ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DETERMINANTS OF RURAL GIRLS SCHOOL PARTICIPATION: THE CASE IN QIMBIBIT DISTRICT, OROMIA REGIONAL STATE.

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN DEMOGRAPHY

By:

HERKO BELAY

June 2005

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

Demographic, Socio-economic and Cultural Factors Affecting School Participation of Rural Girls: The Case in Qimbibit District.

By
Herko Belay Deressa

Demographic Training and Research Center
Institute of Development Research

Approved by the Examining Board

Dr. Assefa Hailemariam Chairman, Department Graduate Committee	Signature
Dr. J. Narasimha Rao Advisor	Signature
Dr. Yalew Engidayehu External Examiner	Signature
Dr. Eshetu Gurmu Internal Examiner	Signature

Acknowledgements

In the first place, I would like to express my earnest thanks to my Advisor Dr.J. Narasimha Rao, for his unreserved professional and technical assistance in framing, actualizing and culminating the study.

Next, I strongly expound my deep appreciation to my bureau (OLSAB) Staffs whose support and encouragement during the past two years was unforgettable. Especially I appreciate Obbo Paulose Firdisa who was Oromiya labour and Social Affairs bureau head, and who allowed me to be sponsored and continue my study. Moreover, he was eager to see my success.

I also appreciate Addis Ababa University School of Graduate Study for their financial support to complete this study.

My deep appreciation also goes to my wife w/o Tigist Mitiku for her unreserved and worth support and encouragement during the past two years besides typing the draft of this paper.

Finally my thanks go to the whole my family and those in one way or another contributed to the success of my study.

TABLE OF CONTENTS

Title **Page**

CHAPTER Two

CHAPTER Three

CHAPTER Four

Chapter Five

LIST OF TABLES

List of Appendices.

Acronym

CSA----------Central statistical Authority.

IDR----------Institute of Development Research.

IDS----------Institute of Development studies.

MOE----------Ministry of Education.

OEB---------- Oromiya Education Bureau.

SPSS----------Statistical Package for Social Scientist.

UNESCO----------United Nations Educational, Scientific and Cultural Organization.

UNICEF----------United Nations Children's Fund

CBOS----------Community Based Organizations

Abstract

Female education is recognized as one of the important pathways to promote social and economic development. In Oromiya, evidence from different sources indicates that although there have been improvements in female participation, girls' and women's access to education remains limited in several zones in the region. It is evident that girls have less access to and more likely to drop out of school than boys. Factors that contributed for less educational participation of rural girls are varying from place to place in their type and intensity.

This study found out the major demographic, socio-economic and socio-cultural variables that influenced educational participation of rural girls in Qimbibit district. It was based on primary data collected from parents (selected rural households), primary school and out of school girls and primary school teachers. After the data has been collected and edited, SPSS computer soft ware was used to code, recode and analysis. Univariate analytical method was used in describing the background characteristics of the study population. After the association between independent and dependent variables had been tested using bivariate analytical method (i.e., Chi-square test), logistic regression was used for further analysis.

The result of this research finding indicates that Variables such as age of parents, family size, parents' basic assets, literacy status of parents, abduction and sexual harassments and parents' attitudes towards girls' education are the major ones affecting school participation of rural girls. Based on the findings of the study the investigator recommended areas of intervention to tackle the problem and reduce its future consequence. Among the recommendations:-

- Increasing awareness (Educating parents and the community):- community and parental resistance to girls' education is not limited to obvious economic reasons, some times they lack appreciation of the benefits, misunderstand the schooling process and are ignorant of educational opportunities open to their daughters. Hence, community influential persons, elders and religious leaders should intensively participate in educating parents and the community about the benefits of educating girls in addition to the use of education media. This needs a close and intact supervision and follow-up by concerned government and non-government organizations.
- Empower rural women both economically and socially. This can be possible through:-
    A) Providing both formal and informal education opportunities.
    B) Participating in income generating activities that doesn't require much labor, rather this needs new technology and reduce labor force.

CHAPTER-ONE

1.0 Introduction

1.1 Background

There seems to be general agreement that education is crucial for socio-economic development, and most countries appear to be giving education priority. Especially, primary education provides a fundamental base for further human development. It also provides the basis for developing the capacity to cope with readily evolving and changing society in an information age. Therefore, its universal availability for all and quality are central to the human resource development capacity of any society. Hence, ensuring gender equality through promoting female education has a significant positive impact on socio-economic, socio-cultural and demographic change.

There are several studies that indicate the impact of gender inequality in education on socio-economic development. According to Lagerlot (1998) model, in S. Klasen (1999), initial gender inequality in education can lead to a self-perpetuating equilibrium of continual gender inequality in education with the consequence of high fertility and low economic growth.

J.Jeheebhoy (1995) indicated that, the benefits of educating women ranges form improved productivity, income and economic development on the national level to a better quality of life on the individual level, notably a healthier and better nourished population and gender autonomy among women. Educated women, no less than men, tend to be more employed and to earn more than those with less education. Data at the national aggregate level indicate that there is a correlation between years of education and GNP. Moreover, countries with the smallest educational gaps between men and women have higher GNPs, revealing that as education is more fairly distributed among the population, the productivity of the nation increases (king and Hill, 1993; sited in Nelly, P, 1997, P. 56).

Educating women is also important for all kinds of demographic behavior affecting mortality, health, fertility and contraception. Greater the woman education, increases her health knowledge, which improves her ability to promote the health of her children, and the power over household resources, which often leads to greater allocations to child health and nutrition compared to her husbands S.Kalsen (1999). That is educated women tend to make better decisions regarding family health, hygiene, and nutrition; thus, their children exhibit lower mortality rates. Women's level of education is a very strong predictor of fertility and contraceptive use, since educated women tend to delay marriage and to have fewer children. Even though, the minimum years of schooling for education to make a difference varies depending on the quality of education, the ability of the individual, and the societal context; it seems that between four and five years of schooling creates a level of skills and knowledge that will be sustainable (Nelly, P, 1997,P. 97). Therefore, it is important that girls not only be given access to school, but that they complete at least the primary cycle.

Despite its paramount individual and social benefit, education for girls is very low especially in developing countries. A number of studies indicated that despite repeated commitment on part of governmental and non governmental organizations to efficiently tackle the issue of women empowerment the gender disparity with regard to education seems to be quite glaring (Genet, 1991;king and Hill, 1993;Nelly, P, 1997; UNICEF, 1992;).

The problem of gender disparity in education is high in rural areas than in urban areas of most developing countries. In most rural areas traditional cultural attitudes and beliefs are still very strong which discourage girls' education. According to the Beijing Declaration (1996), discrimination in girls' educational participation persists in many areas owing to customary attitudes, early marriage and pregnancies. The declaration notes that girls under take heavy domestic work at a very early age.

1.2. Statement of the problem

Studies indicated that girl's education has always lagged behind that of boys in all developing countries. According to the 2003/4 educations for all global monitoring report, despite progress in girls' education in 1990's girls continue to face sharp discrimination in access to schooling through out the developing world. A number of statistical data indicate that girls in rural areas are more disadvantaged in terms of access to and success in their education. Some of the reasons responsible for this are economic constraints, unreasonable load of house hold chores, early marriage, school distance, marriage by abduction and pregnancy etc.

In Ethiopia, except for Addis Ababa and some towns, a gender disparity in education is high with girls having significantly lower gross enrolment ratio than boys. Even though there were efforts by the government to reduce gender gap in education by raising the gross enrolment ratio of girls, the result was not attractive. P.O.yalokwu (2001) indicated that the primary school enrolment rate for girls were 38% and 39% for the years 1995/96 and 1999/2000 respectively. But the distribution of girl's primary school enrolment ratio is varying among regions and districts in response to relative socio-economic development.

In Oromia, even though there is expansion of basic education, high gender disparity exists in rural areas, especially in primary school enrolments. According to Oromia Education Statistics Annual Abstract for the year 2004, the regional rural primary school participation rate (gross enrolment ratio) was 72% for males and 46% for females. The data indicated that males' primary school participation was by far higher than females' participation. Moreover, from around 1.2 million children out of the school in the region, 75% of them are girls. One of the unique features in urban/rural disparity is that, urban participation for females is higher than that of rural female participation in that in the urban areas; over all female primary school enrolment ratios was 145.5% while in rural areas it was 46% (Ibid).

North shoa is one of the zone of Oromia regional states where rural girls' primary school participation is very low (32.2%) next to Borena (25.3%).In the zone, Qimbibit district is one of the districts with very low girls primary school gross enrolment ratio (30%). This implies that majority of the girls in the district could not get the chance to participate in primary education. The under – representation of girls in primary school on the other hand implies that, education of future mothers will be impaired which is a challenge to efforts done to bring development. No detail study has been under taken in the district to identify the problems and its causes. Therefore, this study tries to answer the following basic questions: -

1. What are the main household social, economic and cultural factors that are an obstacle to girls' primary school participation in the study area?
2. What are the demographic factors affecting girls' primary school participation in the study area?
3. Which factors are more influential in sustaining low primary school participation of girls?
4. What roles to be played by government, non – government and community organizations to reduce gender gap in education?

1.3 Objectives of the study

The general objective of this study is to explore how household socio-economic, cultural and demographic factors affect primary school participation of rural girls in the study district and come up with the strategies that should be implemented to alleviate these problems. The Specific objectives of this study are:-

- To explore the influences of age, family size and sex of the household heads on school participation of rural girls in the study district.
- To examine the impact of parents' educational status and ownership of basic assets on rural girls school participation.
- To analyze how parent's attitudes and beliefs towards girl's education in general affect school participation of their daughters.

- To explore whether or not early marriage, abduction and sexual harassments are influencing school participation of rural girls in the study district
- To examine the impact of physical distance on school participation of rural girls in the study district.

1.4 Definition of Key Terms

Conceptual and working/operational/ definition of important terms used in this study was given as follows.

1.4.1. Conceptual Definition.

- Gross enrollment ratio in primary school (1-8):

It is defined as the proportion of total enrollment in primary, irrespective of age, out of the corresponding school age population for the primary. This is probably the most widely used indicator of access or participation in developing countries (MOE, 2000).

- Gender:

A cultural elaboration of differences between men and women. It becomes the set of patterns of learned behavior about what society considers appropriate for women or men (UNESCO, 1997).

1.4.2. Operational or working Definition.

- Girls' educational participation:

The enrollment of young girls as compared with young boys.

- Gender disparity or Gender gap:

It is inequality in educational participation between males and females.

- "Goti":

Is an association of a limited number of peasant households with in the larger kebele administration. Mostly it consists of 80 -100 households. It is the channel of public mobilization for political and socio-economic purposes.

- "Gare":

Is an association of households smaller than Goti which consists of 20 -30 households.

- "Cell":

Like Goti and Gare, Cell is the smallest association of households that consist of five households.

1.5. Literature review

1.5.1. The situation of women education across developing regions.

Centuries ago women had been suffering from their low status in all spheres of their life. This low status of women emanated from the sexual division of labor created in a society. The low status of women affected not only their life condition but also hinders the over all social, economic and cultural change among society.

However, over the last few decades a number of actions have been taken against gender inequalities in many aspects including education. To mention few, the United Nations Universal Declaration of Human Rights in 1948, the series of meetings of Africa, Asian and Latin American states and governments in the 60s, 70s and 80s, The United Nations General Assembly Declaration of the Decade for women (1975-1985), and The World Declaration on Basic Education for all etc. are some emphasized on education for women and girls as a means of reducing gender disparities (Mekasha, 2000, P.108). While progress towards ensuing gender equality has been achieved in some countries, practical measures have yet to be taken. In many instances women's position is still far from satisfactory.

The lower status of women in most developing countries is rooted in economic inequalities, discrimination with regard to access to power, society's reluctance to change attitudes and sexually discriminatory practices, customs and habits that negatively affect the education of women and girls and ignorance of legal rights due to the influence of cultural models (Ibid). Moreover, ideological forces in many societies create and maintain notions that women and men are very different in physical, physiological, and intellectual constitutions (P. Nelly, 1997,P.143). Therefore, all these factors hinder women not to participate in education mostly in developing countries. According to UNESCO, (1990) While almost half (45%) of the female population of developing countries is illiterate, and the figure in the least developed countries rises to 79 percent of adult women. In Africa 64 percent of women cannot read and write and fewer than half the school-age girls were enrolled in primary school (Ballora, 1992). Moreover, in 1990 about 125 million children

between 6 and 11 years were not enrolled in school in developing countries, and in 16 developing countries primary school enrolment for girls is two-third lower than for boys (UNICEF, 1992).

Generally even though education for women and girls is the basis for the promotion and improvement of their status and a tool to support their role as equal partners in society, majority of women in developing countries are illiterate.

1.5.2 Women's education and Development

Accessing Women and girls to education enhances their empowerments and helps them to participate in development activities. As part of individual's personal development, education is a right for every woman as well as men and they should has access to it. Acquiring it enables women to increase their self-confidence, improve their self-esteem, became aware of their civil rights improve their income earning capabilities and to play an active role in family and community decision making (Ballora, 1992, P. 86). Hence, Literacy is a means for women to participate on equal terms in the process of social development and change for quantitative and qualitative progress in society, in short for sustainable development.

A diverse body of literature and empirical research outputs demonstrate that women who have educational background they can have more paid employment, low fertility rate, better health, better nutritional status and have more dynamic attitude than their uneducated counter parts (World Bank, 1999).

Uneducated mothers have less ability to influence decisions in the family. Their daughters remain uneducated as well vicious circle perpetuates. Girls grow up only to marry and bear children. Moreover, they are kept at home and remain unskilled.

A number of studies have demonstrated the effects of women's literacy and education in both social and economic development. Women's education plays an important role in childcare, especially in relation to infant mortality levels. A study carried out by the Research Triangle institute (1990) in 80 developing countries

indicated that an increase of seventy percent in girl's enrolment in primary schools, together with a comparable growth in secondary education, would after 20 years result in a decrease in the infant mortality rate of 40 per 1,000 live births (Ballora, 1992)

Studies by Ballora (1992) indicated that as women's level of education raises the number of mal nourished children declines. Moreover, prenatal care and medical treatment at child birth increases with the mother's level of education.

Women's literacy has a positive impact on school enrolment and attendance of girls. According to the study carried out in Mexico, adults who completed at least primary education had more daughters with some formal education than those who had not finished their studies (Ibid).

Education increases women's self-reliance in economic matters as well as self-reliance for social acceptance and status. In discussing the effects of women education on their economic activity, J. Jejeebhoy (1998) explained that education opens economic opportunities for women and increases their participation in the wage sector and that such participation enhances women's control over material resources by giving them an independent source of income. Greater control over material resources may reduce educated women's reliance on children for material support and increase their ability to purchase health and contraceptive services.

Education also enables women to participate in labor force and increase production. According to the Triangle Research institute by Ballora (1992), a 70 percent increase in primary and secondary education will after 20 years lead to a 7.3 percent increase in women's participation in the labor force. Increased productivity in the agricultural sector is also linked to the educational level of rural women. Studies in many developing countries indicated that four years of primary education (usually considered the minimum level for retaining literacy) increased productivity by 7.4 percent with additional benefits in the form of increased modernization of agriculture (Ballora, 1992).

1.5.3 Women's education and demographic process

Women's education is highly associated with demographic variables like fertility, mortality and migration.

1.5.3.1 Woman's education and Fertility

Marriage (or union) is important in fertility analysis because it defines periods of exposure to sexual activity and child bearing. Several studies reported that women's level of education is positively associated with age at marriage and the number of children. Fertility levels are usually lowest among the most educated women compared to the uneducated women. According to population bulletin (1997), a study done in Brazil indicated that women with no formal schooling have an average of 6.7 children while those with secondary or higher schooling have only 3.2 children on average. This is because, women's education influence fertility by raising the age at marriage, by providing women with new job opportunities, and by introducing woman to new ideas or values etc.

1.5.3.2 Women's education and Mortality

Women's education improves the nutritional status and health care of the family. Many studies reported that there is a strong relation ship between child health and mortality and women's education, even stronger than the relationship between women's education and fertility. Mothers with primary of higher education witness fewer deaths among their children than women with no education. According to population bulletin (1997), in Burkina Faso, the infant mortality rate was 111deaths per 1000 births for women with no education, compared with 90 infant's death per 1000 for women who had completed primary school and 53 deaths per 1,000 for children of mothers with secondary or higher education.

1.5.4. Major factors Affecting Rural Girls education

A number of complex and interrelated factors affect the educational participation of rural girls. Different studies classify these factors in various ways. For instance, institutional polices and practices; societies customs, beliefs and attitudes about

women's roles, responsibilities and capabilities, and socio-economic factors affect educational participation of girls (Ayiga, 1997; Emebet, 1998; IDS, 1998; Odaga and Heneveld, 1995). However, many of these factors that affect rural girls educational participation are vary in terms of their severity and extent from place-to-place and society-to-society. Therefore, this review summarizes the literature under the categories: demographic, socio-economic, and socio-cultural factors that affect girls' school participation.

1.5.4.1 Socio – economic Factors

Household socio-economic factors that affect the educational participation of rural girls include educational level of parents, parents' occupation and religion, family income and assets, etc. The ability of parents to cover school expenditure on items such as uniforms, exercise book and others has been found to be a very important factor that affects access to schooling of girls. When resources are scares parents prefer to invest on the education of sons rather than daughters (Emebet, 2004). Economic constraints seriously affect girl's education in a number of ways by depriving them of the time to do assignment and studies, necessary school materials and also burdening them with responsibilities especially household chores, which seriously affect the educational participation of rural girls.

Parents in rural areas with low household income and socio-economic background face problems in sending their children to schools. Studies indicate that, in most developing countries, children of poor families have less chance to enroll in school and more probability to drop out than children of well to do families (Anderson, 1988; Lockheed and Verspoor, 1991: sited in Befekadu, 1998,P.41). Since poverty is often linked to the limited educational attainment and low occupational status of the parents, poor families do not give priority to the value of education.

Even in countries where primary education is free, household educational opportunities can be unaffordable to rural people. When decisions have to made as a result of financial constraints girls are more likely to be affected and withdraw from school than boys (Odaga and Heneveld, 1995). In Ethiopia also, economic problems

of households and low socio-economic status have been suggested to be important factors for the inability of parents to send their children to school (Anbessu and Junge, 1988: sited in Befekadu, 1998, P.48). Child labor is also another problem affecting educational participation of rural girls in most developing countries including Ethiopia. Child labor is the means to the survival of some households, and schooling represents a high opportunity cost to those sending children to school. While the importance of child labor for agricultural, domestic and marketing tasks, has been well documented, when it comes to child care, girls are more likely to be involved than boys, and children in rural areas spend more time working than those in urban areas, consequently there are fewer rural girls in schools than their urban peers (Asomanting and Others, 1994; Brock and Cammish, 1991; Cammish and Brock 1994: sited in Odaga and Heneveld, 1995, P.73).

Research findings in different countries of Africa indicated that girls are the major sources of labor in the household to fetch water, fetch fuel in the form of firewood, dried animal dung or crop residues, help in preparing food in grinding, husking and pounding of grains; looking after younger children; washing and participate in the work force in weeding; holing, with handcrafts production and with tread from an early age some times as young as six (Befekadu, 1998, P.34).

The expected benefits of investments in education can serve either as a motivating or deterring factor to the enrollment of children in school. Research findings indicate that, if the perceived benefits are higher than the expected costs, then parents may be motivated to make sacrifices and send their children to school because with higher levels of education, their chances of finding a high income-earning job are higher. On the other hand, if long unemployment persists after children leaving school, parents may not send their children to school and may withdraw them from schools (Odaga and Heneveld, 1995: P. Nelly, 1997: Forum for African women Educationalists, 1996). The effect of poor employment prospects negatively affects girls more than boys. Males tend to have better job prospects and earn more than females, and this has been one of the reasons why parents prefer to educate their

sons rather than their daughters (Appleton and others, 1990; Brock and Cammish, 1991; Davison and Kanyuka, 1992; Dundow and Howuth, 1993: sited in Odaga and Heneveld, 1995, P. 79).

The economic condition of a country also influences the educational opportunities of its citizens differently. For poor countries the disadvantaged such as girls and those in rural areas tends to suffer most. Different research results indicated that, the gap between boys and girls is largest in poorest countries and disappears for high-income countries at least for the primary and secondary level (Gertler and Glewwe 1990, Colclough, 1994: sited in Forum for African women Educationalists, 1996).

Parental education, especially mothers' educational status is also one of the serious factors that affect educational participation of girls. Studies by Odaga and Henevel, (1995) found out that maternal education is the main influence on children's schooling, whether for boys or girls. The effect on girls is roughly twice as great whether for girl's actual enrolment or for the probability that the girls will continue to the next grade. Parental education also promotes children's enrollment, more for girls than boys, but the maternal effects are stronger (UNICEF, 1992). In general, female students who come from families of better socio-economic status participate in education than female students who come from poor families (Emebet, 2004).

1.5.4.2. Socio - Cultural Factors

There is the problem of cultural patterns and customs, society's beliefs and attitudes that affect the educational participation of girls in general and that of rural girls in particular.

A) Parental perception towards schooling for girls

Parental and familial beliefs and attitudes have a strong influence on the decision to invest on children's education. Especially investment in girls' education is affected by many negative perceptions of girls and women. Some parents believe that boys are more intelligent, they perform better in school and they are a better educational investment than girls. In societies where patrilineal inheritance is dominant, boys are

favored in human capital investment decisions since they are the prime beneficiaries of family assets (Odaga, 1995).

Many literatures indicate that, parents worry about wasting money on the education of girls who are likely to get pregnant or married before completing their schooling. There is a strong belief that, once married, girls become part of another family and the parental investment is lost (Davison, 1993; sited in Odaga and Heneveld, 1995). Some communities and parents hold a negative view of educated girls. According to Bello and Others (1992); sited in Odaga 1995, in Chad some parents believe that schools push girls to prostitution, make them unfaithful to their husbands and make them difficult to control by parents. In some regions of Cameroon, educated girls are perceived as being too independent and demanding and being likely to challenge the traditional submissive role expected of them in marriage (cammish and Brock, 1994).

Across the region formal education has historically been linked to employment opportunities in the labor market. Families tend to judge the value of education by the returns from the labor market. Given the historical exclusion of girls from education and the formal labor market, it seems prudent for families to invest in the formal education of boys because they always are better placed to explore formal labor market opportunities. The tradition of poor female participation and performance in school and the labor market reinforces this familial and community bias (UNICEF, 1992).

In most cases parents and families often give the excuse of lack of resources for not educating daughters and girls to cover up the realities behind. Although poverty is a very real constraint to education and the economic costs of education are prohibitive to some parents, research findings suggest that many parents and families respond lack of money as a reason for not educating girls to cover up for socio-cultural and other factors (Kapakasa, 1992; sited in Odaga and Heneveld, 1995).

B) Fear of pregnancy and sexual harassment

After puberty, parents are often afraid that girls attending school will encourage sexual liaisons and become pregnant. The loss of a daughter's virginity and pregnancy is seen as shameful in societies and some parents may prefer not to send girls to school or withdraw daughters from school at puberty to prevent this risk.

Studies have shown that, girls may be harassed sexually on the way to, as well as with in schools by male pupils as well as teachers. A study by Amanuel (2002) also indicated that, parents support early marriage due to fear of unwanted pregnancy, abduction and loss of virginity, which seem to have a great value. It is estimated that 3,000 primary school girls get pregnant yearly in Tanzania and are thus expelled from school (Bendera and Mboya, 1998). This is both a discouragement for girls to attend schools causing absenteeism and dropout, as well as reason for the reluctance of parents to send daughters to school. This is likely to be more critical where girls have to travel a long distance to reach school.

Other studies indicated that, parental fear of teenage pregnancies limit girls access to as well as persistence in school since it cause parents to withdraw their daughters from school when they reach the age of puberty and give them in marriage (Dolphyne, 1991).

C) Early marriage, abduction and religion.

In most societies because of various socio-cultural reasons girls are made to marry at their early age. Some customs, traditions and religions favored early marriages for girls for fear of premarital pregnancies (Bendera and Mboya, 1998). Studies in many developing countries indicated that, the number of girls attending school abruptly drops when they reach the ages 15 to 19. One major reason for this phenomenon is early marriage (Emebet, 2003). A study by Amanuel (2002) also indicated that, parents support early marriage due to fear of unwanted pregnancy, abduction and loss of virginity, which seem to have a great value. Many parents believe that it is not worth while to invest in girls' education instead they invest time and money to educate their sons, who will provide support for them when adult (Ballora, 1992). In

many societies daughters are seen as additional sources of household labor that, once married, will become part of productive labor force of another household.

In most societies, women are often perceived as being weaker than and interior to men in which such perceptions tend to influence societies expectation and behavioral roles of women and have often been used to justify the restriction society places on women in terms of responsibility, independence and status. Consequently, girls tend to be expected to learn certain subjects like domestic science which society or culture considers being compatible with their future roles when they grow up (IDS, 1995).

Cultural practices such as marriage and bride price or dowry systems have been found to be influential barrier to rural girl's education. More over, parental fear of teenage pregnancies also limits access to as well as persistence in school. Such fear causes parents to withdraw their daughters from school when they reach the age of puberty and give them in marriage.

1.5.4.3. Demographic factors

One important demographic factor that affects access to schooling of rural girls is the average size and composition of the family unit. Family size has often been associated with other factors such as income, occupation and parental educational level. Many research results noted that low-income households often with low levels of education found to have large families. As a result, their modest financial resources either have to be spread thinly amongst all, or priority has to be given to some children only (IDS, 1998). In such circumstance, parents have to make the decision about which children would attend and which would not. The implication from this is that there is a negative correlation between family size and investment in a girl's education.

1.6 Analytical Framework

In the literature review, various factors like socio-economic, demographic and socio-cultural factors in general which influence girls educational participation has been reviewed. However, in this study the researcher has dealt with the major determinant variables under socio-economic, demographic and socio-cultural factors.

The variables of the study

The dependent variable of the study is parents' priority in sending their children to school, which is categorized into a boy, a girl and both. If parents prefer to send a girl or both (girls and boys), girls participate in education, but if parents prefer to send boys only girls do not participate in education. Hence, the dependent variable of the study is "rural girls educational participation in primary schools" which is a dichotomous variable categorized in to those who participate and those who do not participate.

Based on the information from the literature review and the experience of the researcher, it is assumed that there are many independent variables responsible for the lower educational participation of rural girls in the study district. The independent variables were investigated under the category of socio-economic, demographic and socio-cultural factors.

A) Socio-economic factors: -The variables considered from socio-economic factors includes; household basic assets, fathers and mothers educational attainment and occupation, and religion.

B) Demographic factors: -Age of the household head, sex of the household heads, and family size are some of the demographic variables considered in this study.

C) Socio-cultural factors: -Under this category, fear of abduction and sexual harassment, early marriage and parents attitudes and beliefs towards girls' education were analyzed.

Therefore all the demographic, socio-economic and socio-cultural variables listed above affect educational participation of rural girls directly or indirectly.

1.7. Hypotheses

1. Educational participation of rural girls may increases with age of parents.
2. Parents' basic assets are positively related to the educational participation of rural girls.
3. Rural girls' Educational participation increases with parents' educational level.
4. Large family size is negatively associated with educational participation of rural girls.
5. Fear of abduction and sexual harassments negatively associated with school participation of rural girls.

1.8 Significance of the study

- As it has been stated educating female / girls brings a positive socio-economic, cultural and demographic change. Therefore, identifying the main obstacles that hinder the educational participation of rural girls considered to be half way of solving the problems.
- The strategies to be identified will help concerned authorities in alleviating the problems.
- The result of this study can serve as base line information for those who are interested to do further research in the area of rural girls' education especially in other districts of Oromyia where educational participation of rural girls is low.

1.9 Limitation of the study

Due to financial and time constraints, quantitative data had not been collected from out of the school and primary school girls. As a result, the researcher could not compare quantitative results obtained from parents with that of data from out school and schoolgirls. So the researcher had tried to collect qualitative data from out of school and schoolgirls using focus group discussion and in depth interview.

Some of the difficulties faced during the fieldwork include, since it was the time of election there was suspicions on the part of the study population considering that the researcher is from one of the political parties. Other difficulties include the problem of transportation and food.

1.10 Organization of the study

This study has six chapters. The fist chapter deals about background of the study, statement of the problem, both general and specific objectives, review of related literature, conceptual framework and hypotheses.

The second chapter incorporates research design and methodology, which consists, fieldwork procedure, source of data, sampling techniques and methods of analysis. Background characteristics of the study region were described in chapter three.

Chapter four deal with the statistical test of association between predictor and outcome variable using chi-square. After the association between out come and predictor variables were tested and interpreted, the degree of influence of each independent variables on dependent variables were analyzed in chapter five using multivariate logistic regression. Finally in chapter six, summary, conclusion and policy recommendations were provided.

1.11. RESEARCH DESIGN AND METHODOLOGY

Under this section, the method used, subjects included in the study, sampling procedure, the instruments; the procedures for data collection and techniques used for data analysis were described.

This study is based on the data collected in Qimbibit district, North shoa zone, Oromia regional state. The study zone and district had been selected for the following main reasons:

a). Among zones of Oromia regional state the lowest primary school enrollment of rural girls is observed in North shoa zone followed by Borena (Oromia educational statistics annual abstract, 2004).

b). Among districts in north shoa zone, the lowest primary school enrolment of rural girls is observed in Qimbibit district (Oromia educational statistics annual abstract, 2004).

c). It seems that no detail study has been done so far on the factors that affect school enrolment of rural girls in the study district.

1.11.1 Source of data

For this study the main source of data is primary, which was collected from the following sources:

- Qimbibit district education bureau
- Three primary schools directors and teachers
- Parents and
- Primary school and out of school girls

1.11.2 Fieldwork procedure.

In identifying respondents and collecting relevant data to the study, assistance had been obtained from Qimbibit District Public Mobilization office (who are organizing each kebeles in to "Goti", "Gare" and "cell"", and have detail information about size of households in each kebeles and family size of each household). Other offices that

provided assistance include kebele administration, Qimbibit District Education Bureau and selected primary schools directors and teachers.

For data collection eight enumerators and four supervisors, all with high school education and with some fieldwork experience were employed. Enumerators and supervisors were given a two-day orientation and training about the objectives and methods of the study, the instruments for data collection and content of the questionnaire to avoid any complexities.

1.11.3 Sampling techniques

A) Selection of peasant associations and parents.

In Qimbibit district there are a total of thirty Kebeles where twenty-nine of them are rural peasant associations. From this twenty-nine peasant associations, six of them (about 20%) was randomly selected using a lottery method. This is because all peasant associations of the district are almost homogenous in terms of climatic condition, fertility of land, distribution of primary schools and other socio-cultural factors.

As to the selection of parents is concerned, a total of about 58 parents (household heads) who have at least a son and a daughter who are school aged were randomly selected from each selected peasant associations based on information obtained from each "Goti", "Gare" and "Cell" leaders. Therefore, a total of 352 household heads were interviewed for this study.

C) Sample size determination

In order to determine the minimum sample size required for this study, the proportion of girl's school participation rate in the district was used. According to Oromiya Educational Statistics Annual Abstract, 2003/2004 the above figure was 30%. Thus P is, therefore set at 0.30 and 1-P at 0.70. These figures were plugged in the following formula to obtain the required sample size.

$$n = \frac{(z^2\square/2)^2 . p. (1-p)}{d^2}$$

The sample is determined with the following assumptions;-

- A confidence interval of 95%
- A 5% margin of error is accepted.
- 5% contingency, that is, for non-response.

$$\mathbf{n} = \frac{(z^2\square/2)^2 .p. (1-p)}{d^2} + 5\% \text{ contingency}$$

$\mathbf{z^2\square/2}$ =1.96~2, where Z= the standard normal deviate which corresponds to the 95%confidence level.

d =margin of error.

P = proportion of female school participation in the study district.

1-p =proportion of school age girls who could not get the chance of education.

Since p=0.30 and 1-p=0.70, n is calculated as;-

$$\mathbf{n = \frac{(4 \times 0.30 \times 0.70)}{(0.05)^2} + 5\% = 352}$$

Therefore, a total of 352 individual households were selected from the 6 peasant associations for this study.

1.11.4 Instruments Design

There are two major instruments used in this study. These were questionnaire and focus group discussions.

A). Questionnaire: - Household based questionnaire with both closed and open-ended items were administered for parents. Items for the questionnaire were adapted from the relevant literature reviewed in the study, and also developed by the investigator. The questionnaire was prepared in English and then translated into Afan Oromo in order to make communication easy.

B). Focus group discussion: - The focus group discussions were organized and conducted in three separate groups. The first group represents parents, which

included mothers, fathers, religious persons and elders. The second group is primary school and out of schoolgirls and the final group from teachers. Each group consisted of 8 to 15 participants.

1.11.5 Methods of Data Analysis

Univariate analytical method was used to describe the background characteristics of the study population. To identify the important variables (factors) that influence girl's educational participation, bivariate methods was used (i.e. chi-square statistical test). Moreover, disparities of girls' educational participation had been analyzed through bi-variate analysis.

In this study, the dependent variable was girl's educational participation, while demographic, socio-economic and socio-cultural factors consist of a set of independent variables. The data were analyzed using social science statistical package (SPSS), which is commonly used for intermediate level of data management.

For this study binary logistic Regression was used as an appropriate statistical technique, because there is one dependent variable, which is dichotomous. Hence the equation of logistic regression model is given as:

$$\text{Logit}(P_i) = \text{Ln}(P_i/1-P_i) = B_o+B_1X_1+B_2X_2+- - - + B_kX_k$$

Where B_o is the intercept, B_1 to B_k are the logistic regression coefficients, and X_1 to X_k are the independent variables.

Where B_i refers to the effect of x_{ij} on the log odds that $y_i=1$, controlling for other x's.

In order to measure how well the model fits, classification and the likelihood method were used.

In this study 0.05 is the value to be taken as level of significance. The list of variables that were used in the study is given bellow.

Table: 1.1. Demographic variables

Variable	Description	Value Level	Value
X_1	**Sex of the household head**	**1= Male 2= Female**	**String**
X_2	**Age of the household head**	**----------**	**Number**
X_3	**Marital status of the household head**	**1=Never married 2=Married 3=Divorced 4=Widowed 5=Separated 66=No response**	**String**
X_4	**Family size**	**----------**	**Number**
X_5	**Distance to school**	**----------**	**Number**

Table: 1.2. Socio-economic variables

Variable	Description	Value Level	Value
X_6	Fathers' educational attainment	1=Illiterate 2=Literate	String
X_7	**Mothers' educational attainment**	1=Illiterate 2=Literate	String
X_8	**Fathers' occupation**	1=Civil servant 2=Merchant 3=Agriculture 4=Daily laborer	String
X_9	**Mothers' occupation**	**1=Civil servant 2=Merchant 3=Agriculture 4=Daily laborer 5=House wives**	String
X_{10}	Religion of the household head	**1=Orthodox 2=Muslim 3=Catholic 4=Protestant**	String
X_{11}	Household basic assets - Farm land size in hectors - Number of oxen - Number of cows	---------- ---------- ----------	**Number** **Number** **Number**

Table: 1.3. Socio-cultural variables

Variable	Description	Value Level	Value
X_{12}	**Fear of abduction and sexual harassment**	----------	**String**
X_{13}	**Parents attitude and beliefs towards girls education**	----------	**String**
X_{14}	**A best thing a girl should do (preference of parents)**	----------	**String**
X_{15}	**Parents perception of their daughters age at first marriage**	----------	**String**

CHAPTER Tw0

2. BACKGROUND CHARACTERISTICS OF THE STUDY REGION AND THE STUDY POPULATION

Under this section general information about population size, land area, access to formal education etc of north shoa zone and the study district (Qimbibit) were described.

North shoa zone is one of the fourteen zones of Oromia regional state located in the central part of the country. It has an area of 3.2 percent of the total land area of the regional state accounting for 11,376 sq.km. As it is projected from the base population of the 1994 national population and housing census for the year 2001, the total population was 1,415,578 with the sex ratio of almost equal. In the zone about 42% of the total populations are children under the age of 15. It is the fourth densely populated zone in the region (124.4 people per sq. km) next to Jimma, west and east shoa zones. The vast majority of the people in the zone live in rural area (91.4%) a population, which is the highest when compared with the national average (84.9%) and the regional average of 87.9 percent.

Even though education is the light in the way to development, and every citizen have the right to access to education, very few number of the younger generation have an access to education in this zone. According to the 1998 welfare promoting survey of CSA, the literacy rate of the zones rural population aged 10 years and over was found to be 11.3 percent, the lowest rate among all the zones of the region. This literacy ratio shows marked gender discrepancy of 17 percent for males and 4.9 percent for females. According to Oromia Educational statistics Annual Abstract for 2004, primary school Participation rate (gross enrolment ratio) of male students is much higher than that of females, which is 60.8 and 46.9 for boys and girls respectively.

Qimbibit, which is the study district, is found to the North of Addis Ababa in Oromiya Regional state having the total area of 1890 Km^2. It is located on the main road to Mekele about 100 km far from Addis Ababa. As it is projected from the base

population of the 1994 national population and housing census for the year 2003, the district has the total population of about 594, 784 of which the Oromo's constitute over 95 percent of dwellers.

Agriculture that incorporates both subsistence farming and animal rearing is the main economic sphere that has been the backbone of the dwellers. Crops such as barley, wheat, beans etc and animals that include cattle, goat and sheep are widely reared.

2.1. Characteristics of the study population

For this study parents are the unit of analysis who's socio-economic, socio-cultural and demographic background characteristics have an impact on girls' low educational participation. Therefore, some of the socio-economic, socio-cultural and demographic background characteristics of parents were described bellow.

2.1.1. Demographic Characteristics of Respondents

Table.2.1.Frequency and percentages of parents by demographic characteristics

• Sex of the household head	**Frequency**	**Percent**
Male	277	78.7
Female	75	21.3
Total	352	100.0
• **Age of the household head**	Frequency	Percent
<30	56	15.9
30-44	70	19.9
45-49	65	18.5
50+	161	45.7
Total	352	100.0
• **Marital status of the household**	**Frequency**	**Percent**
Married	345	98
Others	7	2.0
Total	352	100.0
• **Mothers' age at first marriage**	**Frequency**	**Percent**
<15	43	12.2
15-19	152	43.2
Above 19	157	44.6
Total	352	100.0
• **Fathers' age at first marriage**	**Frequency**	**Percent**
10-14	7	2.0
15-19	23	6.5
20+	322	91.5
Total	352	100.0
• **Family size**	**Frequency**	**Percent**
<5	128	36.4
6-7	109	31.0
8+	115	32.7
Total	352	100.0
• **With what time gap do you give birth to a child**	**Frequency**	**Percent**
One year	96	27.3
two years	146	41.5
Three years	110	31.3
Total	352	100.0
• **Distance to school**	**Frequency**	**Percent**
<30minutes	129	36.6
30-60 minutes	177	50.3
Above 60 minutes	46	13.1
Total	352	100.0

As it is observed from the above table, the sex distribution of the respondents show that males account for 78.7 percent of the total, while females account 21.3 percent. As to the age distribution of the respondents is concerned majority of them (45.7 percent) are 50 and above, while those who are between the age categories of 30-44 and 45-49 are 19.9 and 18.5 percent respectively.

As to the marital status of the respondents are concerned, almost all of them (98%) are married, while the rest are divorced and separated.

From the table, age at first marriage of the respondents show that 91.5 % of males responded that they were married at age 20 and above, while 43.2% of the females were married between the age category of 15-19years. Only 12.2% female respondents were married below age 15. As far as family size is concerned, almost all the respondents seem to have large family size. From the total respondents about 63.7 percent of them have 6 and above family members, while about 36.4% of the respondents have less than 6 family members.

Concerning the child spacing of the respondents, 41.5% and 31.5% of their wives were gave birth to a child with the difference of two and three years respectively. 27.3% of mothers were gave birth to a child with the difference of one year.

As to distance to the school is concerned majority of the respondents (50.3 percent) responded that it takes them 30-60 minutes to reach the nearby school. Only 13.1 percent of the respondents responded that it takes them above 60 minutes and 36.6 percent responded that it takes them less than 30 minute to reach at the nearby school. Therefore, it seems that for the majority of the respondents (86.9 percent) it takes them less than 60 minutes to reach at the nearby school.

2.1.2. Socio-economic characteristics of respondents

Table: 2.2. Frequency and percentages of parents by socio-economic characteristics

• **Religion of the household head**	**Frequency**	**Percent**
Orthodox	341	96.9
Muslim	11	3.1
Total	352	100.0
• **Fathers' educational attainment**	**Frequency**	**Percent**
Illiterate	183	52
Only read and write	89	25.3
Primary (1-8)	80	22.7
Total	352	100.0
• **Mothers' educational attainment**	**Frequency**	**Percent**
Illiterate	216	61.4
Only read and write	81	23.0
Primary (1-8)	55	15.6
Total	352	100.0
• **Fathers' occupation**	**Frequency**	**Percent**
Civil servant	1	.3
Agriculture	350	99.4
Daily laborer	1	.3
Total	352	100.0
• **Mothers' occupation**	**Frequency**	**Percent**
House wife	318	90.3
Others	34	9.7
Total	352	100.0
• **Household farm land size in** hectors	**Frequency**	**Percent**
< One hector	33	9.4
1-2 Hectors	33	9.4
3-4 Hectors	224	63.6
Above four hectors	62	17.6
Total	352	100.0
• Household number of oxen	**Frequency**	**Percent**
<2	126	38.1
2	56	15.1
3+	170	46.9
Total	352	100.0
• Household number of cows	**Frequency**	**Percent**
<2	143	40.6
2	124	35.2
3+	85	24.1
Total	352	100.0

Continued from table: 3.2

• **Number of household domestic animals**	**Frequency**	**Percent**
Do not have	10	2.8
<5	31	8.8
5-10	89	25.3
11-15	74	21.0
Above 15	148	42.0
Total	352	100.0
• **Total average annual production of grains in quintal**	**Frequency**	**Percent**
<3 quintals	24	6.8
3-5 quintals	73	20.7
6-10 quintals	121	34.4
11-15 quintals	84	23.9
Above 15 quintals	48	13.6
Do not have	1	.3
No response	1	.3
Total	352	100.0
• **Household source of income other than selling animals and grains**	**Frequency**	**Percent**
Yes	27	7.7
No	325	92.3
Total	352	100.0
• **Average annual income outside selling animals and grains**	**Frequency**	**Percent**
100-300	6	1.7
400-1000	14	4.0
1000-2000	5	1.4
Do not have	326	92.6
Do not know	1	.3
Total	352	100.0

Table: 3.2. Indicates that almost all the respondents that is 96.9 percent are belongs to orthodox Christian, while only 3.1percent are Muslim. Therefore, respondents are almost homogeneous in terms of their religion. As to the literacy status of fathers and mothers is concerned, majority of them are illiterate, which is 52 percent and 61.4 percent respectively. The rest are those who are primary and those who can read and write.

Almost all the males (fathers), that is 99.4 percent respondents' occupation is agriculture, while 90.3 percent of the females (mothers) are housewives. The rest are engaged in daily laborers, merchants and civil servants occupations.

As to household farmland size is concerned 9.4 percent of the respondents having 1-2 hectors and about 63.6 percent of the respondents have 3-4 hectors. 42% of the respondents have more than fifteen livestock (domestic animals), while 2.8% (i.e. 10 households) of the respondents do not have any domestic animals. 35.8 percent of the respondents responded that they have less than two oxen, while the majority 48.3 percent responded they have three and above oxen. Respondents were asked about the number of their cows. Accordingly, about 40.6 percent of the respondents responded that they have less than two cows, while about 59.3 percent of the respondents responded that they have two and above cows.

From all the respondents only 13.6% of them produce more than fifteen quintals of different types of grains on average annually. On the other hand 27.5% of the respondents produce less than five quintals of grains on average annually. Almost all the respondents, 92.6% do not have any source of income other than from animals and grains.

2.1.3 Socio-Cultural Characteristics of Respondents

Table: 2.3. Frequency and percentages of parents by socio-cultural characteristics

• **The best time for girls to get married**	Frequency	Percent
<15	52	14.8
15-18	181	51.4
Above 18	119	33.8
Total	352	100.0
• **Is abduction and sexual harassment a problem in your community**	**Frequency**	**Percent**
Yes	171	48.6
No	181	51.4
Total	352	100.0
• **Whom do you think should do more domestic and field work**	**Frequency**	**Percent**
A boy	88	25.0
A girl	263	74.7
No response	1	.3
Total	352	100.0
• **For whom do you give priority to go to school between boys and girls**	**Frequency**	**Percent**
a boy	224	63.6
a girl	49	13.9
Equal for both	79	22.4
Total	352	100.0

74.4 percent of the respondent belief that, girls should do more domestic and agricultural work than boys. The opinions of respondents were asked as to the best age of marriage for their daughters. Accordingly, the majority of the respondents (66.2 percent) responded that the best age for girls to marry is less than 18 years, while 33.8 percent of the respondents responded that the best age for girls to marry should be greater than 18 years.

Parents responded that abduction and sexual harassments are common in their community. 48.6 percent of the respondents responded that there is the problem of abduction and sexual harassments, while 51.4 percent responded that abduction and sexual harassments are not the major problem of girls in their community.

As to the priority of sending to school between boys and girls is concerned, majority of the respondents (63.6 percent) give priority to boys, while 22.4 percent of the respondents responded that they give equal opportunity for boys and girls. The rest 13.9 percent responded that they give priority to girls.

CHAPTER THREE

3 DESCRIPTIVE ANALYSIS AND INTERPRETATION OF THE DATA

The chapter four explains the major independent variables such as parents' educational attainment, parents' basic assets, parents' occupation, family size, age of parents and other socio-cultural variables. In order to examine the possible association of each independent variable with the dependent variable, a Chi-Square test was used. The statistical results that show the associations of independent variables with that of the dependent variables have been presented and then the analysis for each independent variable have also been discussed.

3.1 Results of Chi-square Test

Table: 3.1(a) – Associations between Demographic variables and girls educational participation.

Variables		Priority to send to school				X^2		Cramer's V	
		A boy		A girl		Value	Asymp. Sig. (2-sided	Value	Approx. Sig.
		N	%	N	%				
Family size	<5	66	51.6	62	48.4	14.589	.001**	.203	.001
	5-7	72	66.1	37	33.9				
	8+	86	74.8	29	25.2				
	Total	224	63.6	128	36.4				
Age of the household head	<30	13	23.2	43	76.8	155.68	.000**	-.644	.000
	30-44	16	22.9	54	77.1				
	45-49	48	73.8	17	26.2				
	50+	147	91.3	14	8.7				
	Total	224	63.6	124	36.4				
Sex of the household head	Male	177	63.9	100	36.1	0.039	.844	.010	.844
	Female	47	62.7	28	37.3				
	Total	224	63.6	128	36.4				

Table: 3.1(b) - Associations between Socio-economic variables and girls educational participation.

Variables		Priority to send to school				x^2		Cramer's V	
		A boy		A girl		Value	Asymp. Sig. (2-sided)	Value	Approx. Sig.
		N	%	N	%				
Number of oxen	<2	97	77.0	29	23.0	17.694	.000**	.221	.000
	2	36	64.3	20	35.7				
	3+	91	53.5	79	46.5				
	Total	224	63.3	128	36.4				
Number of cows	<2	103	72.0	40	28.0	13.670	.001**	.199	.001
	2	76	65.5	40	34.5				
	3+	45	48.4	48	51.6				
	Total	224	63.6	128	36.4				
HH farm land size in hectors	<2	46	59	32	41	15.263	0.023**	.245	0.023
	2-4	128	67	63	33				
	>4	50	60.2	33	39.8				
	Total	224	63.6	128	36.4				
Fathers' literacy status	Illiterate	134	73.2	49	26.8	15.886	.000**	.212	.000
	Read and write	50	56.2	39	43.8				
	Primary (1-8)	40	50.0	40	50.0				
	Total	224	63.6	128	36.4				
Mothers' literacy status	Illiterate	168	77.8	48	22.2	69.679	.000**	.444	.000
	Read and write	46	56.8	35	43.2				
	Primary (1-8)	10	18.2	45	81.8				
	Total	224	63.6	128	36.4				
Mothers' occupation	House wife	206	64.8	112	35.2	1.807	.179	.073	.173
	Others	18	52.9	16	47.1				
	Total	224	63.6	128	36.4				

Table: 3.1(c) - Associations between socio- cultural variables and girls educational participation.

Variables		Priority to send to school				X^2		Cramer's V	
		A boy		A girl		Value	Asymp. Sig. (2-sided)	Value	Approx. Sig.
		N	%	N	%				
Who should do more domestic& field work	**A boy**	37	33.3	74	66.7	67.695	.000**	.428	.000
	A girl	187	77.6	54	22.4				
	Total	224	63.6	128	36.4				
Fear of abduction and sexual harassments	**Yes**	145	84.8	26	15.2	72.769	.000**	.428	.000
	No	79	43.6	102	56.4				
	Total	224	63.6	128	36.4				
Parents perception towards their daughters age at first marriage	**<15**	32	61.5	20	38.5	7.593	.022**	.147	.022
	15-18	127	70.2	54	29.8				
	Above 18	65	54.6	54	45.4				
	Total	224	63.6	128	36.4				

The above tables (Table: 4.1(a), Table: 4.1(b) and Table: 4.1(c)), show the association between each independent variables with that of the out come variable. To see the association between each independent and dependent variables, the value of likelihood ratio, Chi-Square statistical test were used. Accordingly, among the 15 independent variables categorized under socio-economic, demographic and socio-cultural factors most of them show significant association with the outcome variable.

In the case of independent variables such as sex of the household head, religion and occupation of parents, there has been no significant association with the dependent variable. However, in different literature these variables are among the

major ones that affect educational participation of girls. In the study area, however, parents are homogeneous in terms of their religion where almost all of them (96.9%) are Orthodox Christian and the rest (3.1%) of them are Muslim. The same is true for the occupation of parents in which majority of them are involving in agricultural activities. Hence, these variables have not been any more important variables and the researcher rather concentrated on other independent variables that show an association with the dependent variables, and tried to provide further analysis.

3.2. Demographic Variables and Girls Educational Participation

In this section each demographic variable that showed a significant association with the dependent variable were discussed in detail.

3.2.1. Family size and girls' educational participation

Table: 3.2. Percentage of respondents by their family size and preference to send to school.

Family size	Priority to send to school					
	A boy		A girl		Total	
	N	%	N	%	N	%
<5	66	51.6	62	48.4	128	100.0
5-7	72	66.1	37	33.9	109	100.0
8^{+}	86	74.8	29	25.2	115	100.0
Total	224	63.6	128	36.4	352	100

As it is observed in table 4.1(a) the Chi-Square test shows that there is a significant statistical association between family size and sending daughters to school (i.e., X^2 = 14.59, P=0.001, where P is less than 0.05). The above table also reveals the fact that there is a decreasing tendency of sending daughters to school with increasing family size.

From the table among parents who have less than five family size 48.4 percent of them responded that they give priority to girls in sending to school. From parents who have 5-7 family sizes only 33.9 of them responded that they send their daughters to school. On the other hand, among parents who have eight and above family size 12.2 percent of them send their daughters to school. Therefore, as family size increases from one category to the next category, the percentage of parents sending

their daughters to school decreases. That is, parents with large family size prefer to give priority to their sons over their daughters to go to school.

Information obtained during focused group discussion with out of school and primary school girls also supports the above idea. The reasons why parents with large family size give priority of sending to school to boys over girls is economic and their low expectation from girls education.

When parents with large family size are unable to cover the cost of clothes and school materials of their children they give priority to boys to go to school and girls are made to stay at home and cover the domestic chores as well as out-door work. Most of the parents reported that girls are not successful in their education; hence investing in their education is wasting time and money.

Other studies also found out similar results. According to a study by king and Hill (1993), in less developed countries, households with large family size are forced to make a choice between their children to send to school. They emphasized that parents usually give the chance to boys due to various reasons, which could vary from society to society.

3.2.2. Age of the household head and girls' educational participation.

Table: 3.3. Percentage of household heads by their age and preference to send to school.

Age of household heads	Priority to send to school					
	A boy		A girl		Total	
	N	%	N	%	N	%
<30	13	23.2	43	76.8	56	100
30-44	16	22.9	54	77.1	70	100
45-49	48	73.8	17	26.2	65	100
50+	147	91.3	14	8.7	161	100
Total	224	63.6	124	36.4	352	100

A Chi-Square test result in table 4.1(a) indicates that, there is a high level statistical significant association between age of parents and girls educational participation (i.e. χ^2 =155.68, & P=0.000). The two variables are inversely related in that, as age of parents increases the priority to send girls to school decreases (i.e., Cramers value =-.644).The above table also shows that the priority of sending boys to school over girls increase with age of parents. For instance, while only 23.2 percent of the parents from the age of less than 30 years give priority of sending to school for boys over girls, 91.3 percent of the household heads from the age of 50 and above give priority to send to school for boys over girls. Therefore, majority of the parents from the age of 50 years and above are almost against sending girls to school.

The qualitative data collected by the researcher also support the above result. Old persons are too conservative and do not allow their daughters to go to school. They belief that education is not that much important for girls, rather they prefer their girls to be stay at home and help them in doing household chores and on the farm. Therefore, this study found out that the younger the parents, the greater the likelihood of sending girls to school.

However a study finding by Mulugeta (1998) indicate that older parents appear to send their daughters to school as investment in order to help them later, while younger parents seem to prefer to have their daughters support them at home.

3.3. Socio-economic Variables and Girls Educational Participation

In this section, each socio-economic variable that showed a significant statistical association using a Chi-Square test were discussed. These variables include parents' educational status, and parents' asset.

3.3.1. Parents asset and girls educational participation

Table: 3.4. Percentage of respondents by their number of oxen, farmland size and cows and preference to send to school.

Variables		Priority to send to school					
		A boy		A girl		Total	
		N	%	N	%	N	%
Number of oxen	<2	97	77.0	29	23.0	126	100
	2	36	64.3	20	35.7	56	100
	3+	91	53.5	79	46.5	170	100
	Total	224	63.3	128	36.4	352	100
Number of cows	<2	103	72.0	40	28.0	143	100
	2	76	65.5	40	34.5	116	100
	3+	45	48.4	48	51.6	93	100
	Total	224	63.6	128	36.4	352	100
HH farmland size in hectors	<2	46	59	32	41	78	100
	2-4	128	67	63	33	191	100
	>4	50	60.2	33	39.8	83	100
	Total	224	63.6	128	36.4	352	100

As it is indicated in table 4.1(b), a Chi-Square test shows a significant statistical association between respondents' number of cows and oxen with girls' educational participation. From the above table one can see that as the respondents' number of oxen and cow increases the likelihood of giving chance for girls to go to school also increases. The value of Chi-square test that reveals the association between parents number of oxen and cow with girls educational participation is χ^2=17.694, P=0.000 and χ^2 =13.670, P=0.001 respectively.

During the focus group discussion, parents pointed out that the major assets such as oxen, cows and farmland size are the main sources of their income. Therefore, the one who has relatively large number of these assets than others can have better income. They further responded that, those who have more than two oxen could give them for a rent, even if they do not have enough farmland size. Moreover, some of the female respondents pointed out that they could not send their daughters to school because they do not have cows, since those who do have sell butter and cheese to cover clothes and school materials for their children.

The statistical test showed significant association between parents' farm land size and girls' educational participation, the likelihood of sending girls to school increases with increasing farm land size.

However, during focus group discussion, out of school and primary school girls pointed out that, girls are fully involved in agricultural activities such as cultivation, weeding, harvesting, processing crops, etc in addition to performing household chores. A study report by Oromia Finance and Economic Development Bureau (2002) indicated that, in the region girls perform significantly more household and agricultural activities than boys.

3.3.2. Parents Educational attainment and girls educational participation

Table: 3.5. Percentage of respondents by their educational level and preference to send to school.

Variables		Priority to send to school					
		A boy		A girl		Total	
		N	%	N	%	N	%
Fathers' literacy Status	**Illiterate**	134	73.2	49	26.8	183	100
	Read and write	50	56.2	39	43.8	89	100
	Primary (1-8)	40	50.0	40	50.0	80	100
	Total	224	63.6	128	36.4	352	100
Mothers' literacy Status	**Illiterate**	168	77.8	48	22.2	216	100
	Read and write	46	56.8	35	43.2	81	100
	Primary (1-8)	10	18.2	45	81.8	55	100
	Total	224	63.6	128	36.4	352	100

As it is observed from the above table majority of fathers and mothers are illiterate. A Chi-Square test indicated that there is a significant association between fathers literacy status and girls educational participation (χ^2 =15.886, P =0.000). As literacy status of fathers increases educational participation of girls also increases. For instance, from the table while 50 percent of fathers with primary education responded they send their daughters to the school, only 26.8 percent of fathers who are illiterate responded they send their daughters to the school. The reasons for this may be most of the illiterate fathers favor if their daughters support them in performing agricultural activities.

There is also a strong positive association between mothers' educational status and the priority to send girls to school (χ^2 =69.679, P =0.000). While only 22.2 percent of illiterate mothers responded that they give priority for girls to go to school, 81.8 percent of mothers with primary level education responded they give priority for girls to go to school. Therefore, as the educational level of mothers increases, the chance for girls to go to school also increases.

3.4. Socio-cultural Variables and Girls Educational Participation

3.4.1. Parents Fear of abduction and sexual harassment and girls educational participation

Table: 3.6. Percentage of respondents by their fear of abduction and sexual harassment and preference to send to school.

Fear of abduction and sexual harassments	Priority to send to school					
	A boy		A girl		Total	
	N	%	N	%	N	%
Yes	145	84.8	26	15.2	171	100
No	79	43.6	102	56.4	181	100
Total	224	63.6	128	36.4	352	100

As it is indicated in table: 4.1(C) the Chi-Square statistical test show a significant association between respondents' fear of abduction and sexual harassments, and sending their daughters to school (χ^2 =72.769, P =0.000). From the above table, only 15.2 percent of the respondents who fear abduction and sexual harassments responded that they give priority to go to school for girls, while 84.8 percent of them give priority for boys over girls. On the other hand, majority of the respondents who responded they do not fear abduction and sexual harassments (i.e., 56.4 %) seem to send their daughters to school.

During the focus group discussion with parents, they pointed out that sexual harassment and abduction is a common problem in their community. They said that girls were exposed to abduction and sexual harassments on the way to school and when they are going to the market places. So that most of the girls face the problem

of unwanted pregnancy. One of the old person said "This is a time when human beings are acting like an animal and even less, because when animals give birth to a baby they stay with and provide care. But now a day's girls are giving birth to a child out side home with out the knowledge of their parents and either kill or through any where which is a shame for her parents." The study done in Tanzania by Bendera and Mboya (1998), also support the above findings. They found out that girls were harassed sexually on the way to, as well as within schools by male pupils and teachers. Another study by Dolphyne (1991) indicated that parental fear of teenage pregnancies limit girls access to as well as persistence in school since it causes parents either not to send their daughters to school or withdraw their daughters from school when they reach the age of puberty and give them in marriage.

3.4.2. Parents attitudes and beliefs regarding the roles of girls

Table: 3.7. Percentage of parents by their beliefs regarding the roles of girls and their preference to send to school.

Variables		Priority to send to school					
		A boy		A girl		Total	
		N	%	N	%	N	%
Who should do more domestic and agricultural work	A boy	37	33.3	74	66.7	111	100
	A girl	187	77.6	54	22.4	241	100
	Total	224	63.6	128	36.4	352	100

In table: 4.1(C) the Chi-Square test indicates that there is a significant statistical association between parents' expectation of the roles of girls and their daughters educational participation (χ^2 =67.695, P =0.000). From the above table one can observe that, most of the parents' belief girls should stay at home and do domestic and agricultural work. The reasons behind may be either because of fear of abduction and sexual harassments or either because of their low expectation from girls' education. Most of the respondents responded that educating boys is better than educating girls because girls may not be successful in their education like boys.

One of the old respondents expressed this idea using an example. He said "Barumsi dubara fi gulufni harre tokko dha "which means riding a donkey and girls education is the same.

This finding seems to be supported by other studies as well. A study by Hailegabriel (1997) in Amanuel (2002), for instance indicates that parents are inclined to uphold the education of their sons and resist investing their resources on girls' education, since girls are expected to take care of domestic work.

3.4.3 Parents perception towards their daughter's age at first marriage and girls' educational participation.

Table: 3.8. Percentage of parents by their perception towards their daughters age at first marriage and their preference to send to school

Parents' perception towards their daughters age at first marriage	Priority to send to school					
	A boy		A girl		Total	
	N	%	N	%	N	%
<15	32	61.5	20	38.5	52	100
15-18	127	70.2	54	29.8	181	100
Above 18	65	54.6	54	45.4	119	100
Total	224	63.6	128	36.4	352	100

Chi-Square result in table: 4.1(a) indicates that there is a significant association between age of marriage and girls' educational participation (i.e. $\chi^2 = 7.593$, $P \approx 0.022$). From the responses of parents, those who prefer for their daughters to get married under age 15 seem to stay their daughters at home until they will marry. On the other hand, majority of the parents who prefer above age 18 as an age of marriage for their daughters seem to send them to school.

During the focus group discussion, primary school girls were pointed out that most of the parents arrange marriage for their daughters at an early age with out consulting their consent. They indicated that, most of the parents forced their daughters to

dropout from school and get married. While supervising data collectors the investigator observed when some of the parents were arranging marriage for 13-15 aged girls.

On the focus group discussion, parents pointed out that they arrange marriage for their daughters at an early age because of fear of premarital pregnancy and sexual harassment. Moreover, parent's belief that girls may practice sex when they are far from their parents' supervision and may exposed to HIV/AIDS. As a result they prefer early marriage.

A study by Amanuel (2002) also indicated that, parents support early marriage due to fear of unwanted pregnancy, abduction and loss of virginity, which seem to have a great value. Another study by king and Hill (1993) pointed out that, in Ethiopia about 20 percent of primary school girls were forced to marry. Therefore, it seems that early marriage not only hinders girls from going to school, but it also appears to be a reason for drop-out from school.

CHAPTER FOUR

4 RESULTS OF MULTIVARIATE ANALYSIS

In the previous chapter the preliminary findings of the data were described and interpreted. In describing the data a Chi-Square statistical test was employed to see the association between independent variables and dependent variable. Hence, independent variables, which are significantly associated with girls' educational participation, were identified using the test. Under this section of the study multivariate logistic regression was used for further analysis to see the net effect of selected independent variables. Before conducting the analysis the adequacy of the model and multicollinearity diagnosis test was done.

4.1. Model Adequacy and Multicollinearity test

Classification and the likelihood method were used to check the adequacy of the model. Multiple logistic regression classification result portrayed that 91.2 percent of the cases in the analysis, were correctly classified ensuring the adequacy of the model. Also the likelihood method has exhibited that the model explains the data quite well.

The multicollinearity result of diagnosis test also shows that the relations of independent variables to each other are insignificant, where the condition index value (that shows the diagnosis of the test) is 13.7.

- **Condition indices: -** are the square roots of eigen value to each successive eigen value. A Condition index greater than 15 indicates a possible problem and an index greater than 30 suggests a serious problem with collinearity.

The level of significance of regression coefficients or the cut points for rejecting or accepting the null hypotheses used in this study is 0.05. In testing the hypotheses:

H_0: $B_i = 0$ for all i= 1, 2, 3... 10; which indicates that no independent variable explains variation in girls educational participation.

HA: Bi =0 for at least one the independent variables explains variation in girls educational participation.

4.2 Unstandardized effects of independent variables on girls' educational participation.

4.2.1. Demographic variables and Girls Educational Participation

Table: 4.1. Results of Logistic Regression for selected demographic Variables and Girls Educational participation.

Variables		B	Std. Error	Sig.	Exp(B)
Age of HH head	<30	3.548	.422	.000**	34.730
	30-44	3.568	.399	.000**	35.436
	45-49	1.313	.397	.001**	3.719
	50+RC	0.000[RC]	.	.	
	Constant	-2.351	.280	.000**	.095
• Family size	<5	1.025	.278	.000**	2.786
	6-7	.421	.295	.153	1.524
	8+	0.000[RC]	.	.	.
	Constant	-1.087	.215	.000	.337

B=Regression coefficient, Sig. =Significance of p **< 0.05
Exp (B) =Exponent of B, S.E=Standard error, RC=Reference category

4.2.1.1 Age of parents and girls' educational participation.

The above table indicates the unadjusted regression results of demographic disparities of girls' educational participation. It is inferred from the table that, age of parents has significant association with girls' educational participation. The odd ratios of girls educational participation for household heads in the age category of less 30 and 30-44 increases by 34.7 times (e^B =34.730) and 35.4 times (e^B =35.436) respectively as compared to those household heads in the age category of 50 and above (the reference category). The odds of girls educational participation for the household heads in the age category of 45-49 also increases by 3.7 times (e^B =3.719) as compared to the reference category (household heads in the age

category of 50 and above). This model indicates that younger parents are more likely send their daughters to school as compared to older parents.

Even though the result of this finding has been supported by many studies, Amanuel Abraham (2002), and a study by Mulugeta Gebresselassie (1998), found out the other way round, that is younger parents do not seem to send their daughters to school compared to older parents.

4.2.1.2 Family size and girls' educational participation.

The binary logistic regression model examined the association between family size and girls' educational participation. The result indicated that there is a significant association between family size and girls' educational participation. The odds of girls' educational participation for those parents with less than 5 family size increases by 2.8 times (e^B =2.786) as compared to those parents with eight and above family size (i.e., the reference category). Therefore, the model portrayed that parents with smaller family sizes are more likely send their daughters to school as compared to those parents with large family size.

4.2.2. Socio-economic Variables and Girls Educational Participation.

Table: 4.2. Results of Logistic Regression for selected Socio-economic Variables and Girls Educational participation.

Variables		B	Std. Error	Sig.	Exp(B)
Fathers educational level	Illiterate	-1.006	.279	.000**	.366
	Only read and write	-.248	.309	.422	.780
	Primary (1-8)	0.000[RC]	.	.	.
	Constant	.000	.224	1.000	1.000
Mothers educational level	Illiterate	-2.757	.386	.000**	.063
	Only read and write	-1.777	.415	.000**	.169
	Primary (1-8)	0.000[RC]	.	.	.
	Constant	1.504	.350	.000	4.500
Number of cows	<2	-1.010	.279	.000**	.364
	2	-.706	.285	.013**	.493
	3+	0.000[RC]	.	.	.
	Constant	.065	.207	.756	1.067
Number of oxen	<2	-1.066	.262	.000**	.344
	2	-.446	.318	.161	.640
	3+	0.00[RC]	.	.	.
	Constant	-.141	.154	.358	.868

B=Regression coefficient **S. E**=Standard error **Ex (B)** =Exponent of B
RC=Reference category **Sig.** =Significance of p **< 0.05

4.2.2.1 Fathers' and mothers' Literacy status and girls' educational participation

The logistic regression model examined the association between the educational status of parents and girl's educational participation. As indicated in table 5.2 the result reveals that there is a significant association between fathers' and mothers' literacy status and girls' educational participation. In the case of fathers' literacy status the odds of girls' educational participation for illiterate fathers decreases by 63 percent (e^B =0.366) as compared to the reference category (i.e., those with primary

level education). Therefore the model reveals that literate fathers are more likely send their daughters to school as compared to the illiterate fathers.

On the other hand, the odds of girls educational participation for illiterate mothers and for those mothers who can read and write decreases by 94 percent (e^B =0.063) and 83 percent (e^B =0.169) respectively as compared to those mothers with primary education (the reference category). Therefore, the result of this model indicates that the priority to send girls to school increases more with the increasing literacy status of mothers than that of fathers.

As it is indicated in the literature review, many studies supported the above finding. For instance, according to Emebet (2003) and UNICEF (1992) Parental education promotes children's enrollment, more for girls than boys, but the maternal effects are stronger.

4.2.2.2 Parents' assets and Girls Educational Participation

The logistic regression model in table 5.2 examined the association between parents assets and girls educational participation. The result revealed that there is a significant association between parents' number of oxen and cows, and girls' educational participation.

In the case of parents' number of cows the odds of girls educational participation for those parents who have less than two, and those who have two cows decreases by 63.6 percent (e^B =0.364) and by 50.7 percent (e^B =.493) respectively as compared to those who have three and above cows (i.e. ,the reference category).

On the other hand, the odds of girls educational participation for those parents who have less than two oxen decreases by 65.6 percent (e^B =0.344) for those parents with less than two oxen as compared to those with three and above oxen (the reference category).

Therefore, the result of this model shows that parents who have relatively large number of cows and oxen are more likely send their daughters to school as compared to those parents who have no or relatively small number of cows and oxen. The result indicated that the degree of association is strong with the number of cows than with the number of oxen. This is supported by the information obtained during focus group discussions with parents and teachers. For rural households of the study area, cows are the main sources of income since their products like butter and cheese are sold on the market. Mothers who have cows sell butter and cheese and buy cloth and the necessary school materials for their children.

4.2.3 Socio-cultural Variables and girls' educational participation

Table: 4.3. Results of Logistic Regression for selected Socio-cultural Variables and Girls Educational participation.

Variables			Std. Error	Sig.	Exp(B)
Fear of abduction and sexual harassment	Yes	-1.974	.260	.000**	.139
	No	0.000RC	.	.	.
	Constant	.256	.150	.088	1.291
Parents' perception towards their daughters age at first marriage	<15	-.285	.339	.402	.752
	15-18	-.670	.246	.006**	.512
	Above 18	0.000^{RC}	.		0
	Constant	-.185	.184	.314	.831

B=Regression coefficient **S. E =**Standard error **Ex (B) =**Exponent of B
RC=Reference category **Sig. =**Significance of p **< 0.

4.2.3.1 Parents' Fear of Abduction and Sexual Harassments and Girls' Educational Participation

In table 5.3 the results of logistic regression examined that there is a significant association between parents' fear of abduction and sexual harassments with girls' educational participation. The odds of girls' educational participation for those parents who fear abduction and sexual harassments decreases by 86.1 percent (e^B =0.139) as compared to those parents who do not fear abduction and sexual harassments for their daughters (the reference category).

This finding is supported by studies done in most African countries. According to a study by Dolphyne (1991), parental fear of teenage pregnancies related with sexual harassments limit girls access to as well as persistence in school since it causes parents to withdraw their daughters from school when they reach the age of puberty and give them in marriage. Information obtained during focus group discussion with school and out of schoolgirls also supports the above facts.

4.2.3.2 Parents perception towards their daughter's age at first marriage and girls' educational participation.

Table 5.1 exhibits the effect of parents' preferences of age at first marriage for their daughters and girls' educational participation. The result indicated that there is a significant association between parents' preferences of age at first marriage for their daughters and girls' educational participation. The odds of girls educational participation for those parents who prefer marriage between age 15-18 for their daughters decreases by 48.8 percent (e^B =0.512) as compared to those parents who prefer marriage at the age of eighteen and above for their daughters (i.e., the reference category).

This finding is supported by the studies of Emebet (2003), and Amanuel (2002), which indicated that because of various socio-cultural reasons parents, prefer for their daughters to be married at their early age rather than send to school.

4.2.4 Adjusted (Standardized) net effects of independent variables on Girls Educational participation.

In the unadjusted effect the impact of each independent variable on the dependent variable were tested separately. In this section, however, the net effects of all significant variables were examined at a time. Accordingly, some of the variables that were significant in the unadjusted test of association become insignificant in the adjusted net result.

Table: 4.4. Adjusted net effects of independent variables on dependent variable

Variables		B	S.E.	Sig.	Exp(B)
Age of HH heads	<30	4.059	.612	.000**	57.902
	30-44	4.235	.542	.000**	69.080
	45-49	1.256	.517	.015**	3.511
	50+ RC			.000	
Mothers educational level	Illiterate	-3.613	.658	.000**	.027
	Only read and write	-2.189	.662	.001**	.112
	Primary (1-8) RC	.	.	0.000	
Number of cows	<2	-1.558	.495	.002**	.211
	2	-.745	.489	.127	.475
	3+ RC			.007	
Fear of abduction and sexual harassment	Yes	-2.773	.437	.000**	.062
	No RC	.	.	0.000	.
	Constant	-0.205	0.416	0.623	0.815

4.2.4.1 Influence of Age of household heads on girls educational participation.

The result of adjusted net effect of binary logistic regression in the above table examined a significant association between age of parents and priority to send girls to school, which demonstrate the first hypothesis to be rejected, that says

educational participation of rural girls increases with age of parents. The odds of girls' educational participation for those household heads in the age category of less than 30, 30-44 and 45-49 increases by 57.9 times (e^B=57.902), 69 times (e^B =69.080) and 3.5 times (e^B =3.511) respectively as compared to the reference category (i.e., parents with the age category of 50+). Therefore, younger parents more likely send their daughters to school as compared to older parents. As compared to the unadjusted effect, the influence of age is high in the adjusted effect.

4.2.4.2 Influence of mothers' literacy status on girls' educational participation.

The adjusted net effect result of logistic regression model in table: 5.4 indicated that there is a strong association between mothers' literacy status and girls' educational participation, which realized the fourth hypotheses to be accepted, that says girls' educational participation increases with the educational level of parents. The odds of girls' educational participation for those mothers who are illiterate and for those who can read and write decreases by 97.3 percent (e^B =.027) and 88.8 percent (e^B =.112) respectively as compared to the reference category (i.e., mothers who were attended primary education). The impact increased by 4 percent as compared to the unadjusted effect

4.2.4.3. Influence of parents' number of cows on educational participation of rural girls

The result of adjusted net effect of logistic regression model in table: 5.4 examined the existence of association between parents' number of cows and girls educational participation. The association exhibits the second hypothesis to be accepted which states basic assets of the family are positively associated with girls' educational participation. The odds of girls' educational participation as indicated in the adjusted net effect, decreases by 78.1 percent (e^B = .211) for those parents who have less than two cows as compared to those parents who have three and above cows (i.e., the reference category). Therefore, the impact increased for the adjusted effect as compared to the unadjusted effect.

4.2.4.4. Influence of parents' fear of abduction and sexual harassments on girls' educational participation.

The result of adjusted net effect examined a significant association between parents' fear of abduction and sexual harassment with girls' educational participation. The association comprehends the last hypothesis to be accepted which says parents' fear of abduction and sexual harassments negatively associated with girls' school participation. The odds of girls' educational participation decreases by 93.8 percent (e^B =0.062) for those parents who have responded they fear abduction and sexual harassments for their daughters as compared to those who responded abduction and sexual harassment is not a problem in their community (i.e., the reference category).

Chapter FIVE

5. Summary, Conclusion and Recommendations

The chapter six deals with the summarized procedures of the study, conclusions and possible recommendations.

5.1 Summary

As it is indicated in chapter one of this study, the main purpose of this study was to explore how household socio-economic, cultural and demographic factors affect school participation of rural girls in Qimbibit district and come up with the strategies that should be implemented to alleviate these problems. To reach at the above intended purpose, the study was designed to answer the following research questions formulated based on the statement of the problem: -

1. What are the main household social, economic and cultural factors that are an obstacle to girls' primary school participation in the study area?
2. What are the demographic factors affecting girls' primary school participation in the study area?
3. Which factors are more influential in sustaining low primary school participation of girls?
4. What roles to be played by government, non – government and community organizations to reduce gender gap in education?

Towards the end of the above research question, the following specific objectives were formulated; -

- To explore the influences of age, family size and sex of the household heads on school participation of rural girls in the study district.
- To examine the impact of parent's basic assets and educational status on rural girls school participation.
- To analyze how parent's attitudes and beliefs towards girl's education in general affect school participation of their daughters.
- To explore whether or not early marriage and sexual harassments are influencing school participation of rural girls in the study district

- To examine the impact of physical distance on school participation of rural girls in the study district.

Literatures were reviewed on major factors affecting school participation of rural girls. Hence, conceptual / theoretical / framework and research hypotheses were developed based on the reviewed literature on demographic, socio-economic and cultural factors affecting school participation of rural girls. The research hypotheses developed to analyses the specific objectives include; -

1. Educational participation of rural girls increases with age of parents.
2. Parents' basic assets are positively related to the educational participation of rural girls.
3. Rural girls' Educational participation increases with parents' educational level.
4. Large family size is negatively associated with educational participation of rural girls.
5. Fear of abduction and sexual harassments negatively associated with school participation of rural girls.

To collect qualitative and quantitative data for this study, both open and closed ended questions were prepared in English and then translated into Afan Oromo to avoid complications. For this study, household heads/ parents were the units of analysis for whom questionnaire were prepared. The main sources of primary data for this study were parents, primary school and out of schoolgirls, primary school directors and teachers and Qimbibit district education bureau.

For data collection eight enumerators and four supervisors were employed and given a two-day orientation and training about the objective of the study and content and meaning of the questionnaire.

The sample size was determined based on the primary school participation rate of rural girls in the district, which is 30 percent. Therefore, a total of 352 household heads were responded to the questions.

Focus group discussions were organized and conducted in three separate groups. The first group is parents which included mothers, fathers, religious persons and

elders, second group primary school and out of school girls and final group from teachers. Each group consisted of 8 to 15 participants.

The collected data was entered into computer, coded, recoded and analyzed with SPSS soft ware. And also uni-variate, bi-variate and Multivariate techniques were used for the analysis. By uni-variate techniques background characteristic of the study populations were analyzed. Using bivariate technique Chi-square test were run to see the association between each independent and dependent variables. Multivariate analysis through using logistic regression technique was used to assess the net effect of selected independent variables on the dependent variable.

Based on the data analysis the findings of the study was summarized as follows;-

1. The study result examined that age of parents is one of the factors affecting school participation of rural girls. Age of parents has a significant association with the priority to send their daughters to school. The analysis indicated that younger parents more likely send their daughters to school than older parents. This could be a cause that older parents are too conservative and hold the attitudes and beliefs that girls are not successful in their education like boys. On the other hand, younger parents seem to be open and ready to change. Information obtained during data collection from one of the person with 32 years old supported the above fact. He has four children (three daughters and a son) where two daughters are school aged and others are not. He was asked why his daughters are not attending school, he replied as follows;-

> " I am too poor. I do not have any livestock. I do have only two timad of farm land which is not enough even to produce what we eat. I do not have other source of income to buy cloths, education materials and cover other education costs for them.
>
> But, not only my daughters, I am happy if my wife attend school. Even if she marry another person who can afford her and allow her to attend school, I am not against.

2. The result showed that family size is another factor that affected school participation of girls in the study area. It was examined that parents with large family size give priority to go to school for boys as compared to girls. This is because when family size is large parents face economic constraints to cover the educational costs of their children. Hence, since most of the parents' belief that boys are more successful in their education than girls, as well since they need the labor of their daughters for domestic and field work, boys are given the chance to go to school.

3. The study result also indicated that parents' perception towards the age at which girls should marry is also another factor that affected school participation of girls in the study area. The result revealed parents who prefer early ages as the best age for girls to marry were less likely to send their daughters to school than those parents who belief that girls should marry after age eighteen. During focus group discussion school and out of schoolgirls responded that, most parents prefer marriage for their daughters at their early age rather than sending them to school. Even though they allow them to go to school, they forced to dropout.

4. The type and amount of assets that parents posses also affect school participation of rural girls in the study area. In this study based on the information obtained from parents, assets like farmland size; number of cows and oxen were considered as the main source of income for the study population. Accordingly, the result of the study examined a significant association between parents' number of cows and oxen and the priority to send girls to school. That is parents who had large number of cows and oxen are more likely send their daughters to school than those parents who have less. This is because parents who have cows can access to income by selling butter and cheese, so that they can buy cloths and educational materials for their daughters.

As to land size of parents is concerned, it has a significant association with priority to send daughters to school. The study result indicated that parents with large number farmland size more likely send their daughters to school than those parents who have small farmland size.

5. The study indicated that parents' literacy status is another factor that affected school participation of girls in the study area. The result revealed that there is a significant association between fathers and mothers literacy status and girls educational participation. Hence parents who have formal education more likely send their daughters to school than those parents who are illiterate or those who attended informal education. Especially, the literacy status of mothers and their daughters' educational participation revealed a strong association than that of fathers' literacy status.

6. In the study district parents' fear of abduction and sexual harassments are the other factors that affected school participation of girls. The study result examined that parents who are not certain about the absence of abduction and sexual harassments less likely send their daughters to school as compared to those parents who are certain about the absence of abduction and sexual harassments. Most parents fear early age pregnancy that may be happened because of sexual harassments, so that they do not want their daughters to go to school. Hence they arrange marriage at their early age.

5.2 Conclusion

In this section of the study the major findings of the study was presented in short. Hence the study examined the following results under different disparities of girls' educational participation.

◊. **Demographic Influences**

- Older parents are less likely to send their daughters to school than younger parents.
- Sex of parents seems do not have significant impact on girls' educational participation in the study area.

- The larger the number of family sizes in the household, the lesser the likelihood for girls to go to school.
- Physical distance seems do not have a significant impact on educational participation of girls in the study area.

◊. **Socio-economic Influences**

- Fathers and mothers who attended primary school education are more likely to send their daughters to school than parents who are illiterate and those who attended informal education.
- Parents who have relatively large number of cows are more likely to send their daughters to school than those parents with no or less number of cows.
- Parents who have relatively large number of oxen are more likely to send their daughters to school than those parents with no or less number of oxen.
- The larger the farm size of parents, the more is the likely to send their daughters to school.
- In the study area parents' religion seems do not have a significant impact on girls' educational participation.
- In the study area parents' occupation seems do not have a significant impact on girls' educational participation.

◊. **Socio-cultural Influences**

- Fear of abduction and sexual harassments affect school participation of girls negatively
- In the study area parents' perception towards their daughter's age at first marriage affect educational participation of rural girls.
- In the study area parents' attitudes and beliefs towards girls' education has a negative impact on girls' educational participation.

5.3 Recommendations

Education is a key factor in socio-economic and socio-cultural development. Hence, when all children regardless of sex, participate in primary education the result will be positive benefits in the nation's socio-economic development. Research indicates that primary education, besides generating substantial positive benefits to the students themselves, generates benefits to society (social benefits) that exceed by far the private benefits (Psacharopoulos, 1994; Rosenzweig, 1995: in G.B, Mutangadura & V.L. Lamb, 2003). Education of girls who will be future mothers has a strong impact on health, family welfare, and fertility. Different research results indicate that there is a strong correlation between primary educated mothers and reduced fertility, reduced infant and maternal mortality and enhanced family welfare (Benavot, 1989; Rosezweiga, 1995; in stromquist, 1999).

Other benefits of primary education at the national level include increased agricultural productivity, earnings, and overall economic productivity to the larger economy.

Even though the benefits of girls' education is prominent, majority of girls in the study area are out of the school. The study result revealed that many variables comprised under demographic, socio-economic and socio-cultural factors are some of the causes for low educational participation of girls in the study district. Hence, the investigator recommends the following based on the findings of the study.

- Increasing awareness (Educating parents and the community): - community and parental resistance to girls' education is not limited to obvious economic reasons, some times they lack appreciation of the benefits, misunderstand the schooling process and are ignorant of educational opportunities open to their daughters. Hence, community influential persons and elders should

intensively participate in educating parents and the community about the benefits of educating girls in addition to the use of education media. This needs a close and intact supervision and follow-up by concerned government and non-government organizations.

- Ensuring the practicality of conventions and proclamations on children and women rights. Even though there are different conventions and proclamations to ensure the rights of children and our country is one of the signatory, its practicality is too late. Therefore, concerned government organizations, CBOs and non-government organizations should form coordination and work towards ensuring this conventions and proclamations.
- Ensuring the effective implementation of policy objectives related to access of women to employment opportunities and decision-making power.
- Empower rural women both economically and socially. This can be possible through: -
    A) Providing both formal and informal education opportunities.
    B) Participating in income generating activities that doesn't require much labor, rather that needs new technologies and reduce labor force.
- Ensuring the practicality of population policy, especially that of family planning program.

Bibliography

Almaz Eshete (1991). **"Women in Ethiopia: problems and prospects". A paper presented at a seminar on gender issue in Ethiopia**. Addis Ababa: Institute of Development Research.

Amanuel Abraham (2002). Demographic and social factors that influence Educational participation of Girls in primary schools in Banbasi Wereda, Benshangul Gumuze National regional state. Addis Ababa University: School of Graduate Studies.

Ballora, M. (1991). **Women and literacy.** London: Zed books LTd.

Befekadu Zeleke (1998Ø). Promoting Girls' Basic Education in the Rural Areas of Oromia. (UN published masters thesis) Addis Ababa University

Bendera, S.J. and Mboya, M.W (1996). **Gender and education in Tanzanian Schools**. Dares salaam.

Cammish, N.K. and Brock, C.(1994). **"State, Status and the Status Quo: Factors Affecting the education of Girls in Cameroon."** International Journal of Educational Development.

Dolphyne, F.A.(1991). **The emancipation of women; An African perspective. Ghana**; Ghana Universities press. Legon.

ECFA, (1997). **African Center For women; Traditional and Cultural Practices Harmful to the Girl Child.** Occasional paper No. 1.

Emebet, M (2003). **Problem Encountered and Coping strategies Employed by Female Students in Addis Ababa High Schools**; The Ethiopian Journal of Education, Volume XXIII, Number 2, IER, Addis Ababa University. Addis Ababa - Ethiopia.

Evans, D.R. (1991**). "The Educational policy Dilemma For rural areas"**. Comparative Education review. Vol .25 No.2 E

Gannet Zewude (1991). **Women in primary and secondary education, Gender issues in Ethiopia**, IES

Hailegabriel Dagne (1997). **Female participation in four schools in Bure District in Ethiopia**, Oromia GTZ-primary education Assistance Project.

Harriet.B, (2000). **Women's Empowerment and Demographic processes**, Oxford, New York.

Hyde, K.A (1989). **Improving women's Education in Sub-Saharan Africa,** A review of the literature. Washington D.C: The World Bank.

Jejeebhoy, J (1995). **Women's Education, Autonomy, and Reproductive behavior;** Britain.

Kapakasa, A. (1992). **"The influence of selected social and economic Factors on the performance of Girls in Mali School:** The Implication for Higher Education and national Development. Paper presented at George Washington University." Washington DC

King and Hill (1991). **Women's education in Developing countries Barriers, Benefits and Policy**, The World Bank Education and Employment division, Washington DC

Klasen, S. (1999). **Policy Research Report on Gender and Development,** Working paper Series, No 7.

KUAWAB, (1999)." **Oromyia comprehensive Education Study Main Report**, Volume I: Addis Ababa.

Lockheed, M.E. and A.M. Verspoor. (1991). **Improving primary education in developing countries**. Oxford; Oxford University press.

Marcela, B. (1992). **Women and Literacy:** Women and World Development Series, London & New Jersey.

Mulgeta Gebreselassie1998). **Quality of Education in Ethiopia; Vision for the 21st century. '' Determinants of School enrolment in Ethiopia",** Addis Ababa University, Institute of Educational Research (IDR).

Mutangadura.G.B, and Lamb.V.L. (2003). **Variations in rates of primary school access and enrollments in sub-Saharan Africa:** A

pooled Cross-Country time series analysis, University of North Carolina. International Journal of Educational Development. 23(4), 369-370.

Odaga, A. and Heneveld, W. (1995). **Girls and Schools in Sub-Saharan Africa from Analysis to action**; World Bank Technical Paper Number 298.

OEB, (2003). **Educational Statistics Annual Abstract**, Addis Ababa Ethiopia

Stromquist, N.P. (1997**). Increasing Girls and Women's participation in basic Education**. UNESCO: International Institute for Educational Planning. Paris.

World Bank, (2004). **African Development Indicator**, Cairo.

World Bank, (2003). **" Education for All Global Monitoring Report**, Dakar

World Bank, (1998). **Gender and Primary Schooling in Guinea**, Volume 1, Sussex.

UNICEF (1992). **Strategies to promote Girls Education-Policies and programmes That Work**. New York: UNICEF.

UNESCO (1990). **The Girl Child - An Investment in the future**.NewYork: UNICEF.

Appendix.1 Questionnaire for Parents/ Household Heads/

Addis Ababa University

School of Graduate Studies

Institute of Development Research (IDR)

Demographic Training and Research Center (DTRC)

The main objective of the questionnaire is to collect data with regard to demographic, socio-economic and socio-cultural factors that influence educational participation of girls in rural area. You are expected to give your opinion for each questions listed bellow.

To attain the objective of this study your assistance in giving unbiased answer for all the questions is a paramount importance. Therefore you are kindly requested to answer all the questions.

Thank you for your cooperation

Region---------- District----------PA----------
Questionnaire ID. No----------
Interviewer Name----------
Date interview----------
Checked by Supervisors: Signature----------Date----------

Part-I: Demographic Characteristics

1. Sex of the respondent. Male_____Female_____

2. Age of parents in completed years?

   2.1) Age of father _____, Don't know_____ No response _____

   2.2) Age of mother_____, Don't know _____No response_____

3. What is your marital status?

   Never married_____widowed_____other specify _____

   Married_____ Divorced_____ separated_____

4. Age of parents at first marriage?

   4.1) Age of father at first marriage_____, Don't know_____

   4.2) Age of mother at first marriage_____, Don't know_____

5. What is the number of your family members? _____ No response_____

6. From the total number of your family members, what is the number of dependents (those who don't have their own income)? ----------

   Other specify _____

7. How many living children do you have? ----------

   7.1) Boys_____

   7.2) Girls_____

8. How many school aged children do you have? ----------

   8.1) Boys_____

   8.2) Girls_____

9. Is your wife /husband alive? Yes ☐ No ☐

10. With what time gap do you give birth to a child?

    One years ☐ Three years ☐ No response ☐

    Two years ☐ Don't know ☐

11. Did you reside in another area other than the District you are currently residing?

    Yes ☐ No Don't know No response

12. If your answer for question number 12 is yes, where did you resided?

    Rural area ☐ Both in rural and urban ☐

    In urban ☐ Don't know ☐ No response ☐

Part-II: Socio-economic Characteristics

1. To which categories of religion do you belong?

Orthodox_____, Catholic_____,

Muslim_____, protestant_____,

No response_____ others specify_____

1. Parents' educational level?

2.1) Fathers educational level?
Illiterate_____1-8 _____, 9-12_____, only read &

write_____ Other specify_____

2.2) Mothers educational level?
Illiterate_____1-8 _____, 9-12_____, only read & write

_____ Other specify _____

3. What is your current occupation?

Civil servant_____, Daily laborer_____, Agriculture_____

House wife _____ Merchant _____other specify _____

4. Did you ever change your occupation? Yes_____ No_____

5. If your answer for question 4 is yes, what was your previous occupation?

Civil servant ☐ Daily laborer ☐ No response ☐

Merchant ☐ House wife ☐

Agriculture ☐ other specify _____

6. Health condition of parents: -

A) Health condition of Father

Fully healthy ☐ Always sick and can't work ☐

Disabled and can't work ☐ some times sick ☐

Don't know ☐ No response ☐

B) Health condition of Mother:-

Fully healthy ☐ Always sick and can't work ☐

Disabled and can't work ☐ some times sick ☐

Don't know ☐ No response ☐

7. How many of your school age children attend school at present----------

13. A/ boys----------

13. B/ Girls----------

8. How many of your school age children are not attending school at present------

14. A/boys----------

14. B/ Girls----------

9. What are the reasons, if your daughters don't go to school at all?

_____

_____

_____

10. Whom do you give priority to go to school between boys and girls?

1. A boy 2. A girl 3. Both

11. How many of your school age children discontinued from school currently?

16. A) Boys----------

15. B) Girls----------

12. What are the reasons, if your daughters discontinued their school?

_____

_____

_____

13. What are the tasks that your daughters expected to perform at home?

_____

_____

_____

14. What are the tasks that your daughters expected to perform outside home?

_____

_____

_____

15. What do you think that are the out comes of educating girls?

_____

_____

_____

_____

16. What is your average monthly income?

Below 50 birr ☐ 50-150 birr ☐ More than 150 birr ☐

No response ☐

17. What is the total size of your farmland using the units of measurement used in your area?

Fertile _____ Infertile _____ Medium _____ Don't Know

18. What is the total size of your grazing land in hectare? _____

19. What is the number of your domestic animals?

Oxen _____ Sheep _____ Donkey & horse _____ don't know ☐

Cow _____ Goat _____ Hen _____ other specify _____

20. On average how many quintals of different grains did you produced last year?

Teff _____ Beans & peans _____ other specify _____

Barely _____ Wheat _____ No response ☐

21. Do you have honeybee? Yes☐ No ☐ No response ☐

22. If your answer for question number '37' is yes, on average what is your annual income from selling honey? _____

23. Most of the time what would you sell to buy clothes and educational materials for your children?

Honey☐ hen ☐ grain ☐ no response☐

Cattle ☐ sheep & goat ☐ other specify _____

Part-III: Socio-cultural Characteristics

1. In your opinion, what is the best thing that a girl should do?
   Go to school ☐ Stay at home & perform home activities ☐
   Get married ☐ other specify _____
   Don't know ☐ No response ☐
2. In your opinion, what is the best age at which girls should get married?
   Under 10 years ☐ 13-15 years ☐ 18-21 years ☐
   10-12 years ☐ 15-18 years ☐ above 21 years ☐
3. Do you think that abduction and sexual harassment became an obstacle to girls' education in your community?
   Yes ☐ No ☐ Don't known ☐ No response ☐
4. Whom do you think should do more domestic and fieldwork between boys and girls?
   A girl ☐ A boy ☐ Don't know ☐ No response ☐
5. Parents usually prefer not to send their daughters to school, do you agree?
   Yes ☐ No ☐ Don't know ☐ No response ☐
6. If your answer for question 5 is yes, what are the reasons?

   _____

   _____

   _____

7. What is your general comment about girl's education and obstacles that hinder their education?

   _____

   _____

   _____

8. In your opinion, what activates should be done at the community level to enhance girl's educational participation?
9. How many minutes it takes your children to reach at the nearest by school? ---

Appendix. 2 Questions for focus-Group discussion

I. For parents

1. What type of work young girls does at home and out-sides home in your community?
2. What are the significant economic barriers that hinder girls from attending school or that cause them to dropout of school?
3. What are the significant socio-cultural barriers that hinder girls from attending and remaining school?
4. Does marriage affect female participation in schooling? If so how?
5. What sexual risks do girls who are attending school face?
6. Would you explain the importance of educating girls?
7. What is your general comment about girls' education?

II. For Primary School and out of school Girls

1. What type of activities young girls performs at home and out-sides home?
2. How does the community view girl's and boy's participation in education?
3. What do you think are the major causes that hinder girls' school participation in your community?
4. What do you think can be done to improve girl's participation in education?
5. Give your general comment about girls' school participation?

III. For Teachers

1. What are the significant economic barriers that hinder girls from attending school or that cause them to dropout of school?
2. What are the significant socio-cultural barriers that hinder girls from attending and school?
3. Does marriage affect female participation in schooling? If so how?
4. What sexual risks do girls who are attending school face?
5. What type of work young girls does at home and out-sides home in your community?
6. What is your general comment about girls' educational participation in Qimbibit district?

DECLARATION

The thesis is my original work, has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

Name Herko Belay

Signature

Date 19/07/2005

This thesis has been submitted for examination with my approval as university advisor.

Dr. J. Narasimha Rao		19/7/2005
Advisor	Signature	Date