vary drastically across countries. Tertiary education is found to have a large impact on participation in all countries except the most developed country. In Korea, women's education has a very little side effect on participation. The primary and intermediate education is found to have little impact on participation except in Indonesia. The effect of intermediate education is positive in Indonesia and negative in Srilanka. This result indicates there is not a single relationship between women's education and labor force participation in Asia. The relationships vary significantly by country. Therefore, it is important to consider the cultural context when trying to predict the effect of policies that increase women's education levels on women's participation in the labor force ${ }^{(5)}$.

Heidi Ross (1999) study reviewed female education and development in Asia. Women and development in Asia reflect the reproductive and transformative potential of education takes on new meaning with the strengthening of global economic and political patterns. Increases in the rates of women's participation in the rural and urban workforce have outpaced men's in many countries; the quantity of this work is often low and frequently plays an adjustment function in the economy ${ }^{(6)}$.

## V.METHODOLOGY

The data is collected from secondary sources like the National Sample Survey Office, Ministry of Human Resource Development and Census data. Simple Linear Regression Model (SLRM) and Compound Growth Rate (CGR) these tools are applied to this study. Sex, disciplines, and levels of education taken as dependent variables and Year are taken as an independent variable.

## VI.RESULTS AND DISCUSSION

Table 1: The trend in Literacy Rates in Post independent India

| Year | Rural |  |  | Urban |  |  | Combined |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| 1951 | 4.87 | 19.02 | 12.10 | 22.33 | 45.60 | 34.59 | 8.86 | 27.15 | 18.32 |
| 1961 | 10.10 | 34.30 | 22.50 | 40.50 | 66.00 | 54.50 | 15.35 | 40.40 | 28.31 |
| 1971 | 15.50 | 48.60 | 27.90 | 48.80 | 69.80 | 60.20 | 21.97 | 45.96 | 34.45 |
| 1981 | 21.70 | 49.60 | 36.00 | 56.30 | 76.80 | 67.20 | 29.76 | 56.38 | 43.57 |
| 1991 | 30.17 | 56.96 | 36.00 | 64.05 | 81.09 | 67.20 | 39.29 | 64.13 | 52.21 |
| 2001 | 46.70 | 71.40 | 59.40 | 73.20 | 86.70 | 80.30 | 53.67 | 75.26 | 64.83 |
| 2011 | 57.93 | 77.15 | 66.77 | 79.11 | 88.76 | 84.11 | 64.63 | 80.88 | 72.98 |
| CGR | $\mathbf{9 . 6 4 \%}$ | $\mathbf{4 . 9 5 \%}$ | $\mathbf{6 . 1 7 \%}$ | $\mathbf{4 . 4 7 \%}$ | $\mathbf{2 . 3 2 \%}$ | $\mathbf{3 . 0 4 \%}$ | $\mathbf{7 . 6 5 \%}$ | $\mathbf{3 . 9 9 \%}$ | $\mathbf{5 . 1 9 \%}$ |

Source: Census of India
This table implies the trend in literacy rates in the post-independence period in India. Since 1951-2011 the rate of rural female literacy level has increased 9.64 per cent and rural male literacy level has increased 4.95 per cent in every decade and totally the literacy level has increased 6.17 per cent in rural areas. In urban areas, the female literacy level ( 4.47 per cent) higher than the male literacy level ( 2.32 per cent) in every decade and totally, urban literacy level is 3.04 per cent. Combined female literacy level ( 7.65 per cent) is higher than the male literacy level ( 3.99 per cent). In every decade, the female literacy level is higher than male literacy. The table concludes that women education is essential to increase social status, quality of life and would promote property level and wealth to protect for the future generation.

Table 2: Number of Females per 100 Males Enrolled in different stages of education

| Year | Primary <br> Classes I - V | Upper Primary <br> Classes VI -VIII | Secondary <br> Classes IX - X | Senior Secondary <br> Classes XI-XII | Higher <br> Education |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2005-06$ | 87 | 81 | 73 | 72 | 62 |
| $2006-07$ | 88 | 82 | 73 | 74 | 62 |
| $2007-08$ | 91 | 84 | 77 | 76 | 63 |
| $2008-09$ | 92 | 86 | 79 | 77 | 65 |
| $2009-10$ | 92 | 88 | 82 | 80 | 67 |
| $2010-11$ | 92 | 89 | 82 | 79 | 78 |
| $2011-12$ | 93 | 90 | 84 | 81 | 80 |


| $2012-13^{*}$ | 94 | 95 | 89 | 87 | 81 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2013-14^{*}$ | 93 | 95 | 89 | 89 | 85 |
| $2014-15^{*}$ | 93 | 95 | 91 | 90 | 85 |
| $2015-16^{*}$ | 93 | 95 | 91 | 90 | 86 |

Source: Educational Statistics at a Glance 2016, MHRD
*Figures related to School Education are provisional.
Table 3: Trend Value of Number of Females per 100 Males Enrolled in different stages of education

| Division | Model | a | b | SE(b) | t(b) | R <br> Square | Adj R Square | Sig | CGR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PC | SLR | 1023.555 | 0.555 | 0.122 | 4.548 | 0.697 | 0.663 | 0.001 | - |
|  | $\begin{aligned} & \hline \text { Semi- } \\ & \text { log } \\ & \hline \end{aligned}$ | -7.796 | 0.006 | 0.001 | 4.507 | 0.693 | 0.659 | 0.001 | 1.391 |
| UPC | SLR | 3110.227 | 1.591 | 0.121 | 13.146 | 0.95 | 0.945 | 0.000 | - |
|  | $\begin{aligned} & \text { Semi- } \\ & \text { log } \\ & \hline \end{aligned}$ | -31.646 | 0.018 | 0.001 | 13.109 | 0.95 | 0.945 | 0.000 | 4.231 |
| SC | SLR | 3939.273 | 2 | 0.12 | 16.71 | 0.969 | 0.965 | 0.000 |  |
|  | $\begin{aligned} & \text { Semi- } \\ & \text { log } \\ & \hline \end{aligned}$ | -44.593 | 0.024 | $0.002$ | 15.707 | 0.965 | 0.961 | 0.000 | 5.681 |
| SSC | SLR | 3830.945 | 1.945 | 0.143 | 13.613 | 0.954 | 0.949 | 0.000 | - |
|  | $\begin{aligned} & \text { Semi- } \\ & \text { log } \\ & \hline \end{aligned}$ | -43.668 | 0.024 | 0.002 | 14.298 | 0.958 | 0.953 | 0.000 | 5.681 |
| HE | SLR | 5831.027 | 2.936 | 0.28 | 10.491 | 0.924 | 0.916 | 0.000 | - |
|  | $\begin{aligned} & \text { Semi- } \\ & \text { log } \\ & \hline \end{aligned}$ | -76.403 | 0.04 | 0.004 | 10.223 | 0.921 | 0.912 | 0.000 | 9.647 |

This table indicates that the trend value of females and males education level in different stages. From 2005-06 to 2015-16, the regression coefficient (b) value is positively correlated. During the past ten years, the b value increases from 0.555 per cent to 2.936 per cent, these values represent the female education level has been increased positively during the year. The $t$ value also high and positive level, since in all the stages of female education is significantly correlated with male education. In primary classes, to higher education, the Compound Growth Rate has been increased from 1.391 per cent to 9.647 per cent, during the period these values represent the positive growth rate in all years. Compare to higher education with primary classes, the primary class rate of growth has improved to a small level. In the semi-log model, a value represents negatively slope in all stages of education. In overall, this table concluded parent got awareness about the vital role of education in the future. Education alone could make the children as the wealthy person in the future. Hence, the development of female education is positively high as compared with male education in different stages the period.

Table 4: Number of Females per 100 Males in University Education in Major Disciplines

| Year | Arts/ <br> Humanities <br> Social Science | Engineering <br>  <br> Technology | Commerce | Science | IT <br>  <br> Computer | Medical <br> Science | Manage- <br> ment | Law | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2010-$ <br> 11 | 98.6 | 40.9 | 71.4 | 86.9 | 57.8 | 115.0 | 48.1 | 46.2 | 97.5 |
| $2011-$ <br> 12 | 104.5 | 39.9 | 78.9 | 95.2 | 67.3 | 155.4 | 55.2 | 47.0 | 121.0 |
| $2012-$ <br> 13 | 109.6 | 40.4 | 80.6 | 93.4 | 71.7 | 154.0 | 57.2 | 46.9 | 118.5 |
| $2013-$ <br> 14 | 111.7 | 39.6 | 80.9 | 90.2 | 80.1 | 157.5 | 58.1 | 47.8 | 118.0 |
| $2014-$ <br> 15 | 113.3 | 39.0 | 83.6 | 87.7 | 78.5 | 153.8 | 57.8 | 45.4 | 120.6 |
| $2015-$ <br> 16 | 111.6 | 38.7 | 85.9 | 89.1 | 77.2 | 157.1 | 59.6 | 45.9 | 122.3 |

(Others include Agriculture, Education, Indian Language, Foreign Language, Oriental Learning, Home Science, Fine Arts, Physical Education, Library Education, and Fisheries etc.)
Source: D/o Higher Education, MHRD.

Table 5: Trend Value of Number of Females per 100 Males in University Education in Major Disciplines

| Discipline | Model | $\mathbf{c}$ | $\mathbf{c}$ b | SE(b) | t(b) | R <br> Square | Adj R <br> Square | Sig |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Arts/Humanities <br> Social Science | SLR | -5270.705 | 2.671 | 0.684 | 3.906 | 0.792 | 0.74 | 0.017 |
|  <br> Technology | SLR | 873.914 | -0.414 | 0.08 | -5.159 | 0.869 | 0.837 | 0.007 |
| Commerce | SLR | -4919.016 | 2.483 | 0.477 | 5.202 | 0.871 | 0.839 | 0.007 |
| Science | SLR | 936.087 | -0.42 | 0.847 | -0.496 | 0.058 | -0.178 | 0.646 |
| IT \& Computer | SLR | -7924.371 | 3.971 | 1.087 | 3.655 | 0.77 | 0.712 | 0.022 |
| Medical Science | SLR | -11886.177 | 5.977 | 3.289 | 1.817 | 0.452 | 0.315 | 0.143 |
| Management | SLR | -3752.391 | 1.891 | 0.567 | 3.337 | 0.736 | 0.67 | 0.029 |
| Law | SLR | 357.188 | -0.154 | 0.218 | -0.707 | 0.111 | -0.111 | 0.519 |
| Others | SLR | -6919.428 | 3.494 | 1.789 | 1.953 | 0.488 | 0.36 | 0.123 |

This table above table-3 enumerates the trend value of sex ratio of student enrollment in university education from 2010-11 to 2015-16. The coefficient (b) values are positively correlated except for three disciplines like Engineering \& Technology, Science, and Law. The b values of all disciplines have fluctuated in all years. Compare with all disciplines, Commerce discipline is highly positive significant and engineering\& technology, science and law disciplines are not significant in all periods. The table concluded that the Engineering \& Technology discipline is one of the main factors to determine the demand for arts and other disciplines demand.

## CONCLUSION

Women education is very important in economic development because the educated women will help to improve the social and economic condition of their families, which in turn helps in the development of their nation. In India literacy rate of women in all stages is slowly increasing year by year. University education concluded that the Engineering \& Technology discipline is one of the main factors to determine the demand for arts and other disciplines demand. The rate of Engineering \& Technology demand has declined causes the growth rate of arts and other disciplines has increased. To increase the rate of literacy, the government has to create awareness about women education and also has to provide appropriate facilities to women, this will encourage them to develop their knowledge and decision making power. Government's subsidy and the loan was given to women education must be increased.

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