# The Role of Female Education on Economic Development: Cross Sectional Data

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## Abstract

This study investigates the role of female education on economic development in the case of Gimbo woreda of south west Kafa zone, located at 10 Km from Bonga Town, and 460 km south west of Addis Ababa. The general objective of the study is to assess the role of female education on economic development in Gimbo woreda. The specific objectives of the study were to assess enrollment rate of females in relation to their male counter parts in elementary, secondary, TVET and Tertiary education, evaluating balance of female to male ratio in enrollment rate, assessing repetition and Dropout rates of females especially in primary school, assessing the relationship between female education and economic development. For development of any country the role of female education is the crucial one, especially for third world countries like Ethiopia. Thus, the main purpose of this study is to examine the role of female education on economic development in Gimbo. Data were collected from primary and secondary sources and analyzed by using Statistical Package for Social Science. Descriptive analysis such as percentage, tables and ratios were supported out to come up with major results. In the analysis part different variables to measure enrollment rate at different levels of education like: Gross Enrolment Rate, Net Enrollment rate, Apparent Intake rate and Gross party index were used. Based on the study reached into conclusion that educated female has a positive impact on economic development even if girls were always been in an unfavorable position. Consequently, the researcher recommended enhancing women's education that promotes women's participation is unindustrialized economic policies and providing social and economic safety and security of women's.

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## **INTRODUCTION**

Historically, Women for centuries have been voicing their concerns about legislations government policies, traditional customers and religious beliefs, which have been instrumental to bring women's subordinate status. Despite the importance of education and its effect on economic growth females' education is still a serious problem due to gender based conditions. Common conditioning of gender roles of female children is one of the most qualified reasons for declining on their education. By means of investing on women education, the position of women in economic, social, cultural and political life increases (Emebt, 2015).

FDRE give much attention to female as central issue on plan for accelerated and sustained development to end poverty to liberate women from less productivity tasks, and rising their participation in the labor force, in social and political process of the nation which include rising woman's education, but the situation of women in Ethiopia is much different from those of the many parts of Africa (EPRDF- 2014)

Ethiopia is located in the horn of Africa. Yet today, Ethiopia remains one of the world's developing countries of with population size exceeding 110 million people, 78 percent of which live on less than 2 dollar per day. Ethiopia's fight with poverty and slow development is indistinguishably tied to its history of conflict, recurrent drought, and environmental degradation. This condition is further complex by deep traditional social and economic patterns that place powerful constrictions on the rights of female and their chances to direct their own lives or participate in and subsidize to community and national development. (ESPS, 2008)

According to Etsegenet (1996), some the reasons for such situation were early marriage, girls usefulness in domestic work, strong societal influence in favor of boys high dependency on parents and low hope from and low appearance in educational problems Ethiopian constitution confirms that women are entitled equal to that of men, including education and additionally to affirmative action. The Ethiopian education and training policy is major document that aims to provide education and enables the removal of attitudes, categorizes and practices that negatively affect women's education (Hareg, 2005).

## Statement of the problem

Women in Ethiopia have been subjected to various forms of gender based discriminations, under traditional customary rules and practices which may have had impacts on economic, political and social status of women in the country. Women establish more than partial of the population of Ethiopia, but their enrolment rate and their participation in education is very small when equated with males. This is because of cultural and socio-economic factors. Conversely, any effort made without recognition of female participation will not bring the expected outcome in terms of production, growth & development (Emebet, 1999).

Education is a corner stone of women empowerment. Because in enables them to respond to opportunities, to challenge their traditional roles and to change their lives. Despite the strong benefit of female education, parents tend to prefer to educate their lads. A girl's role in life is perceived solely as a link to the household and thus formal education may be seen as waste of resources. Education of female is one of the most cost effective means of refining structural problems. (Tenbit, 2007)

Since high level of population growth rate is key factor that causes backwardness for nations like Ethiopia. Women's role and status have a direct concern on reproductive and contraceptive use, knowledge, health care systems and nutrition, which results in decline of the total fertility rate. The scope of the study is also limited to identify mainly problems of female's education and its role on economic development.

Generally this study consists of five chapters. Chapter one, deals with introduction about the whole study which includes background, the problem, objective, scope and organization of the study. The second chapter deals with the reviews of related literatures from different sources like the previously worked researches and different published materials. The third chapter deals with methodology used. The fourth chapter is concerned with discussion part, which is the finding of the study. Finally in chapter five, the conclusion of the study is given and some recommendations were raised based on the identified problems.

## LITERATURE REVIEW

## **Theoretical Literature**

Education has been a central focus of women seeking to improve their conditions & to raise their status for enterprise. Education imparts skill that created options for individuals in economic, social, & political life. It is an instrument for attaining high status positions. The educational system is also one of the most central institutional components of gender system.

Education can mobilize the respectfulness of women to contribute most effectively through their surroundings. Therefore women's should be fully, involved in human resource development (Emebet, 1999). Women's education has a broader sense in that; it comprises both formal& non-formal education. Formal education is a sequential academic schooling that consists of several levels. Non-formal education can be described as any organized & systematic learning conducted mainly outside the system of formal education. It has benefit like addressing the needs of those who were not able to participate in the formal education for several reasons (Emebet, 1999). Education is an investment in human capital and social development and serve as a route for the transmission of culture from one generation to another and it consists of elements as presentation, innovation and replacement of harmful- tradition by useful ones (International Encyclopedia of the social science 1967).

According to Hegel's Theory of education (1909) the concept of education is so wide, so comprehensive it seems doubtful whether one human being could unite in himself in all the qualities and experiences necessary for adequate performance of the task. Education needs to be considered in so many relations like to a general philosophy, to social and economic conditions, to legislation and to the state, to practice with its many problems of methods, organization and equipment.

Young females receive less education than males in almost all poor countries. So closing the educational gender gap by expanding educational opportunities for women is economically desirable for four reasons. The rate of return on women's education is higher than that of men's in most developing countries, Increasing women's education not only increases their productivity on the farm and in the factory but also results in greater, labor force sharing, later marriage, lesser fertility, and greatly improved child health and nutrition, Improved child health and nutrition and more educated mothers lead to multiplier effect on the quality of a country's human resource for several generations to come and Because women carry all proportionate burden of the poverty and landlessness that permeate unindustrialized societies. Any significant improvement in their role and status via education can have a central effect on breaking the spiteful cycle of poverty and insufficient schooling (Todaro, 2002).

# DATA SOURCE AND METHODOLOGY

## Source and Type of Data

Both primary and secondary data collected were used. Primary data were collected from sample households through structured questionnaire, interview and secondary data from concerned line offices such as agricultural office, education office, and from administration office of the woreda. Reviews of relevant books, journals, articles, and other published and unpublished document was also carried out.

In order to achieve the objective of the study; the study was used various variables like Gross Enrollment Rate (GER). Net Enrolment Rate (NER), Gender party Index (GPI), Repetition and Dropout rates at different levels of education. From all variables GPI is the most crucial one to know the balance between females and males education. But repetition and dropout rate is the most useful indicator of efficiency of education. This rate helps to understand how the education system works in terms of the use of available resources and time. The definitions of the variables are given in the discussion part of this study.

#### **Description of variables**

Gross Enrollment Rate (GER): It is percentage of total enrollment in different levels of education. It is a crude measure of coverage since it includes under- graded and overage pupils it can be higher than 100%. This is frequently the case in countries attempting to address the backlog of students interested in attending school, but previously unable because of financial need, family issues or lack of schools.

Net Enrollment Rate (NER) is the best of measuring organized on time school participation. It is a more refined indicator of school and enrollment coverage and explains the proportion of students enrolled interims of official age group. It is usually lower than GER since it excludes over aged and under aged pupils.

Apparent Intake Rate (AIR) is the percentage of new entrants in grade one who are out of the total number of children of the official primary admission age 7 in Ethiopian cases).

Gender parity Index (GPI) is an important indicator of balanced programs to boost enrollment and participation. It is the ratio of female to male GER for all level. In a situation of equality between boys and girls enrollment rate, GPI is 1, while indicates the highest disparity.

Repetition Rate- measures the proportion of students who have remained in the same grade for two or more consecutive years by retaking the grade having either left the grade prematurely or returning for a second or third time. Any repetition reduces the efficiency of education system, and also indicates to high pupil teacher ratio, unqualified teachers, or lack of learning materials.

Dropout Rate: - is a measure, typically by grade, of those who leave formal schooling. In most cases it is calculated as the remainder after subtracting from enrollment, those who repeat and those who are promoted to the next grade.

Current national policy of Ethiopia uses the term "readmit" to characterize any student not repeating within one year. Ethiopia repletion rates are according to international standard/ artificially low, but its reported dropout rates are artificially high (Educational statistics Annual, 2018/19).

In this study descriptive analysis is used, which includes techniques such as tables, percentage and ratios. These techniques were used to put numerical data in terms of relative terms to interpret easily.

# DISCUSSION AND ANALYSIS

## **Primary Education**

Primary education is absolutely critical to a nation's development providing on average the highest public returns to investment for the state and the critical underpinning for later education and economic growth. In Ethiopia primary, education defined as education in grade 1-8, in two cycles 1<sup>st</sup> cycle (grade 1-4) and 2<sup>nd</sup> cycle (grade 5-8) has had a systematically increasing enrollment for the last five years.

11 chu	Trends of Gross Enromment Rate (GER) at primary rever (1-6)											
	Primary 1 <sup>st</sup> cycle				Primary 2 <sup>nd</sup> cycle			Primary (1-8)				
Year	(1-4) (%)			(5-8) (%)			(%)					
	Boys	Girls	Total	Gender	Boys	Girls	Total	Gender	Boys	Girls	Total	Gender
				Gap				Gap				gap
2014	122.9	111.2	117.5	11.7	68.3	53.7	61.1	14.6	98.0	85.1	91.2	12.9
2015	133.0	122.5	127.8	10.5	64.8	55.5	60.2	9.3	100.5	90.5	95.6	10
2016	126.7	118.4	122.6	8.3	65.6	60.5	63.1	5.1	97.6	90.7	94.4	6.9
2017	123.2	114.3	118.8	8.9	67.4	63.5	65.5	3.9	96.6	90.1	93.4	6.5
2018	128.8	119.1	124.0	9.7	69.4	64.8	66.1	2.6	99.5	93.2	96.4	6.3
GR	5.9	7.9	6.5	-	0.9	11.1	5	-	1.5	1.5	5.2	

## Trends of Gross Enrollment Rate (GER) at primary level (1-8)

Source: Computed by the Researcher based on secondary data (ESAA2003)

Table: shows the increase in GER for primary education by gender, except for the years 2018/19. However there remains a gender gap in terms of enrollment of boys and girls with girls still lagging by about 6.3 percentage points, but the gap is also closing.

As indicated in table: The GER for boys and girls in the first and second cycle have small increasing trend. In the first cycle GER for boys has increased by 5.9 percentages, while that of girls has increased by 7.9 percentages in 2003 as compared to the base year.

For the second cycle GER for boys has decreased by 0.9 percentages, while girls increased by 11.1 Percentages. This shows that the government has doing its best to increase the number of girl's enrollment in primary schools.

When we come to gender gap in the first cycle, in the base year there was 13.7 percentages gender gap in favor of boys. The percentage was reduced to 9.7 percentages in 2003. This shows that though there was a gender gap between bays and girls in favor of boys, but the gap was reducing year after year.

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Year	Boys (%)	Girls (%)	Total (%)	Gender gap					
2014	82.6	75.5	79.1	7.5					
2015	86.0	80.7	83.4	5.3					
2016	84.6	81.3	83.0	3.3					
2017	83.1	80.5	82.1	2.6					
2018	87.0	83.5	85.3	3.5					
NER Growth Rate	4.4	8	6.2	-					

### Table: Trends of net enrollment rate for primary school

Source: Computed by the Researcher based on secondary Data (ESAA, 2018)

NER is calculated by dividing the number of properly aged primary students (for Ethiopian case, age 7-14) by the number of children of school going age (7-14), table shows increase in NER from 2014 to 2018 by 6.2 percentage points.

The data on primary NER shows an increasing trend for boys except for a year 2016 and 2017. While that of the girls also show an increment except for a year 2017. The 7.5 percentage points gender gap in 2014 narrowed to 3.5 percentage points in 2018 i.e. gender gap in NER is slightly increased from the last two previous years.

## Table: Primary Repetition rate trends by gender (Grade 1-8)

Year	Boys (%)	Girls (%)	Total (%)
2014	6.4.	5.7	6.1
2015	6.6	5.7	6.1
2016	7.0	6.3	6.7
2017	4.7	5.2	4.9
2018	7.2	10.0	8.5

Source: Educational statistics annual abstract, 2018.

Table: shows similar trend interpretation rates for boys and girls over the first two years. In the year 2017 there was a great achievement in decreasing the repetition rate to 4.9% which is a decline of 1.8 percentage points from the year 2016. However in the year 2018 the rate has been significantly increased with 3.6 percentage points from the previous year. In addition to this there is remarkable increase in girl's repetition rate which is not a good indication of the efficiency of the education system.

# Table: Dropout rate of primary by gender (Grade 1-8)

Year	Dropout Rate					
	Boys (%)	Girls (%)	Total (%)			
2014	12.6	12.5	12.4			
2015	13.1	11.6	12.4			
2016	15.9	13.2	14.6			
2017	18.2	19.0	18.6			
2018	13.1	13.0	13.1			

Source: Educational statistics annual abstract, 2018

As noted in the table the trend in dropout rates nationally has been higher for both genders for the first four years and it has reduced by 5.5 percentage points for the year 2018.

# SECONDARY EDUCATION

Secondary education has been implemented in Ethiopia for many years providing for post-primary education in the first cycle (grade 9-10) and the second cycle (grade 11-12) the focus of secondary education growth has been predominantly in the first cycle Eighty four out of every hundred students in secondary education are in the first cycle National examination is given at grade 10 to certify completion of general secondary education and to select students that quality for the next higher level education i.e. preparatory program or TVET.

Table 4.7 Trends of secondary GER									
	Secondary 1st cycle GER (%)					Secondary 2nd cycle GER (%)			
Year	Boys	Girls	Total	Gender Gap	Boys	Girls	Total	Gender Gap	
2014	45.7	28.6	37.3	17.1	7.3	3.7	5.5	3.6	
2015	44.4	29.6	37.1	14.8	7.8	3.8	5.8	4	
2016	43.7	32.4	38.1	11.3	8.5	3.5	6.0	5	
2017	43.5	34.7	39.1	8.8	8.9	5.0	7.0	3.9	
2018	45.8	34.9	38.4	6.9	9.4	6.7	8.1	2.7	

Source: computed by the researcher based on secondary data (ESAA, 2003)

As can be seen from table over five years enrollment has grown in both cycles especially 2<sup>nd</sup> cycle. In both cycled especially 2<sup>nd</sup> cycle the rate for boys& girls have diverged with boys predominating.

As noted in the table the gender gap between boys and girls for the  $1^{st}$  cycle is declining slightly. As the number of grade increases the challenges that women face become high most of them are forced for marriage at their 17 and 18 and also as they grow up the home work burden also increase due to these factors the gender gap in secondary  $2^{nd}$  cycle becomes wide year after year, although it shrinks a little bit in 2018.

Table: Trends of secondary NER									
Year	Boys (%)	Girls (%)	Both (%)	Gender gap					
1999	16.8	12.6	14.7	4.2					
2000	15.4	12.2	13.8	3.2					
2001	15.0	11.9	13.5	3.1					
2002	16.8	16.1	16.4	0.7					
2003	16.4	16.2	16.3	0.2					

Source: Computed by the researcher based on secondary data (ESAA, 2018)

Table: shows the current statistics for secondary NER in the first cycle. It is clear that there is a large discrepancy between GER and NER for the first cycle, indicating that secondary education is highly dominated by over aged students. This may be due to delayed graduation from primary school or it may be because of examination barriers, supply barriers, financial barriers to transferring from grade 8 of primary to grade 9 of secondary education. While there has been 1.6 percentage points increase in NER in the last five years, the trend show an irregular pattern. The gender gap is narrowed for the two consecutive years i.e. 2017 2018.

Year	1st cycle se	condary		2nd cycle secondary				
	Male	Female	Total	GPI	Male	Female	Total	GPI
2014	45.7	28.6	37.3	0.63	7.3	3.7	5.5	0.5
2015	44.4	29.6	37.1	0.67	7.8	3.8	5.8	0.49
2016	43.7	32.4	38.1	0.74	8.5	3.5	6.0	0.41
2017	43.5	34.7	39.1	0.79	8.9	5.0	7.0	0.56
2018	41.8	34.9	38.4	0.83	9.4	6.7	8.1	0.71

Table: Secondary Gender parity index (GPI)

Source: Computed by the researcher based on secondary data (ESAA, 2018)

As it is mentioned in the previous discussion GPI shows the ratio of female to male enrollment rate. The table shows that there is an increasing trend in GPI when compared with previous year's i.e. a decline in gender disparity. For the first three years GPI is low which indicate higher disparity between female and male enrollment in second cycle secondary. But for the years 2017 & 2018 the GPI show some increment.

When we compare GPI of the two cycles it is clear (observable) that GPI is high for the first cycle and it is lower for second cycle. This indicates that as the level of education increase the balance between male and female is becoming low i.e. higher disparity exist. The gender gap exists due to various factors (barriers) that women face as discussed before. But in this case it is special that most women are involved in emigration when they miss their first chance of EGSECE examination.

#### Relationship between female education and economic development

Since women constitute more than half of the population in Ethiopia educating women has a significant effect on economic development. As tried to show the participation of women in education by using different variables in a current year's government gave a due emphasis for women education when compared to past years. This could be shown from the gender parity index (GPI) at different levels of education is approaching to one (From data analysis).

Even though there was still a gap between males and females this gap was reducing year after year as shown from the analyzed data. This improvement of women education has a positive impact on economic development because education especially, women education is one factor that is required for economic development. Therefore there is a positive relationship between women education and economic development in Gimbo.

To see some of the relationships which have a positive impact on economic development. Many economic and sociological theories predict that education increases women's participation in labor force. It is because it affects women's willingness and ability to enter into labor market. To specify the impacts: the increased schooling of female: Increase their earning power and encourage them in seeking employment, Increases their occupational requirements, Changes people's attitudes towards women's traditional role in the labor market, and Provides them the reference they need for many jobs in the market. Therefore women's education can reduce a negative impact of population growth on economic development. This result from reduced fertility rate due to an increment of female's schooling.

## **Conclusion and Recommendation**

The researcher concludes that female's access to education is likely to contribute improvements in the socio

economic status of individuals and community at large, which is educating and empowering women, has a positive impact on economic development. In addition female education at least to the end of primary school is closely related to lower fertility improved infant and child health.

Moreover mothers who are educated are more likely to educate their children and lesser cost incurred by environmental degradation therefore one has to make sure that women get equal share of benefit from the trends of education. In all trends of education, especially girl's education shows that girls have always been in disadvantageous position in terms of access to and success in education. A number of historical, socio- cultural and economic factors have contributed to this situation.

Although the gender parity Index increased in primary school, it has not yet balanced (i.e. it has not becomes equal to one). When we come to the secondary school the gender parity Index has also show some improvement, but it is not satisfactory because there is a huge gap between women and men education.

Enrollment promotion in primary and secondary schools of country has scientifically increased in recent years as explained in the previous chapters. However the participation of girls still remained low. This implies that only those female students who are motivated and who are economically well-off continued to attend school at different levels of education. Those who could not be supported by their parents or guardians will face to drop out and engage on other income generating activities.

## Recommendation

The study has identified certain problems that are related to the equal educational opportunity for girls. The study has suggested solutions to the identified problems that can only have a long term nature requiring both action programs and research. Accordingly this study makes the following recommendation based on the identified problems and the conclusion. These are: Enhance women's economic empowerment to promote their participation in developing economic policies and provide social and economic safety and security, Promote equal access and success in education and training to build the capacity of women's education and support needy female students to enter and continue their education, Reduce violence against women and improve their human right to increase women's access to all levels of education and decision making particularly political and public spheres. To create awareness among the people regarding women's education with the relation of some development issues and also the significance of women's contribution with men in political economic and social lives of Ethiopian people, To encourage girls educational policies that indicates girls education should not be end but it should be a means to an end, Educational polices on girls should emphasize on creating various channels of communication and use available media to promote girls education and moreover educational policies must give financial support to raise the participation of women in education and educational management must be democratic professionally coordinated, efficient and effective to encourage participation of women in implementing the policies.

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