

**Section 63 (Gender and Population)**

**Title: Gender Disparities in Education, Health, and Labour Force Participation in Ghana**

**Author: Eric Adjei Boadu**

**Population Impact Project**

**Department of Geography & Resource Development**

**P. O. Box 59  
University of Ghana  
Legon-Accra  
Ghana**

**Tel: 00 233 21 500796**

**Fax: 233 21 500310**

**Email: [Ericca98@hotmail.com](mailto:Ericca98@hotmail.com):**

The 1993 Ghana Demographic and Health survey, was used to examine cultural norms and socio-economic variables underlying gender disparities in education, health and labour force participation in Ghana. Gender was defined as a concept that refers to roles and responsibilities that are expected of men and women as members of society. The study showed that fewer girls than boys enter each level of schooling and as the level of schooling increases, the representation of girls decreases faster. Stepwise logistic regression showed that, sex of head of household is an important determinant of education. Whereas female education is significantly affected by household standard of living, male education is not. Urban residence is an important determinant of education. Some health indicators do not show striking gaps between the health status of men and women. Activities and responsibilities of men and women in Ghana showed that domestic work is almost exclusively the responsibility of women. Women work longer hours than men do when domestic and economic works are added together.

# **GENDER DISPARITIES IN EDUCATION, HEALTH, AND LABOUR FORCE PARTICIPATION IN GHANA**

**ERIC ADJEI BOADU**

## **1 INTRODUCTION**

After the Beijing conference in 1995, many countries including Ghana started gender awakening programmes and a search for tools to bring about gender equity. The Beijing Platform of action in itself is an agenda for action that various parties, national governments, international agencies, NGO's, Organizations and Individuals have been invited to act upon to make gender equitable development a reality.

In the early 1970s, the term Women In Development (WID) came into use. The concern was the unequal or disadvantaged position of women as compared to men and the development strategies to minimize disadvantages of women and to end the discrimination against them.

The gender approach is a recent concept. In the 1980s, Gender And Development (GAD) emerged as an alternative to the earlier Women In Development focus. The gender approach acknowledges the distinction between biological and social differences of men and women.

At all levels, education for females lags behind that for males. There are approximately 900 million illiterate adults in the world, of whom two thirds (65%) are women. Of the 130 million children of primary school age not in school the world over, 70% are girls (CEDPA, 1996). The allocation of scarce household resources affects girls more than boys. Early domestic responsibilities especially among young girls conflict with the pursuit of education. The long historical neglect of educating girls has left very high illiteracy rates, especially among older and rural women. For these women, illiteracy is a major contributor to their marginalization and low status in life. Widespread early childbearing is in conflict with schooling and traditional attitudes constrain women from receiving education.

Gender roles have life-long health consequences for women, starting in infancy. In areas of the world where girls are less valued than boys, girls receive less food and have less access to health care. As a result, infant girls have lower rates of

immunization, high rates of diseases and higher mortality rates. Early childbearing, considered a duty in many cultures, endangers the health of mothers.

Women and men have unequal access to jobs, advancement opportunities, and positions of authority. Women work in different occupations than men and tend to have a narrower range of employment options. In some cases, work done primarily by men becomes lower paid and less prestigious when women begin to do it, and “women’s work” earns higher pay when done by men.

### ***1.1            Understanding Gender***

Gender is a concept that refers to roles and responsibilities that are expected of men and women as members of society. These roles and relationships are determined not by biological differences but are socially defined and shaped by traditions and beliefs (CEDPA, 1996). Gender and development then represent the growing recognition that women are an integral part of their societies and that sustainable development must include the full and equal participation of women and men.

Gender-focused development recognizes that gender is an organizing principle of society that affects women and men in all activities and relationships and consequently influences the outcomes of development interventions. Despite its influence, gender is not well understood and is often confused with sex. Sex refers to universal, biological characteristics of women and men. Gender refers to men’s and women’s roles and relationships in a specific society or culture. The concept of gender is based on stereotypes of male and female behaviour that are often associated with sex.

Therefore to adopt a gender perspective is to distinguish between what is natural and biological and what is socially and culturally constructed. What is biologically determined is relatively inflexible but what is socially constructed is relatively transformable. Society assigns roles based on a person’s sex. Some of these roles are arbitrarily assigned, and some are shaped by history, ideology, culture, religion and economic development. Gender roles are learned behaviours in a given society/community or other social groups i.e., activities, tasks and responsibilities that are perceived as males and/or females. They differ from one society to another, from place to place and overtime. Gender roles are learned throughout childhood and during adulthood. The family, schools, institutions, media, tradition and culture all play a part in reinforcing certain behaviour for boys and girls, while discouraging others. The gender roles of men and women within a given social context may be flexible or rigid, similar or different, and complementary or conflicting. As a result of these, there are gender disparities and gaps which are not just male-female gaps because they are not biologically based. They are gaps that arise from the different roles and social locations of men and women.

## **1.2 Division of Roles, Responsibilities and Status of Ghanaian Women**

Women in Ghana have traditionally sustained an active and productive economic role and at the same time, they have carried a very heavy reproductive and domestic work burden. They have managed these roles within the context of a large network of family support but often without the direct participation of men. Their independence has been a source of pride but not a measure of their equality. Women in Ghana have long accepted a heavier work burden than men but have less access to education, health care, and income earning activities.

In agricultural communities in Ghana, men are usually responsible for clearing land for cultivation and growing cash and food crops of high commercial value, while women are more involved in the production of food crops for home consumption. While in some communities, men and women may cultivate jointly, wives often combine work on the household farm with independent economic activities that provide them a fair degree of economic independence (Oppong, 1974). The exploitation of women has been sustained in the commercially developing rural sub-sectors of Ghana from pre-colonial economies. In the development and expansion of the cocoa industry, the participation of women was said to be less rigorous than that of men. Women participated in the industry mainly as small-scale operators.

Parental responsibilities for the financial costs of childbearing and household maintenance are similarly divided along gender lines. Fathers typically assume responsibility for housing and children's education while mothers take responsibility for food. Some aspects of family structure carry a considerable risk that women may find themselves the primary supporters of children, without the benefit of a male partner. As Bleek (1987) pointed out, "***in case of spousal separation where husband and wife do not live together, the husband's contribution to running the house tends to decrease or disappear***". Even though men may earn higher incomes than women, they tend to use their incomes in more varied and individualistic ways, whereas women are constrained in this regard by cultural values associated with motherhood (Whitehead, 1994).

### **1.3.Statement of the problem**

### **1.3**

If Ghanaians fail to take gender into account, the majority of women will continue to be disadvantaged. There is the urgent need to promote equality in order to achieve equity in development. Females are an important segment of Ghana's population, making up 51% of the total population. But women's representation in various positions in Ghana is no where near 50%. This situation does not offer a

proportional opportunity for women as active agents of change in development. Factors accounting for the situation include lack of education, and cultural perception of women concerning their capabilities and needs. There is the society's tacit belief in male superiority. At the family level, when parents are financially constrained in the education of their children, they always choose sending boys to school without considering the ability and potential of the girls. Girls are therefore sent to learn a trade like, dress making or typing whereas the brother goes to the university. For example, to be a chief director or a managing director of a corporation requires a certain level of education and knowledge. Men always have more advantage over women in education and especially at the higher level. As much as lack of education is the obstacle to effective participation of women in power and decision making, the basic obstacle is still the society's tacit belief in male superiority. Even when a woman qualifies for a post and is appointed, there is still a tacit feeling that the woman is just favoured. Deep-seated cultural perception of women as inferior compared to men has been and continues to be a major hindrance to women advancement in the area of health care, power sharing and decision-making. Therefore, if Ghana is to achieve its avowed aim of national development, it is important that those women's capability and needs be taken as seriously as those of men. True national development will be achieved only when the living standard of all the people – males and females is improved.

#### **1.4 Objectives of the Study**

This research seeks to:

1. Make gender analysis, that is, to review the activities and responsibilities of men and women in Ghana.
2. Consider the socio-economic and demographic variables underlying gender disparities in education, health and labour force participation in Ghana

#### **1.5 Methodology**

The study will investigate factors such as household standard of living, sex of head of household, reasons for not attending school, type of occupation, place of residence, and age of head of household. The stepwise logistic regression analysis will be used to verify the determinants of male and female education. Figures and Tables will be used in the descriptive part of the study to make comparison between male and female education, health care and labour force participation in Ghana.

## **1.6 Sources of Data**

Data for this study is mainly taken from Ghana Demographic and Health Surveys (GDHS) 1988 and 1993. Another survey data on women in public life in Ghana is requested from National Commission for Women and Development (NCWD) and Ghana Statistical Service.

## **1.7 Literature Review**

**Kunyehia A. (1992):** This paper, a part of a book on legal literacy as a tool for women's empowerment, discusses the problems of legal literacy and law enforcement issues in Ghana. It presents 5 specific cases that reveal the legal problems faced by women that are linked not to the nature and content of the laws but rather to the ineffectiveness and gender insensitivity of law enforcement agencies such as the police and the courts. It is noted that the lower courts, which are often staffed by village elders and chiefs who have traditional and non-progressive attitudes towards women, comprise the section of the judiciary that has the most immediate impact on women's issues. Thus, women's issues are resolved within the terms and views of the judges and not the law. Both the lower and higher courts have therefore become instruments of oppression. Likewise, the police often fail to respond to domestic disputes and leave women vulnerable to the oppression of their menfolk. The strategy proposed to resolve these problems is to direct a campaign of women's rights and issues not just to women but also to the custodians and interpreters of the laws.

**Thomas D. (1994):** Through use of child height as a proxy for general health and nutritional status, the author said, the hypothesis that there are gender differences in the allocation of household resources to child health was examined. Data were derived from household surveys conducted in the United States, Brazil, and Ghana. In all three countries, mothers were found to allocate more resources to daughters while fathers channeled resources toward sons. Maternal education was found to have a larger effect on the height of daughters than sons, while sons benefit more than daughters as paternal education increases. In Brazil, women's non-labour income was used to improve the health of daughters but not sons. In Ghana, education of a woman whose educational attainment surpasses that of her husband's had a larger impact on the height of her daughter than that of her son.

**Gage A. J. and Njogu W. (1994):** The report critically reviews the relationship between gender inequality and demographic behaviour in Ghana and Kenya. This study's choice of countries is particularly significant because of both matrilineal and patrilineal traditions in Ghana, the greater participation of women in Ghana's cash economy, and the opportunity for comparisons. This study examines gender inequalities in families and households, in access to education, employment, and property rights; and access to health services and family planning. It is concluded that increased educational opportunities for women and economic security would

not sufficiently reduce gender inequalities or motivate couples to reduce fertility, particularly in Ghana.

**Tansel A. (1997):** This study examines the determinants of human capital investment in male and female children's schooling in Cote d'Ivoire and Ghana. Data were obtained from the living standards survey in 1985, 1986, 1987 in Cote d'Ivoire and in 1987-88 and 1988-89 in Ghana. The mean schooling attainment of parents and children in the sample was 3.61 years for men and 1.91 years for women in Cote d'Ivoire and about 5 years for men and 3 years for women in Ghana. Income growth increased schooling, especially for girls in Cote d'Ivoire and for boys in Ghana. Findings indicate that parents' education had a significant influence on the educational achievement of male and female children. Father's education was more important than mother's education in both countries for the education of their children. The impact of parents' education was larger for girls in Ghana and larger for boys in Cote d'Ivoire. Mother's education had a larger effect on daughter's schooling attainment in Ghana. One standard deviation increase in father's education increased his son's achievement by almost a year and his daughter's by a smaller amount. Distance was a greater deterrent for girls than boys in Ghana.

### **1.8 Organization of the Study**

This research is organized into four sections. Following this introduction section, section two deals with gender inequalities in education, and health. Section three concentrates on gender inequalities in Labour Force participation and finally, summary, conclusion and recommendations come in section four.

## **2 GENDER INEQUALITIES IN EDUCATION AND HEALTH**

### **2.1 Gender And Education**

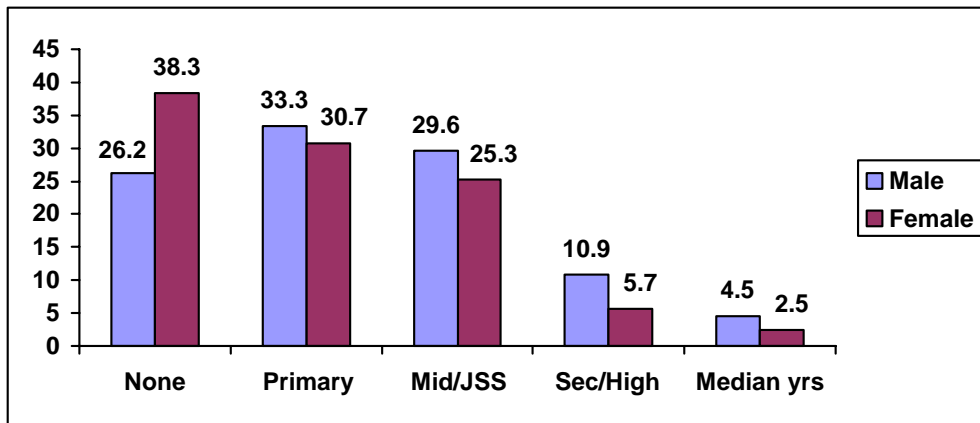
The government of Ghana has long been committed to universal primary education as well as equality of access for boys and girls. Dr Kwagyir Aggrey, a renowned academician in Ghana was reported as saying ***“If you educate a man, you educate an individual but if you educate a woman, you educate a whole family”***.

The benefits accruing to all are greater when the woman is the beneficiary of education. The notion of the girls of today being the women of tomorrow is universally lauded. Schooling teaches students more than how to read and write. It also teaches how to organise one's thinking and how to express one's ideas clearly and logically. Lack or incomplete schooling perpetuates low self-image and the perception of inferiority.

While boys continue to benefit from new and changing knowledge, girls do not. Their primary source of information remains inherited maternal guidelines. The reasons for not sending daughters to school and the high dropout rate can be attributed to traditional and attitudinal, financial, and infrastructural factors.

Figure (1) gives information of education on household members aged 6 years and over. For the male population, more than 26% have never been to school, 33% have had only primary education, about 30% have attended middle school and only 11% attended secondary and above. On the whole, 38% of the women have never been to school; 31% have only primary education and 25% have middle/JSS education while 6% have secondary and above. This figure shows that fewer girls than boys enter each level of schooling and that as the level of schooling increases, the representation of girls decreases faster.

**Figure (1)**  
**Percent distribution by highest level of education according to sex**



Source: Constructed from GDHS, 1993 Tables 2.6 and 2.7

Table (1) indicates the students' enrollment at the University of Ghana. Percentage of male enrollment has always been higher (above 80%) than female enrollment (ranging between 15 and 19 percent). In other words, male enrollment is more than five times the female enrollment.

**Table (1)**  
**Students' enrollment at the University of Ghana**

Year	Male	Female	Total
1977/78	3539 (84%)	653 (16%)	4192
1978/79	3516 (85%)	622 (15%)	4138
1979/80	3294 (85%)	587 (15%)	3881
1980/81	3098 (84%)	607 (16%)	3705
1981/82	2849 (83%)	580 (17%)	3429
1982/83*	2744 (81%)	640 (19%)	3384
1984/85	2766 (83%)	586 (17%)	3352
1985/86	2797 (81%)	665 (19%)	3462
1986/87	2758 (81%)	658 (19%)	3416

\*There was no academic year 1983/84 as the University was closed

**Source:** Computed from University of Ghana Basic Statistics

### **2.1.1 Determinants of Gender Disparities in Education and Drop-out**

Research conducted in Ghana has identified several factors that lead girls to drop out of school. Although the demand for education is generally high for both sexes, preference for educating boys still persists. This preference reflects traditional stereotypes of women's role, customary patrilineal inheritance systems, and the perception that boys have greater prospects for formal-sector employment than girls.

Women bear a larger share of household chores than men do, and the perception that these tasks are feminine continues. Mothers therefore are more likely to assign domestic tasks to their daughters than to their sons, particularly in rural areas where girls are expected to assist their mothers with household chores such as fetching water, collecting firewood, cooking and caring for young children. A study has observed that teenage girls in Ghana work longer hours than boys whether or not they are enrolled in school (Lloyd et al, 1993). Heavy domestic responsibilities interfere with schooling, depress performance and in extreme cases, lead to school withdrawal.

Pregnancy and/or marriage can also precipitate the exit of females from school. Pregnant primary and secondary school students are expelled from school and may experience difficulties re-enrolling after giving birth. Although female students at institutions of higher learning are not expelled from school when they get pregnant, they are nonetheless often subjected to penalties like losing their boarding house privileges. It is important to note that male students are not punished for impregnating women.

Another factor restricting girls' enrollment in secondary school and, as a consequence, in higher learning is the limited availability of secondary schools for girls. Most secondary schools in Ghana are boarding institutions and there are more such schools for males than for females. Even in co-educational schools, more dormitory facilities are reserved for boys (Dolphyne, 1987 and Manuh,

1984). The tendency for girls to attend lower-quality schools is one explanation for their poorer performance in national examinations in Ghana (Hyde, 1993).

When girls succeed in gaining entry to secondary and post secondary schools, there is strong evidence that stereotypes regarding male and female roles lead to different curricula for girls and boys. Several studies show that the educational structure in Ghana channel girls into arts and humanities and boys into sciences. Data substantiate that the enrollment of women in technical and scientific fields is quite low. In 1987/88, approximately 60% of undergraduate female students' in Ghana were studying arts and home science, (CEDAW, 1991a). Table (2) shows student's enrollment according to the area of study at the University of Ghana. The percent of female students doing arts and humanity courses are always higher than the percent of male students.

**Table (2)**  
**Students admission, enrollment and percent enrollment statistics according to area of study, University of Ghana, 1993, 1994, 1997 and 1998.**

Area	1993			1994			1997			1998		
	Adm	Enr	%en	Adm	Enr	%en	Adm	Enr	%en	Adm	enr	%en
<b>Arts</b>	1862	1521		2217	1812		3467	2548		3202	2606	
M	1372	1096	62.7	1613	1308	75.4	2498	1778	79.5	2272	1855	71.5
F	490	425	73.0	604	504	82.5	969	770	91.3	930	751	76.5
<b>Sci</b>	914	810		1032	533		825	531		1305	972	
M	729	653	37.3	834	426	24.6	642	458	20.5	998	741	28.5
F	185	157	27.0	198	107	17.5	183	73	8.7	307	231	23.5

There was no data for 1995 as the University was closed down, data was not available for 1996

**Source:** Computed from University of Ghana Basic statistics

### **2.1.2 An alternative to formal education in Ghana**

Informal education and adult education provide opportunities for learning and training to those without formal education or those in need of further skill development. Although more adult women than men are illiterate in Ghana, women appear significantly less likely to receive informal education. When they do participate in informal training schemes, women tend to be primarily directed to those that revolve around traditional feminine roles. Women mostly outnumber men in adult literacy classes in Ghana but the total number of registered students is very low compared with the total number of adult illiterate women. It is quite possible that more women would participate in literacy programmes if their household and agricultural responsibilities were reduced (Karani, 1989).

The main courses taught by the Women's Training Institute in Ghana, which falls under the Department of social welfare and community development, are dress making, cooking, home management, textile, hairdressing, languages and current affairs. Similarly, the National Vocational Training Institute (NVTI) offers classes in auto mechanics, electrical and metal works, building, printing, dressmaking and catering. Most women attending the school are enrolled in the

last two courses, while men are enrolled in the first five courses. Likewise, while a few women who participate in the Opportunity Industrialization Centres (OIC) programme in Ghana take courses in plumbing and auto mechanics, the majority take secretarial courses (Manuh, 1984).

### **2.1.3 Statistical Analysis**

Even though there might be increases in education over the years, large differentials among households exist. Using data from the 1993 GDHS, this study will explore the determinants of education to understand the factors that influence future trends in current education for household members. The investigation of the determinants of education will be built upon some demographic and socio-economic variables such as sex of head of household, working status, age of head of household, reasons for not attending school, type of place of residence and household standard of living index (SLI).

Standard of Living Index was developed by El-Zanaty (1995) and applied by Shawky (1998). The SLI was created from a set of variables related to housing conditions and ownership of consumer durables. This index is used with changing in the variables and scores to match with the case of Ghana. The housing condition included in the index and the scoring is summarized as one point for each of the following: piped drinking water, modern flush toilet, electricity throughout the dwelling, one point for floor material made of cement and two points for floor material made of either parquet, polished wood, vinyl, asphalt strips ceramic tiles, terrazzo or wall-to-wall carpet. In addition, one point is given for ownership of each of the following items: a radio, a television, a video, a refrigerator, a bicycle, a motor cycle, a car, and a tractor.

**Table (3)**  
**Construction of SLI**

Group	Valid	Frequency	Percent	Valid Percent	Cumu. Percent
Low	0	1892	8.5	8.5	8.5
	1	6293	28.4	28.4	37.0
Medium	2	5264	23.8	23.8	60.7
	3	3249	14.7	14.7	75.4
High	4	1695	7.7	7.7	83.1
	5	1077	4.9	4.9	87.9
	6	913	4.1	4.1	92.1
	7	863	3.9	3.9	96.0
	8	409	1.8	1.8	97.8
	9	245	1.1	1.1	98.9
	10	161	0.7	0.7	99.6
	11	55	0.2	0.2	99.9
	12	23	0.1	0.1	100.0
		Total	22139	100	100.0

**Source:** Computed from GDHS, 1993

To create the categorical variable, households scoring between 0 and 1 on the index are classed as low standard of living group, households scoring between 2 and 3 are grouped in the medium category and households scoring between 4 and 12 are in the high standard of living group. From Table (3), the low group includes 8,185 people, the medium, 8,513, and the high 5,441 people.

**Table (4)**  
**Definitions and Measurements of independent variables used in the Statistical analysis**

Variable	Measurement
Age of head of household	Six age groups: 15-24 (Reference), 25-34, 35-44, 45-54, 55-64, 65+
Type of place of residence	Two categories: Rural (Reference), Urban
Sex of head of hh	Two categories: Male (Reference), Female
Work for family, others, self	Four categories: Self employed (Reference), Employer, Unpaid family worker, For wages/salary
Why not attending school	Six categories: Financial constraint (Reference), School too far away, Lack of interest, Disability, Need to help Family business, other
Standard of Living Index (SLI)	Three categories: Low (Reference), Medium, High

Table (4) presents the definitions of the variables used for the Logistic regression. Given the dichotomous nature (0,1) of the dependent variables, the Stepwise Logistic Regression Model is applied as the most suitable technique. The model can be written in terms of log odd of an event occurring. The odd of an event occurring is defined as the ratio of probability that the event occurs to the probability that it does not occur. That is,

$$\ln \left( \frac{P}{1-P} \right) = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + \dots + B_nX_n$$

Where,  $P$  is the probability of success,  $B_0$  is the constant,  $B_1; B_2; B_3; \dots B_n$  are the coefficients of the independent variables,  $X_1; X_2; X_3; \dots X_n$  are the independent variables. The results of the logistic regression analysis for male and female education are summarized in Table (5).

Results from Table (5) show that there are some differences in the determinants of male and female education. From the stepwise logistic regression, whereas female education is significantly affected by household standard of living, male education is not.

From the Table, sex of head of household is an important determinant of education. The odds of male education for female head is nearly 10 times as much as the male head while the odds of female education for female head is 1.4 times as much as the male head. This could be attributed to the financial assistance that mothers may expect from their male children during their old age. There is the belief that education is a pre-requisite for formal employment and higher incomes. Female heads of households therefore encourage education most especially male education.

Employment status is among the important determinants of education especially female education. When head of household is an employer, the results show that the odds of female education is 5 times as much as the household head who is self-employed. In contrast, the household head who is an employer has no effect for male education i.e., whether the he is a self-employed or employer, male education is encouraged. The odds of male education for the household head who is unpaid family worker is 3.7 times as much as the self-employed. The corresponding value for the female education is 2.5 times the self-employed. These show that, heads of households who are not salary earners mostly women, seek education for their children in order to get good jobs in future so as to meet the women's financial demands in their old age. Surprisingly, whereas the odds of male education for wages/salary worker is 1.8 times as much as the self employed, that of the female education for the salary/wage worker is 7.9 times as much as the self employed. These clearly show that, when heads of households earn income, then they may probably encourage education, especially for females.

Standard of living is not an important determinant for male education. This variable was removed from the step-wise logistic regression equation for being insignificant. The explanation is that, whatever the standard of living for the household, the parents (household) encourage male education. In contrast, the SLI is a significant determinant for female education. The odd of female education for the medium standard household is 1.4 times as much as the low standard household and the value for high standard of living is 3 times as much as the low. The explanation could be that, when parents are financially constrained in educating their children, then the female has to stop receiving it.

Age of head of household is highly significant and exhibits similarities in both female and male education. However, the results indicate that, younger cohorts encourage education more than older cohorts, whether for the male or the female. It could mean that older cohorts have no dependants who may be at the school-going age.

**Table (5)**  
**Variables in the Logistic Regression Equation for**  
**Highest education Level for household members**

Variable	Female				Male			
	B	SE	Odds Ratio	P	B	SE	Odds Ratio	P
Sex of head of HH Male ® Female	.3395	.1533	1.0000 1.4042**	.584	2.2712	.2359	1.0000 9.6915*	.906
Work for family, self Self employed ® Employer Unpaid family worker For wages/salary	1.6052 08987 2.0727	.5248 .1649 .3324	1.0000 4.9787* 2.4564* 7.9461*	.833 .711 .888	.8745 1.3098 .6044	.6049 .1935 .2279	1.0000 2.3977 3.7053* 1.8302*	.706 .787 .647
SLI Low ® Medium High	.3121 1.1117	.1633 .2276	1.0000 1.3663** 3.0396*	.577 .752	--- ---	... ...	--- ---	... ...
Age of head of HH 15-24 ® 25-34 35-44 45-54 55-64 65+	-2.4273 -3.5655 -3.4598 -3.7137 -3.4699	.2465 .2705 .2489 .2668 .2769	1.0000 0.0883* 0.0283* 0.0314* 0.0244* 0.0311*	.081 .028 .030 .024 .030	-4.1359 -3.6327 -3.3748 -3.4209 -3.7169	.3664 .2810 .2561 .2630 .2828	1.0000 0.0160* 0.0264* 0.0342* 0.0327* 0.0243*	.016 .026 .033 .032 .024
Reason not attend sch. Financial constraint ® School too far Lack of interest Disability Help family business Other	-1.1334 .3096 -.4062 -2.2840 2.9249	.6327 .1581 .7508 .2723 .2230	1.0000 0.3219 1.3629** 0.6662 0.1019* 18.6326*	.244 .577 .340 .092 .949	-2.8743 .3700 -.6465 -2.3013 2.2610	.7975 .1900 .6932 .2819 .2377	1.0000 0.0565* 1.4477** 0.5239 0.1001* 9.5926*	.053 .591 .344 .091 .906
Type of place of resid Rural ® Urban	.6105	.1821	1.0000 1.8414*	.648	.5988	.1993	1.0000 1.8199*	.645
Constant	.2519	.2559			.8380	.2048		

®=Reference group \*Sig<.01 \*\*Sig<.05 dash (---) means variable not in equation

Source: Computed from GDHS, 1993

Concerning those not attending school, reasons like school too far away and disability are not significant determinants for female education. For male education, the insignificant determinant is only disability. The odds of female education for financial constrain is 10 times as much as those who need to help family business. This is the same for the male education. This means that, financial constrain is a major deterrent of education both for the male and the female. However, the odds of both female and male education for lack of interest in education are 1.4 times as much as the odds for financial constrain meaning that, lack of interest is a more important determinant of female and male education than financial constrain.

With regards to residence, urban residence is an important determinant of education. The odds of male education for urban residence is 1.8 times as much as rural residence and the odd of female education for urban residence is nearly twice as much as its rural residence. This means that females who live in rural areas are less likely to receive education than females living in urban areas. This is true for males also.

## **2.2 Gender And Health**

Biologically, male children suffer from higher neo-natal mortality rates than females. This is related to some endogenous factors. Throughout the childhood period there is a marked preference for boys over girls especially in many developing countries. In Ghana the male children mostly have better nutrition, health care and even longer duration of breast-feeding. This makes the male-child have lower mortality and morbidity rates than the female-child. During the reproductive period (15-49 years), the situation is critical for women. This is the period where women bear their children and are at heightened risk of dying as a result of early marriages and poor anti and postnatal care. Due to work conditions and high competition among colleagues there is higher morbidity and mortality rates for males than for females in the elderly period.

Improving the health status of people involves assessing the health needs of men, women, and children and effectively meeting these needs. Gender issues in the health sector are more difficult to identify due to marked differences in health needs of men and women. There are different patterns for causes of death for men and women, different patterns of morbidity and mortality and different needs and uses of health services. Lack of sex desegregated data about health conditions and the use of health services precludes a detailed gender analysis of the sector.

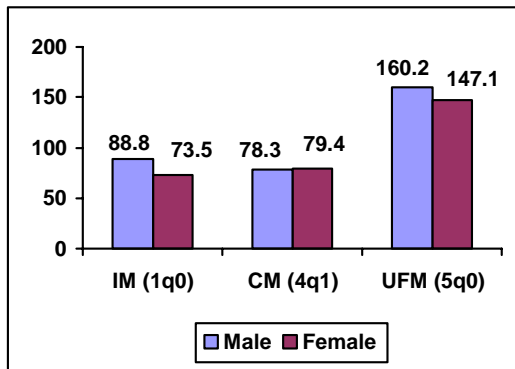
Some health indicators do not show a striking gap between the health status of men and women. For example, in Ghana, Life Expectancy was 59.2 for women and 55.5 for men. Infant mortality rate was 70.1 for females as compared

with 79.2 for males and there is no significant difference in nutritional status for male and female children (GDHS, 1993).

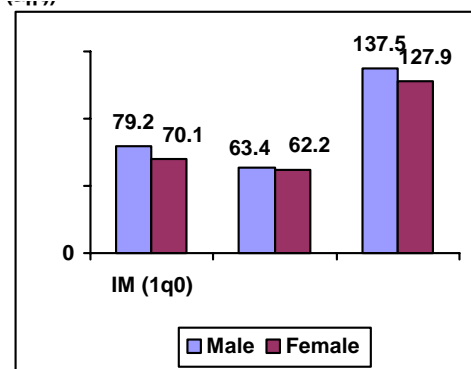
Figures (2a) and (2b) present estimates of infant and child health in Ghana during the late 1980s and early 1990s for a ten-year period preceding the surveys. The infant mortality rate was higher for boys than for girls. During the late 1980s, 9 out of 100 Ghanaian male infants died before reaching their first birthday. Child mortality rates do not vary much by sex but during the 1980s, girls had a slighter disadvantage than boys. Also in 1993, the risk of mortality in childhood for the male child generally exceeded that of the female child. Infant and under-five mortality rates were higher for the male than for the female. There was hardly any sex differences in mortality risk between the sexes during childhood age one through four.

**Mortality rates in Ghana in the late 1980s and early 1990s**

**Figure (2a) Mortality rates 1980s**



**Figure (2b) Mortality rates 1990s**



IM=Infant Mortality, CM=Child Mortality, UFM=Under -Five Mortality

Source: Constructed from GDHS, 1988 Table 6.5 and GDHS, 1993 Table 7.7.

Table (6) shows the distribution of vaccination coverage among children aged 12-23 months old. Except in the case of measles, males generally appear more likely to be vaccinated than females. On the whole, however, slightly more females than males were found to have received all immunizations.

**Table (6)**

**Percent of children 12-23 months who received specific vaccines by the time of the survey and the percentage with a vaccination card Ghana, DHS, 1993**

Percentage of children who received:												
Sex	BCG	DPT			Polio			Measles	All <sup>1</sup>	None	% vacci.	No. of children
		1	2	3+	1	2	3+					
M	84.6	82.3	75.0	63.4	82.0	74.4	63.4	62.5	53.2	14.0	69.2	344
F	81.4	81.4	72.3	61.2	81.4	71.7	61.2	66.4	56.7	16.6	67.1	307
T	83.0	81.9	73.7	62.3	81.7	73.1	62.3	64.4	55.0	15.3	68.2	651

<sup>1</sup>Children fully vaccinated (i.e., those who have received BCG, measles and three doses of DPT and Polio

Source: GDHS, 1993 Table 8.8

**Table (7)**

**Percent of children born in the 3 years preceding the survey who were ever breastfed, and median duration of breast feeding, Ghana, DHS, 1993**

Sex	Among all Children		Median Duration in Months <sup>1</sup>			No. of Children
	% ever breastfed	No. of children	Any Breast feeding	Exclusive Breast feeding	Full Breast feeding <sup>2</sup>	
Male	96.7	1131	21.0	0.4	1.9	180
Female	97.6	1072	22.2	0.4	2.1	206
Total	97.2	2203	21.6	0.4	2.0	386

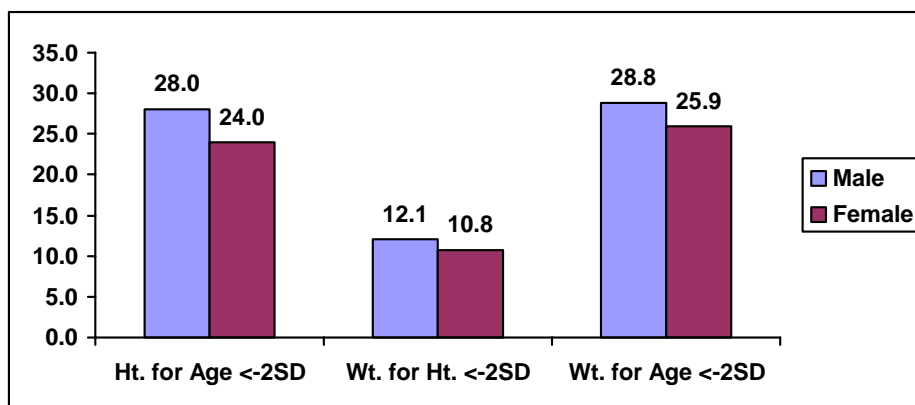
<sup>1</sup>Median is based on current status <sup>2</sup>Either exclusive breast-feeding or breast feeding and plain water only

Source: GDHS, 1993 Tables 9.1 and 9.4

From Table (7), even though breast feeding does not vary much by sex, it could be seen that, the proportion ever breastfed and the median duration of breast-feeding is longer for female than for male children.

From Figure (3), Percent of children 1-35 months of age are classified as undernourished according to three anthropometric indices of nutritional status: Height (Ht) for Age, Weight (Wt) for Height and Weight for Age (GDHS, 1993). We could see that slightly higher percentage of males (28%) was stunted than females (24%). The Wt. for Age index is an indicator for measuring nutritional deficiencies and combines the effects of both chronic and recent under-nutrition. Male children are more likely to be under weight (29%) than female children (26%). Children whose Ht. for Age is more than 2SD below the median are described as stunted or chronically malnourished and those with a Wt. for Ht. index more than 2SD below the median are referred to as wasted or acutely undernourished. Stunted describes the effect of prolonged under-nutrition whereas wasting is an indication of current or short-term under-nutrition.

**Figure (3)**  
**Percent of children 1-35 months of age classified according to three anthropometric indices**



Source: Constructed from GDHS, 1993, Table 9.5

### ***2.2.1 Provision and Access to Health care services***

Women tend to be poorer than men and poverty is a barrier to accessing health mainly as a result of the inability to pay hospital fees. The inability to access health facilities is a problem for both men and women but more so for women since they often have to attend to the health needs of children, the aged, their husbands and themselves. They often do this at the expense of their own health.

Traditional practices and beliefs affect both male and female health-seeking behaviour, but again such beliefs affect women more than men. Generally, men can take autonomous decisions about seeking health care while women often need permission before seeking health care for themselves and their children. These result often in women seeking health care too late to be helped. Male and female sterilization is available on request in Ghana. However, the requirements for sterilization operate inequitably: female sterilization requires spousal consent while male sterilization does not. Access to health is also constrained by the way health services in Ghana are organised and provided. As in most other developing countries, public sector health resources are excessively concentrated in urban tertiary hospitals. This adversely affects women more than men due to their more elastic demand for health care. Moreover, health facilities in Ghana that is usually managed by men may not be sensitive to women's specific needs for privacy, counseling and confidentiality.

The stated goal of the government of Ghana is to provide "Health care for all by the year 2000". The government subscribe to the view that the state has a fundamental responsibility for ensuring universal access to health care for its citizens. But effective access to health care can be ensured only if it is affordable. The cost of health care in Ghana increased in the 1980s because of massive cutbacks in spending that were introduced as a result of the economic crisis and

structural adjustment programme (World Bank, 1992). It is believed that costs are likely to deter than enhance use of health care among the poor and among women.

### **3. GENDER AND EMPLOYMENT**

In addition to their domestic and child rearing responsibilities, women in Ghana have traditionally engaged in agriculture and trade. Ghanaian women are well known for their high levels of economic activity. A comparative study of women's labour force participation rates for 38 developing countries found that economic activity for ever-married women aged 25-49 was highest in Ghana (Lloyd, 1993). Since World War two, women in Ghana have been increasingly drawn into more modern sectors of the economy; however, important gender disparities still exist in employment opportunities.

Research on gender inequality in employment in Sub-Saharan Africa has been limited by poor-quality and non-comparable data. Censuses and labour force surveys have used different definitions of work which have led to varying degrees of underestimation of female labour force participation (Dixon-Mueller, 1985). This is particularly relevant for unpaid family workers, most of whom are women. According to the 1984 population census of Ghana, women accounted for 64% of the unpaid family workers.

Although women constitute 51% of the population, they comprise only about 39% of the economically active group that reflects the conceptual biases with regard to the activities of women. As a result, official labour force statistics often fail to capture and reveal the value and diversity of women's work. Often reproductive work and unpaid family labour largely carried out by women are not regarded as work because they have no exchange value and do not directly contribute to the economic resources of the household.

The economic activities in which women participate are mainly agriculture, trade, small scale manufacturing and food processing industries. They are generally employed at the lower levels of both the formal and informal sectors. For most women in Ghana, access to job market is quite restricted as they lack the requisite educational qualifications and skills. Early marriages also prevent some young women from benefiting from opportunities to enter and survive in the restricted labour market. The informal sector constitutes the most important source of employment for the majority of working women, which is characterized by low income and job insecurity. Also, the implementation of the Structural Adjustment Programme in Ghana is observed to be pushing women further into the informal sector through the redeployment exercise.

Table (8) shows that domestic work is almost exclusively the responsibility of women and that women work longer hours than men when domestic and economic works are added together.

**Table (8)**  
**Estimates Of Gender Differences In Work Hours In The Past 7 Days Before The Survey By Type Of Activity And Age Group, Rural Ghana (1987-88)**

Activity	Number of hours worked				Gender Gap in hours worked	
	Male		Female		Age 15-64	Age 65+
	Age 15-64	Age 65+	Age 15-64	Age 65+		
Economic	28.3	20.3	22.7	11.4	5.6	8.9
Domestic	5.6	2.1	20.8	10.8	15.2	8.7
Total	33.9	22.4	43.5	22.2	9.6	0.2

**Source:** Data from 1987/88 GLSS and pertaining to rural areas of Ghana.

Gender disparities in work responsibilities are observed even among school-age children. Using data from the 1987/88 Ghana Living Standards Survey (GLSS), Lloyd and Gage-Brandon (1991) show that teenage girls in Ghana work longer hours weekly in both market and domestic work than boys, whether or not they are enrolled in school.

Table (9) shows the ratio of male to female employment for selected sectors of the economy for 1984, Ghana. The table illustrates that a small-scale self-employed/unpaid family worker has always been predominantly a female.

**Table (9)**  
**Ratio of male to female employment for selected sectors of the economy of Ghana, 1984**

Type of Employment	1984
Self-employed/unpaid family workers	0.7
Private sector	3.7
Public Sector	3.0

**Source:** Data from GSS 1987

Table (10) shows female employment by occupational groups in Ghana. From the table, the female component of the labour force in Ghana increased over time, from nearly 39% in 1960 to 51% in 1984, a reflection of both the expansion of educational opportunities for women and changing conceptualizations of women's work. However, working women in Ghana are concentrated in only a few sectors of the economy. Women have made up over 80% of the work force in sales since 1960, a manifestation of higher traditional levels of women's participation in trading in Ghana. In contrast, there is a noticeable deficit of women in professional, administrative, and clerical jobs. In the administrative and managerial sectors for example, women constituted only 9% of the work force in 1984. This employment patterns are largely a reflection of gender disparity in education. Women employed in the formal sector generally receive lower salaries and have fewer chances of promotion than their male counterparts as a result of lower levels of education (Manuh, 1984; Mbugua, 1989).

**Table (10)**  
**Female employment by occupational groups in Ghana, 1960, 1970 and 1984**

Occupation	Percent Female		
	1960	1970	1984
All occupation	38.6	45.1	51.4
Professional/Technical	19.5	23.4	35.7
Administrative/managerial	3.7	5.1	8.9
Clerical	7.2	15.4	29.8
Sales	80.5	87.4	89.0
Service workers	-	-	34.7
Agriculture/Animal husbandry/forestry/	36.7	42.9	47.3
Production/Transport/Labourers	21.8	24.6	44.8

Note: dash indicates that data are not available

Source: CEDAW, 1991a.

In the informal sector, women's economic activity is characterized by unskilled and semi skilled small-scale Ghanaian businesswomen. Many women in the sales sector operate with little capital investment, and only a small proportion employ wage labour. The vast majority rely on their daughters to provide supplementary labour (CEDAW, 1991a).

From a study conducted in 1979 in Accra-Tema (Ghana), Date-Bah (1986) observed that the concentration of women in certain occupations is related not only to their training but to the employers' belief that women were unsuited for certain types of work, particularly supervisory positions and positions involving physical strength or contact with machines. She also noted that a more general bias against women workers is related to their higher levels of absenteeism, to some extent a reflection of women's greater family responsibilities, and to various costs related to pregnancy, including frequent maternity leaves. Although women's economic activity and childbearing are not necessarily incompatible, the unequal division of domestic and child-care responsibilities between men and women may exert varying constraints on women's effective participation in urban formal sector jobs. Working conditions in the formal sector make it difficult for women to effectively combine their material and domestic roles. In Ghana, flexible working hours and the possibility of part-time employment are limited in the formal sector.

### **3.1 Women in Political Life**

Between 1981 and 1992, the highest decision-making body was the Provisional National Defense Council (PNDC) which was a military regime with its chairman as the Head of State. Membership of the Council was reshuffled many times but at any point in time there were on average 6 men on the Council compared with one woman.

Table (11) shows women's share at various levels of political power and decision-making for 1980, 1985, 1990 and 1994. The Committee of Secretaries which was

equivalent to the cabinet was made up of 16 persons on average and included one woman in 1980 and 1985. In 1990, there was no woman. There were 26 ministerial positions including one woman in 1980 but none in 1990.

**Table (11)**  
**Women's share at various levels of political power and decision-making:**  
**1980, 1985, 1990 and 1994**

Level of participation	Women participating in Politics											
	1980			1985			1990			1994		
	Tot	Fe	%F e	Tot	Fe	%F e	Tot	Fe	%F e	Tot	Fe	%F e
MC	17	1	6	16	1	6	16	0	0	19	2	11
CS	15	1	7	-	-	-	-	-	-	24	4	17
MS	26	1	4	29	1	3	29	29	0	35	3	9
DMS	24	1	4	-	-	-	-	-	-	45	5	11
MP	-	-	-	-	-	-	-	-	-	200	16	8
DA	-	-	-	-	-	-	-	-	-	6448	486	8
CD	-	-	-	-	-	-	-	-	-	16	1	6

**MC=** Member of Cabinet, **CS=** Council of State, **MS=** Minister of State **DMS=** Deputy Minister of State, **MP=** Member of Parliament, **DA=** District Assembly, **CD=** Chief Directors

**Source:** Ministries of Information and Local Government, 1994

Ghana had a parliamentary system of government again in January 1993. The Cabinet that is the highest executive body consisted of 17 men and 2 women. The Council of State that is an advisory body to the President had a membership of 24 including 4 women (17%). There were 35 Minister of state and 45 Deputy Minister appointments. The memberships of women were 3 and 5 respectively. With the poor representation of women at the levels of the executive, women's impact on matters relating to women's development can easily be marginalized. The legislative power of the country which was vested in 200 parliamentarians in 1993, only 16 of the number were women. In the civil service, the highest post is the chief director. Out of the 16 chief directors appointed in 1994, only one was a woman. Between 1988 and 1994, the total membership of the 110 district assemblies were 6448. Out of this number, females were 486 (less than 8%). The three-member commission of the public services included one woman. In 1994, 30 persons were designated for ambassadorial appointments. Out of this, women made up 10% of the total number. Representation of women in the judiciary was estimated to be about 10% and 11% for both superior and inferior courts in 1982 and 1994 (Ministry of Local Government, 1994).

### **3.2 Women in Public Bodies**

In 1984, out of the 1416 people in the Government Administration, only 190 (13%) were women, for the 715 Managing Directors, women were only 42 (6%) and for the 236 in the Legislative Bodies, only 11 i.e., (5%) were women. In its totality, only 10% of persons serving on public bodies were women. (Second Report on Social Demand for Education and Manpower requirements for Economic Development of Ghana, 1989).

Table (12) shows women in selected professional bodies in the country in 1994. In all the professions, women are less than a third.

**Table (12)**  
**Women in selected professions, 1994**

Profession	Total	Female	% Female
Chartered Accountant	656	8	1
Doctors	588*	102	17
Pharmacists	1030	168	16
Dental Surgeons	34*	11	32
Engineers	1373	11	0.8
Journalists	480	89	19

\*Doctors and Dental surgeons under Ministry of Health

**Source:** Secretariat of the Professional Bodies and Ministry of Health

Table (13) shows the staff strength of the Civil Service with women making up 33% of the junior Civil Service Personnel. Women constituted 25% of the senior Civil Service grade in 1993 and decreased to 9% at the director grade, a position where decisions are made.

**Table (13)**  
**Women in the Civil Service by category, 1990, 1992, 1993.**

Category	1990			1992			1993		
	Total	Fe	%Fe	Total	Fe	%Fe	Total	Fe	%Fe
Total C.S	86730	28455	33	76797	25330	33	80209	26001	32
Dist./Met C.S.	--	--	--	--	--	--	17342	4135	24
Directors	--	--	--	--	--	--	66	6	9
Senior C.S	--	--	--	9301	2486	27	9911	2474	25
Junior C.S.	--	--	--	67496	22844	34	70287	23527	33

**Fe= Female**

**Source:** Office of the Head of Civil Servants (C.S.), 1994

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 4.1 Summary and Conclusion

In most regions of the world, women receive less formal education than men and women's own knowledge, abilities and coping mechanisms often go unrecognized. The power relations that impede women's attainment of healthy and fulfilling lives operate at many levels of society, from the most personal to the highly public. Achieving change requires policy and programme actions that will improve women's access to secure livelihoods and economic resources to alleviate their extreme responsibilities with regard to house work.

This research has examined various dimensions of gender inequality in Ghana in access to education, health care and employment. Despite substantial improvements in women education, fewer girls than boys enter each level of schooling and as the level of schooling increases there is a decline in the representation of girls, partly as a consequence of household economic conditions, the limited availability of girls' secondary schools, and stereotypes regarding male and female roles, which often result in different curricula for boys and girls. There are different patterns for causes of death for men and for women but there are lack of desegregated data about the health conditions and the use of health services. Moreover, some of the health indicators do not show impressive gaps between the health status of both sexes, which make it impossible for a detailed gender analysis of the health sector. Similarly, there are wide disparities in employment and access to resources. Although women's work participation is higher in Ghana, women are underrepresented in certain sectors of the economy particularly in professional and managerial jobs. Differences are also noted in women's economic situation but the Ghanaian women are substantially more likely to participate in independent trading activities.

The government of Ghana has addressed through legislation and policy most of the inequalities; however, there is a wide gap between the legal status of women as it exists in theory and women's realization of their important rights. One important factor limiting the effectiveness of government legislation is the duality of the legal system. Customary laws govern the vast majority of the population, and sometimes conflict with the legal systems thereby permitting some degree of ambiguity and manipulation. Other limiting factors include women's lack of legal awareness, mainly as a result of their low levels of education, and the nearly absence of women in policy making bodies. The few women who rise to prominent positions and who express concern for empowering women face numerous challenges from male-dominated society in which the concept of gender equality has barely acquired social legitimacy.

Although there are no laws in Ghana that directly or indirectly bar women from participating in political, social or economic life, the deep-seated cultural perception of women as inferior compared to men continues to be a major hindrance to women's advancement in areas of power sharing and decision-making. In the area of politics, it is argued that women could equally stand for elections and be voted for. Most women in Ghana know the laws relating to their ethnic groups and religions better than they know of the legal provisions made for them in the country's constitution. The customary and religious laws inhibit women's participation in political and public life and make women accept minor positions. *Since women in principle are free to participate in public life, much effort is still needed to encourage their participation. A shift is needed in society's perception of whether women are entitled to or not entitled i.e., higher education, health care, or higher political positions. It is indeed sad that while*

*we are preparing to enter the twenty-first century, we are still debating what women deserve or do not deserve.*

#### **4.2 Recommendations**

According to the results of this study, it is recommended that:

Female heads of Households place equal importance to girls' education as boys. 1.

In addition to expanding education for girls, teachers' attitudes and practices, school curricula and facilities must also change to reflect a commitment to eliminate all gender bias. 2.

Employers are to ensure that their personnel policies and practices comply with the principle of equitable representation of both sexes, especially at the managerial and policy-making levels. 3.

Schools, the media and other social institutions should seek to eliminate stereotypes in all types of communication and educational materials that reinforce existing inequalities between males and females and undermine girls' self-esteem. 4.

The government must establish gender and development documentation centres. 5.

Improvement in women's representation at the district levels (i.e., District Assemblies) are urgent because, it is at these levels that opinion leaders can have real contact with the most vulnerable women groups. 6.

## REFERENCES

- Bleek, W. (1987) "Family and family planning in Southern Ghana" In sex roles, population and development in West Africa, (ed) Christine Opong, London
- Bukh, J (1979) The village woman in Ghana. Uppsala; Scandinavian Institute of African Studies.
- CEDAW (1991a "Consideration of reports submitted by State Parties under Article 18 of the Convention; Ghana" Unpublished document. Committee on the Elimination of Discrimination Against Women /C/GHA/1-3  
Centre for Development and Population activities CEDPA, (1996) Washington DC, USA
- Date-Bah E. (1986) "Sex segregation and discrimination in Accra-Tema: causes and consequences" In sex inequalities in urban employment in the third world (ed.) Richard A. and Catherine H., London. The Macmillan Press Ltd., Pp235-276.
- Dixon-Mueller, R (1985) Women's work in third world agriculture. Women and Development No.9. Geneva: International Labour Office.
- Dolphyne, A. F. (1987) "The Ghana National Council on Women and Deve.: An example of concerted action" In sex roles Popu. and Deve. in West Africa (ed.) Christine Opong. London: Heinemann pp213-220.
- Ewusi, K. (1978) "Planning for the neglected poor in Ghana" Report to the United Nations Research Institute for Social Development (UNRISD).
- Fapohunda, E. R. and Todaro M. P. (1988) "Family structure and demand for children in Southern Nigeria" Population and Development pp571-579.
- Gaisie, S. K. and Degraft J. (1976) The population of Ghana. Committee for International coordination of National Research in Demography (CICRED)
- Ghana Statistical Service 1984 Population Census of Ghana.
- Ghana Statistical Service (GSS) and Institute for Research Deve. (IRD)/Macro Systems Inc. Ghana Demographic and Health Surveys 1988 and 1993.
- Hyde, Karen A. L. (1993) "Improving women's education in Sub-Saharan Africa: A review of the literature" In women's education in Developing countries. Barriers, benefits and policies (ed.) Elizabeth M. k. and Anne Hill M. Baltimore and London: John Hopkins University press, Pp. 100-135.

International Conference on Population and Development (ICPD), Cairo, 1994

James T. McClave, Frank H. Dietrich, 11 (1991) Statistics 5<sup>th</sup> edition, Dellen Publishing Comp (San Francisco) a division of MacMillan Publishing Comp

Karani, F. A. (1989) "Education policies and women's education" In women and law in Kenya (ed.) Oki Ooko-Ombaka and Mary A. M. Nairobi public law institute pp. 23-28.

Kuenyehia A. (1992) Legal literacy and the law enforcement agencies in Ghana In legal literacy; a tool for women's empowerment, (ed) Margaret Schuler and Sakuntala Kadirgamar-Rajasingham. NY, (UNIFEM) pp. 301-312.

Lloyd, Cynthia B. and Anastasia J., Gage-Brandon (1993) "Women's role in maintaining households: family welfare and sexual inequality in Ghana" Population Studies pp. 115-131.

Manuh, Takyiwaa (1984) Law and the status of women in Ghana. African training and Research Centre for women research series. Addis Ababa. United Nations Economic Commission of Africa E/ECA/ATRCW/84/25.

Marija J. Norusis (1994) Advanced Statistics 6.1. SPSS Inc USA

Mbugua, Wariara (1989) "Women's employment pattern: Emerging aspects of economic marginalization" In women and law in Kenya (ed.) Oki Ooko-Ombaka and Mary A. M., Nairobi public law institute pp98-111.

Nora Guhl Naquib/Cynthia B. Lloyd (1994) Gender inequalities and demographic behaviour.

Opong, C. (1974) Marriage among a matrilineal elite: a family study of Ghanaian senior civil servants. London: Cambridge University press.

Population and Development Programme of action adopted at the ICPD Cairo 1994 Vol. 1 UN

Raana Haider (1995) A perspective in deve., gender focus. The Univ. press Ltd.

Shawky G.A. (1998) Family planning policy initiative and contraceptive use in a comparative study for Egypt and Thailand. The Egyptian pop & family planning review ISSR, Cairo Univ. vol. 31, No.2

Tansel A (1997) Schooling attainment, parental education and gender in Cote d'Ivoire and Ghana Economic Deve. and cultural change pp. 825-856.

Thomas D. (1994) like father, like son; like mother, like daughter. Parental resources and child height; journal of Human resources pp. 950-988