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**FINANCING SECONDARY EDUCATION IN GHANA:  
MANAGING SUBSIDIES TO PROMOTE EQUITABLE  
ACCESS AND PARTICIPATION**

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**Thesis submitted to the University of Sussex, United Kingdom, in partial  
fulfillment of the requirements for the degree of Doctor of Education**

**MARCH, 2016**

**UNIVERSITY OF SUSSEX**  
**CHRISTIAN KORAMOAH, DOCTOR OF EDUCATION**  
**FINANCING SECONDARY EDUCATION IN GHANA:**  
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**ACCESS AND PARTICIPATION**  
**ABSTRACT**

Educational subsidies are becoming important mechanisms in promoting access to education among many countries. In Ghana, subsidy for Secondary Education is available to all students irrespective of their income backgrounds with the government granting only partial subsidies. Despite the strong political commitment to redress historical inequities in educational funding mechanisms, policy actions in relation to Secondary Education Financing in Ghana appear to fall short of achieving the desirable goals when viewed through a vertical equity philosophical perspective. It was against this background that this study sought to explore the management of educational subsidies in public Senior High Schools in Ghana and its implications for enhancing meaningful access and participation in Secondary Education.

Although the education financing field presents a landscape and proliferation of theories, this study employed the vertical equity theory as its theoretical foundation. The study employed the concurrent triangulation research strategy by incorporating both positivist and interpretivist paradigms (combining both qualitative and statistical analysis). This was necessary because of the wide range of data needed to draw the necessary conclusion on effective funding mechanism for Secondary Education. Heads of Senior High Schools, management of the Secondary Education Division of the Ghana Education Service and parents of students at the secondary school level participated in the study. Both primary and secondary data were collected. Interview guides were used in the collection of qualitative data while statistical data were collected from EMIS. Statistical data analysis was done using Microsoft Excel. The qualitative data from the interviews were thematically analysed using data transcription.

The study found out that, social accountability mechanisms to monitor how heads of schools utilised their allocated funds are highly ineffective due to lack of transparency. There were weak internal controls and monitoring systems. The releases of the subsidy have been unduly delayed due to government inability to release the funds on time. The subsidy as a mechanism of financing Secondary Education in Ghana is quite inequitable; giving students with different needs the same amounts of resources.

There is the need to verify the enrolment figures submitted by heads of schools for the subsidies before disbursement of funds are made while ensuring that the relevant stakeholders are involved in the management of the funds. Government alone cannot afford to provide secondary education hence a cost sharing policy seems to be the optimal choice in providing adequate funds to schools. However, it is essential to ensure that the poor who lack the ability to pay in a cost sharing system are targeted and their education paid for by the government. Again policies in relation to education financing must consider the principles of equity, affordability, adequacy and efficiency. The implication therefore is the formulation of an objective, targeting mechanism to cater for those who cannot pay.

## ACKNOWLEDGMENT

Several key persons have contributed immensely to the successful completion of this dissertation and are highly acknowledged for their invaluable contributions. Firstly, I am most grateful to my supervisor, Professor Albert Kwame Akyeampong of the University of Sussex, School of Education and Social Work for his insightful guidance throughout the writing of this thesis.

I am equally very grateful to Professor Keith Lewin, also of the University of Sussex, School of Education and Social Work, who thoroughly reviewed this thesis and provided very helpful suggestions.

Dr. Yusuf Sayed of the University of Sussex, School of Education and Social Work provided very useful direction and guidance in the writing of this thesis and I would like to express my profound gratitude to him.

I would also like to show my appreciation to all the other lectures and professors at the University of Sussex I came into contact with throughout my study at the University.

I am also grateful to the management of the Ghana Education Service (GES), Heads of the Participating Secondary Schools and Parents who gracefully responded to the study by providing the relevant data.

Dr. Ato Essuman, former Chief Director of the Ministry of Education has been very instrumental in my academic and professional life and I cannot help but to express my heart felt appreciation to him.

I also express my profound gratitude to every individual who directly or indirectly provided assistance for the completion of this thesis.

Finally, I would like to thank my family especially my wife Mrs. Juliana Boakyewah Koramoah and all the children for their understanding and unflinching support and encouragement throughout this study.

## **DEDICATION**

I dedicate this thesis to all SHS students in Ghana and all those who could not make it to Senior High School for economic reason.

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## **ACRONYMS AND ABBREVIATION**

AfDB	African Development Bank
ADPE	Accelerated Development Plan for Education
BECE	Basic Education Certificate Examination
BOG	Bank of Ghana
BTA	Bank Transfer Advice
CA	Chief Accountant
CAGD	Controller and Accountant General's Department
CDD	Ghana Centre for Democratic Development
CHASS	Conference of Heads of Assisted Secondary Schools
CREATE	Consortium for Research on Education, Access, Transitions and Equity
CPP	Convention People's Party
CSR	Corporate Social Responsibility
DAs	District Assemblies
DDE	District Directorate of Education
DEO	District Education Officers
DFID	Department for International Development
DPs	Development Partners
DSE	Director Secondary Education
EC	European Community
EMA	Education Maintenance Allowance
EMIS	Education Management Information Systems
FAA	Financial Administration Act
FAR	Financial Administration Regulation

FCUBE	Free Compulsory Universal Basic Education
GCB	Ghana Commercial Bank
GDP	Gross Domestic Products
GER	Gross Enrolment Ratio
GES	Ghana Education Service
GET	Ghana Education Trust
GETFund	Ghana Education Trust Fund
GLSS	Ghana Living Standard Survey
GNAT	Ghana National Association of Teachers
GoG	Government of Ghana
GPRS	Growth and Poverty Reduction Strategy
HIPC	Highly Indebted Poor Countries
HIV	Human Immune Deficiency Virus
HOS	Head of School
ICT	Information and Communication Technology
IDA	International Development Agency
IGF	Internally Generated Funds
JICA	Japan International Cooperation Agency
KOICA	Korea International Corporation Agency
LEAP	Livelihood Empowerment Against Poverty
MDRI	Multilateral Debt Relieve Initiative
MOE	Ministry of Education
MOF	Ministry of Finance
NER	Net Enrolment Ratio
NGOs	Non-Governmental Organisations
OECD	Organisation for Economic Cooperation and Development
PPP	Public Private Partnership

PTAs	Parents and Teachers Associations
SHS	Senior High School
SIPs	Social Intervention Programmes
SIML	Social Impact Mitigation Levy
SRC	Student Representative Council
SSA	Sub-Sahara Africa
UNESCO	United Nations Education, Scientific and Cultural Organisation
UPE	Universal Primary Education
USAID	United States Agency for International Development

## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Study

The government of Ghana is the major financier of the public education system. Thus, between 2012 and 2014, over 90% of the total expenditure on education (excluding private expenditure) was contributed by the government (Ministry of Education, MOE, 2015). Hence it could be concluded that, the performance of the education sector is thereby heavily influenced by the state of the economy and the ability to provide resources for education. Debates, however, continue to emerge over the direction, efficiency and sustainability of educational financing since there are disparities in financial provision to various education levels, communities and individuals.

Available statistics from the MOE repeatedly show that there have been gaps in the budgetary allocations to the sector over the years. For example, the Ministry's budget requirement exceeded the ceiling given by the Ministry of Finance (MOF) by 1.3 billion Ghana Cedis<sup>1</sup> (GH¢) in 2012, GH¢1.7 billion in 2013 and GH¢0.4 billion in 2014.

As education costs increase, state funding is being subjected to strict accountability. The chances of increasing the education sector budget through increased allocation from the MOF and/or internal adjustments of the sector's budgetary allocation seem unlikely due to budgetary constraints. The option of ensuring internal efficiency in the utilisation of resources by stakeholders is therefore desirable. Ngolovoi (2010) and others, have also proposed cost-sharing as a way of financing secondary education, which is particularly pertinent in the context of budgetary constraints as an important option for financing secondary education (James & William, 2002). However, cost-sharing without any intervention to cater for the poor may not be an equitable procedure for Ghana because of the possibility of excluding low income communities and individuals.

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<sup>1</sup> Cedi (GH¢) is the Ghanaian currency: GH¢1.00 is equivalent of UK £0.17 and US\$0.26

In 2001, there was a public outcry against the attempt for fee increases at the Senior High School (SHS) level.

The government followed quickly with a directive that current fees should be maintained. A subsidy was then instituted to absorb the cost difference between the previously charged fees and the proposed fees. The subsidy was to cover the running cost of schools including; general stationery, first aid, building maintenance, furniture maintenance, sports, culture, sanitation, textbook user fee, postage and practical fees for science, technical, vocational and agriculture students. It is however important to note that since the subsidy is a flat rate and therefore regressive by household incomes, there is a higher likelihood that this could benefit more of the rich households. Most of the poorest households would be unable to afford the extra fees to be paid and therefore drop out from secondary education.

## **1.2 Statement of the Problem**

Almost thirteen years into the implementation of the secondary education subsidy scheme, its management is still saddled with a host of problems. Notable among them are; failure to authenticate enrolment figures, inadequacy of funds and delay in releasing same to schools. Though these problems are linked to government budgetary constraints and bureaucracies, there is a public perception that the Ghana Education Service (GES) management is responsible for the delay. However, the authorities of GES blame schools for not submitting the required documentation in time and also, the Ministry of Finance (MOF) for the late release of the funds.

This has resulted in situations where individual schools devise their own strategies for sustenance. Against the backdrop of inadequate enforcement of the policies on illegal fee collection, schools continue to bill parents arbitrarily to mobilise funds. Secondly, in reaction to the delays, some school heads often resort to threats to close down schools before the end of school terms, while others, through their Parent Teacher Associations (PTAs), request permission from the GES authorities, to charge special levies for the efficient administration of their schools.

Subsidy provision has become an issue for both politicians and human rights activists. Arguments raised in support of subsidies have been on the grounds of equity, affordability and sustainability (Toutkoushian & Michael, 2007). It is argued that subsidies be opened to all students irrespective of their economic background.

However, most governments can only grant partial subsidies which do not cover every cost involved in secondary education due to inadequate funds. This is the case of Ghana's secondary education subsidy which covers only part of the non-salary recurrent cost leaving the other part of the non-salary recurrent cost to be paid by parents and households. This tends to prevent children with poor backgrounds from accessing secondary education as they cannot afford to pay the remaining percentage. This indeed confirms the assertion by Fernandez et al. that;

By choosing to subsidize only partially the cost of an education, higher-income individuals can effectively exclude poorer individuals from receiving this education and simultaneously extract resources from them (Fernandez et al., 1994, p 250).

Thus without proper targeting, subsidising secondary education partially, could result in an unanticipated consequence of excluding poorer individuals from participating in secondary education.

Hence, despite the strong political commitment to redress historical inequities in educational funding mechanisms, policy actions in relation to education financing appear to fall short of achieving the desirable goals when viewed through a vertical equity philosophical perspective.

### **1.3 Rationale for the study**

Working in the finance division of the Ghana Education Service has fuelled my interest in this particular research. I have gathered from my work experience that the government is struggling with the payment of the subsidy, evidenced by the long delays in the releases of the subsidy. Timing of the releases affects the efficient utilisation of the funds. The attempt to ensure equity in resource allocation in Ghana's education delivery for several decades



(based on economic rationality), has not yielded the desired results perhaps due to a lack of empirical evidence. Other possible causes could be due to the formulation of ineffective educational financing policies, lack of political commitment as well as inadequate information regarding the whole range of costs of schooling to households. My personal experience has revealed that, rich and well-resourced communities and individuals who have the potential to finance their education, benefit from government financing resources much in the same way, if not more, as less endowed communities and individuals.

It is worth noting that policies such as the fee-free education and educational subsidies do not target deserving communities or schools or individuals.

The result, according to Miron (2009) has been a growing disparity in the rate of building and development of schools. Little account is taken of the issues regarding equity risks. This has become particularly pertinent in the context of dwindling education budgets and supplies which directly result from the failure of the government to design financial policies that take cognisance of disparities in the benefits across various income groups. Ghana currently employs uniform subsidy in the financing of secondary education; which is rather giving unequal opportunities (declining equity) to persons from poor households to participate in secondary education.

Further experience affirms the significance of equity in education financing. I have seen poor but brilliant students emerged out of poverty as financial support and scholarships unlock many doors for them. It is within this context that this study aims to explore the efficient disbursement and utilisation of the subsidy to public senior high schools in Ghana. The study also investigates government policies on educational subsidies and whether they assist to improve access and participation in secondary education. Specifically, the study aims to explore the relevant theoretical frameworks in addressing equity in the management of the subsidy and subsequently provide empirical evidence to support the assertion that, the subsidy should be targeted and aligned to learner needs to ensure equity. Indeed, in a country with limited and dwindling resources, it is crucial to investigate the ways in which such resources can be distributed to maximise impact.

## 1.4 Research Questions

The research was based on addressing the following two main questions:

1. How is the secondary education subsidy being managed to provide an efficient source of funding for schools and students?
2. How equitable is subsidy as a system of funding secondary education?

In the attempt to answer the above questions, efforts were made to address the following sub-questions:

- What are the main causes of delays in the releases of the subsidy?
- How adequate are the control mechanisms guiding the request for/and management of the subsidy?
- To what extent are the internal controls for subsidy administration being adhered to?
- What is the contribution of the subsidy to the running costs of schools?
- How helpful is the subsidy as a financing mechanism for improving access and participation in secondary education?
- To what extent has the subsidy reached schools with poorer students?

In order to answer these questions, this study looked at the following objectives:

- To examine the system of allocation and distribution of the subsidy.
- To analyse the delivery of the subsidy from the equity perspective.

## 1.5 Relevance of the Study

Although there have been several empirical studies on public school financing in Ghana; such as Canagarajah and Ye (2001), Karikari-Ababio (2005) as well as Thompson and Casely-Hayford (2008), the literature on the role of subsidies in improving access and participation in secondary education in Ghana is limited. As a result, better empirical understanding of subsidies in promoting access and participation in secondary education is

essential for the delivery of equitable and affordable secondary education especially in a context of limited resources. The study aims to fill the intellectual gap by providing empirical evidence on whether secondary educational subsidies are helping to improve access and participation in secondary schools in Ghana. The rationale for the allocation of resources to ensure that secondary education is effectively and equitably delivered will also be addressed.

This study will provide a basis for appropriate interventions and opportunities for formulating secondary education funding policies and improving practice. It will also guide the Finance and Secondary Education Divisions of the Ghana Education Service, the Ministry of Education and other stakeholders to improve practice and programmes towards the realisation of equitable distribution of educational subsidies.

Thus, for policy formulation, the implications of this study for the international donor community, NGOs and other Civil Society Organisations (CSO's) aside governmental agencies could lead to the development of programmes to revitalise secondary education. It will also help in the sensitisation, mobilisation and motivation of interest for secondary education financing as well as the redirection, strengthening and provision of secondary education financing information.

Academically, the study will add to the existing literature on the philosophy of public education financing within the context of the provision of secondary education. Thus, the outcome of the study will add to the existing academic literature on secondary education financing. Additionally, this study will provide relevant data on a systematic review of global literature on secondary education interventions and outcomes related to subsidies. It will also generate useful data that will prompt further research into the subject of the role of subsidies in enhancing access and participation in secondary education. The study is also designed to fill in some of the gaps in current research evidence regarding subsidies for secondary education financing in the sub-Saharan Africa context, by providing data on the

incidence of accessibility, adequacy, affordability and equitability to make a substantial international contribution to current empirical evidence.

## 1.6 Operationalisation of Terms

This section gives a conceptualisation of the key terms used in this study:

**Adequacy:** The provision of sufficient educational resources to cover the cost of education.

**Affordability:** The availability of sufficient resources to cover the cost of education.

**Equity:** Efficient allocation of educational resources to cover the most disadvantaged (poor households) students.

**Efficiency:** Proper allocation and utilisation of educational resources to attain educational goals.

**Subsidy(ies):** Non-salary payment (s) of recurrent costs by government for the running costs of schools.

## 1.7 Organisation of the Study

The study is presented in seven chapters. Chapter One provides the introduction which gives an overview of the study, rationale for the study, research questions and the relevance of the study. Chapter Two presents the context of the study and traces the history of educational finance in Ghana. The chapter covers related policy decisions on financing education which featured in almost all educational reforms that have taken place in the country as well as in the Constitution of the Republic of Ghana.

In Chapter Three the relevant literature is outlined and provides a literary direction to the current investigation. In this chapter, efforts are made to review the existing literature from conceptual, empirical and theoretical perspectives. The Fourth Chapter provides an in-depth explanation of the methodology of the study. It describes the study design and approach, study population indicating the unit of analysis, sampling technique and

procedure (methods of sampling the study population), research instruments and methods of data analysis in relation to the research questions.

Chapter Five presents the role of the subsidy in increasing participation and access, and discusses how the subsidy has been administered, including the challenges. The chapter also contains statistical analysis of secondary data on enrolment and subsidy obtained from the Education Management Information System (EMIS) and GES Headquarters.

The major findings and discussions of the study are presented in the sixth chapter. The discussion in Chapter Six was done in relation to the pertinent concepts and theories discussed in the review of literature. Finally, Chapter Seven contains the summary, conclusions, recommendations and lessons learnt. The chapter further highlights relevant areas for further research.

## **CHAPTER 2: OVERVIEW OF SECONDARY EDUCATION SYSTEM IN GHANA AND FUNDING MECHANISMS**

### **2.1 Introduction**

This chapter reviews the historical development of secondary education in Ghana, the current status, and funding provisions. It presents an overview of Ghana's secondary education system as well as the financing of secondary education in Ghana.

### **2.2 Overview of Ghana's Secondary Education System**

This section incorporates two sub-sections. Firstly, the historical development of secondary education in Ghana is discussed. Secondly, the current policies surrounding secondary education in Ghana are elaborated upon.

#### **2.2.1 Historical development of Secondary Education in Ghana**

Secondary Education in Ghana commenced in 1876 (Quist, 2003). According to Quist, Secondary Education was started by religious bodies or missions. It was not until 1924 that the colonial government joined in the provision.

In 1964, basic education grew dramatically with middle school pupils increasing by 6,000 owing to the government's focus on education. This created the impetus to expand Secondary Education to absorb the large number of middle school leavers. In response to this increase demand for secondary schools, the Government of Ghana (GoG) established the Ghana Education Trust (GET) in the 1960s to take charge of the expansion of Secondary Schools. The Trust was able to build 24 schools which came to be known as GET schools scattered all over the country. Recent education reforms have brought to the fore, Community Senior High Schools and a subsequent determination by the government

to upgrade one Community Senior High School in each district in Ghana to a high-performing school. This community initiative of secondary school provision emphasises the Government's commitment to increase access and participation in Senior High education (Anamuah-Mensah, 2007).

### **2.2.2 Current Status and Policies of Secondary Education in Ghana**

Ghana's educational system consists primarily of publicly funded government schools. The structure of the education system is made up of eleven years of Basic Education which consists of two years of Kindergarten, six years Primary and three years Junior High School. This is followed by three years Senior High School and three to four years Tertiary Education depending on the course or programme.

There has been a dramatic increase in both the number of senior high schools and secondary school enrolment since independence. In 1950, secondary school enrolment was at 6,162 from 57 secondary schools (Quist, 2003). The current 839 (558 public and 281 private) secondary schools with an enrolment of 750,217 is a marked increase (MOE, 2014). In Ghana, educational structures and facilities that could permit participation in secondary education seem to be inadequate. According to Baku (2003), this situation created the opportunity for the increase in private schools. However, it is important to note that most private schools charge high fees which people from poor households cannot afford, thereby serving as a source of inequality in education. Nevertheless, they continue to be patronised by the very few who can afford their fees.

Table 2.1 presents the trend in enrolment in SHS education from 2009/10 to 2013/14 academic year.

**Table 2.1: Trends in Enrolment for SHS Education<sup>2</sup>**

Indicators	2009/10	2010/11	2011/12	2012/13	2013/14
GER <sup>3</sup> (%)	36.1	36.5	37.1	36.8	43.8
NER <sup>4</sup> (%)	18.5	24.3	23.6	23.6	21.7
Enrolment (Public and Private)	537,332	728,076	758,468	842,587	750,217
Enrolment (Actual age) <sup>+</sup>	275,210 <sup>1</sup>	486,237 <sup>2</sup>	483,161 <sup>2</sup>	540,025 <sup>2</sup>	372,073 <sup>1</sup>
Population (Age group )	1,487, 512	1,996,929	2,044,848	2,291,267	1,711,077
Transition rate from JHS3 to SHS1	52	57	51	61	68
Completion rate (%)		33	34	31	40
Private participation (%)	10.8	8.9	8.8	8.5	8.8

+ <sup>1</sup> Age group = 15-17years    <sup>2</sup> Age group = 15-18years

Source: Education Sector Performance Report (MOE, 2014).

The significant increase in Gross Enrolment Ratio (GER) in 2013/2014 is explained by the fact that the number of years of schooling for SHS was reduced from four years to three years. As a result, two final year groups left the system in 2012/2013 academic year. The decrease in enrolment (10.96%) resulting from the reduction in the number of year groups from four to three in 2013/2014 was not significant due to the large intake of students when the two year groups left the system concurrently in 2012/2013 (Please refer to Table 2.2 below). However, the reduction in the population (25.32%) (as the age population used in the calculation of the GER in 2013/2014 was 15-17 years unlike 2012/2013 where an age population of 15-18years was very significant, thereby resulting in a very high increase in the GER in 2013/2014. Furthermore, in relation to the Net Enrolment Ratio (NER), the same logic applied but in the inverse. The decrease in enrolment of the actual age group from 2012/2013 to 2013/2014 was 31.1% whereas decrease in the population of the age group was 25.3% hence leading to a reduction in the NER. It shows that despite an increase in overall enrolment, the GER has remained relatively stagnant from 2009/2010 to 2012/2013.

In accounting for the phenomenon of the low GER, Anamuah-Mensah (2007) calls attention to what he believed to be the source of the problem: the inability to put in place

<sup>2</sup> Note that the age group changed from 15-17 years to 15-18 years because the number of years of SHS changed from three years, to four years and then back to three years.

<sup>3</sup> GER: Gross Enrolment Ratio

<sup>4</sup> NER: Net Enrolment Ratio



effective student retention mechanisms. Indeed, the low completion rates in Table 2.1 lend further support to his claim. A review of the transition rates from JHS3 to SHS1 also suggests that there is the need to improve access. Table 2.2 depicts the trends in admission to SHS.

**Table 2.2: Trends in Admissions to SHS Education**

Year	Presented <sup>5</sup>	Total Vacancy declared <sup>6</sup>	Qualified <sup>7</sup>	Placed	Unplaced	% Unplaced
2009	338,460	170,243	173,315	137,899	35,416	20.44
2010	395,650	178,131	202,664	177,397	25,267	12.47
2011	350,883	180,023	172,359	172,131	228	0.13
2012	365,426	185,315	202,149	199,895	2,254	1.11
2013	376,859	376,424	376,001	375,123	878	0.23

Source: Compiled from GES (2013)

The significant increase in vacancies declared in 2013 can be attributed to two year groups completing SHS in the same year. Originally, until 2009, the duration of SHS in Ghana was four years. This was however changed to three years in 2009, thereby resulting in two final year groups (those enrolled in 2008 and 2009) leaving the system in the same year (2013). Subsequently, more vacancies in the schools were created.

A closer look at the relationship between the number of vacancies declared and the number of students who qualify may lead one to suspect that the number of vacancies declared influences the number of students who qualify each year. In other words, the number of students who must qualify to enter SHS is determined or informed by the vacancies declared by the schools. This implies that if more access is created, more basic school children will qualify to go to SHS.

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<sup>5</sup> Presented: Total number of JHS students who were registered and wrote the JHS exams (BECE)

<sup>6</sup> Total vacancy declared: Vacant places declared by the various SHS schools to be filled by qualified BECE candidates. These places are vacated places created as a result of final SHS students' completion. The places are also based on available facilities

<sup>7</sup> Defined as those who passed BECE.

Ghana, like most sub-Sahara African countries has signed the Universal Primary Education (UPE) convention on Millennium Development Goals (MDGs), allowing Development Partners (DPs) to support basic education more than the Secondary Education (Africa Development Bank, 2014). In spite of this convention, there are a number of initiatives from the GoG to address the aspects of access and quality of secondary education.

The Ministry of Education in 2014, announced Government's commitment to build 200 Community Day SHSs to increase the supply of SHSs, thus improve access. Out of the 200 SHSs, 23 would be constructed under the World Bank-funded Secondary Education Improvement Project (SEIP) to improve access and quality to secondary education. In addition to building new schools, 50 existing schools would benefit from facilities and quality improvements, while an additional 75 schools would benefit from only the quality improvement aspect. Demand-side interventions would also go into effect under the SEIP by granting 10,400 SHS students in the afore-mentioned SHSs scholarships. Furthermore, the Government had stated that scholarships would be provided to all day students in Ghana thereby covering all costs of attending SHS (MOE, 2014). This is termed by the Government as "Progressively Free SHS".

Table 2.3 shows the trend in number of schools and students' enrolment.

**Table 2.3: Trends in number of public schools and their enrolment**

<b>Academic Year</b>	<b>EMIS Enrolment</b>	<b>Number Of Schools</b>
2005-2006	314,159	398
2006-2007	376,049	478
2007-2008	393,995	491
2008-2009	441,324	492
2009-2010	479,296	496
2010-2011	663,500	511
2011-2012	692,328	526
2012-2013	770,925	535
2013-2014	684,388	556

Source: EMIS and GES, 2014

Table 2.3 shows that as the number of public schools increases, enrolment also increases with the exception of 2013/2014 academic year. This reaffirms the fact that participation in secondary education could be influenced by the number of schools available, although there are other factors that influence participation.

In sum, there have been attempts by past Governments of Ghana to expand the financing of secondary education through the formulation of several policies and initiatives. There has also been significant increase in both the number of Senior High Schools and secondary enrolment since independence.

## **2.3. Financing Secondary Education in Ghana**

This section presents a historical review of the development of secondary education financing in Ghana, with specific emphasis on policies relating to secondary education financing. Also, the section presents a review of trends in secondary education expenditure, as well as the sources of financing secondary education in Ghana.

### **2.3.1 Historical Developments of Secondary Education Financing**

The introduction of Free and Compulsory Education has historically been a political decision which was decided upon at the cabinet level. The colonial administration, headed by Governor Guggisberg did not favour Free and Compulsory Education. This was evident from the 13th Section of the 16 Education Principles of the Educational Ordinance of 1925 which states that; ‘education cannot be compulsory or free’.

A vigorous attempt to expand financing of secondary education by the Central Government started in the early 1950’s. Nkrumah’s administration placed great emphasis and attention on secondary education, since the Government regarded it as the nucleus for educational, human resource and national development (Quist, 2003). Hence, in contrast to the colonial

times, the Accelerated Development Plan for Education (ADPE) of 1951, introduced by the Convention People's Party (C.P.P.) of Ghana's first President Dr. Kwame Nkrumah supported the financing policies of free and compulsory education (McWilliam & Kwabena-Poh, 1959). Notable among its proposals was the call for a six year basic primary education for all children at public expense and the abolition of primary school fees by 1<sup>st</sup> January, 1952. The argument which legitimised the introduction of fee-free compulsory education in the country is as follows: "The desired end is compulsory education for all children in the country" (Osei- Dadzie, 2005, p.3).

The Education Act of 1961 sought to give constitutional backing to the ADPE of 1951. The Act brought into effect, authorisation and responsibilities of all stakeholders in the delivery of compulsory education and educational financing. It further developed the process of rationalisation and legitimisation of a fee-free financial policy, that, essentially, no fee should be charged except for the provision of essential books or stationery. Another very important provision in the Act, is that every child who had attained school going age shall undergo a course of instruction.

The Education Act of 1961 also advanced the cause of equity provision to enable both deprived and privileged groups to benefit from education. However, the Act did not address all problems relating to the management of funds in schools. For example, the abolishing of the fees varied in different regions of the country. In the North, parents were not made to pay for books while in the South, they had to pay. Secondly, supporting Mission schools and Private schools to become fee-free was a complex issue which raised questions about the definition of free education for all children and whether the definition was shared by all.

In 1973/74, the GoG's new perspective on educational financing was to increase cost-effectiveness, cost-recovery and to reduce misapplication of financial resources.

To this end, it was to phase out all residential and feeding subsidies at the secondary and tertiary levels as well as increase textbook-user fees at these levels. Another aspect was the policy to develop loan and scholarship systems for poorer students. Implicit in this new

provision was equity, suggesting that, free education should not necessarily be applied to all children. Thus, for cost effectiveness, parents capable of paying should be made to fund their wards' education. Furthermore, the policy suggested the need for effective management of education funds.

The 1987 Educational Reform was to contain and partially recover educational costs and to enhance sector management and budgeting procedures. The 1992 Constitution reinforced the funding of education in Ghana, principally, by the government. The provision for Free, Compulsory and Universal Basic Education (fCUBE) to all basic school children was clear. The Constitution stipulated that secondary education in its different forms, including technical and vocational education was to be made generally available and accessible to all, by every appropriate means (Republic of Ghana, 1992 Constitution).

The fCUBE policy of 1996 extended, the compulsory and fee free education policy. The fCUBE was instituted to also improve, among others, resource allocation and management in education. The strategy was to support universal education; however, the provisions in the fCUBE according to Kadingdi (2004) rather called for shifting of more resources to the basic level.

In addition, the terminology 'free' was debatable; the element of cost sharing was evident in that District Assemblies (DAs) were empowered by the Local Government Act 462 (1993) to institute levies for parents to support education in their districts. This was the main contradiction of the fCUBE policy, a factor which negated the enforcement of free compulsory education. Hence, to some extent, the 1987 Educational Reform Programme was in a sense analogous to the fCUBE as both aimed at partial cost recovery. Chapter Three extensively discusses cost recovery.

Embedded in the Growth and Poverty Reduction Strategy (GPRS) II was "improving quality and efficiency in delivery of education service" through efficient resource management including financial management. The 2002 Government White Paper on The Education Reform put more financial burden on the government. The policy shifted funds

to the basic education level activities and programmes which included the mainstreaming of Kindergartens (KGs) into public education and making the entire basic education free. There were also provisions of free school feeding and capitation grant to all basic schools.

The phenomenon of cost sharing took a pervasive turn and later development until 2005 saw more public schools in Ghana taking on private schooling characteristics such as charging school fees to top up and extend state subsidy, apparently to support the fCUBE policy of cost sharing (Ahmed & Sayed, 2009; Akyeampong, 2009).

The full cost of financing secondary education in Ghana is made up of investment and recurrent costs. The recurrent cost is also made up of salary which constitutes the highest proportion contributed by government and non-salary to be borne by parents. As a result of the general increase in the costs of education due to inflation the recurrent cost also increased together with non-salary contributed by parents. This is what led to the public outcry in 2001 against the attempt for fee increases at the Senior High School (SHS) level in order to transfer the increasing cost to parents and subsequent intervention by government to introduce the 'subsidy'. Thus the subsidy was instituted to absorb the cost difference between the previously charged fees and the proposed fees. For example according to MOE 2014, in 2013 the total expenditure on secondary education from all sources was GH¢1.255 billion. This comprises of both investment (3.3%) and recurrent (96.7) expenditure. The recurrent expenditure of GH¢1.213 billion was made up of GH¢854.495 million (70%) salaried paid by government and GH¢358.703 million (30%) non-salaried which was to be contributed by parents as fees out of which government further absorbed GH¢50.716 million (14%) as subsidy. Thus the subsidy covers only part of the non-salary recurrent cost leaving the other part of the non-salary recurrent cost to be paid by parents and households.

### **2.3.2 Trends in Educational Expenditure**

The current allocation of public expenditure to the education sector in Ghana is about a quarter (MOE, 2014).

**Table 2.4: Trend in Expenditure on Education as a share of GDP in Ghana**

SOURCE	2010	2011	2012	2013
GDP	46,232,000,000	57,013,000,000	71,847,000,000	93,461,000,000
Total Govt. Exp	11,532,209,320	13,837,325,330	20,944,723,341	27,463,039,403
Total Edu. Exp	2,564,363,357	3,565,710,570	5,704,019,600	5,696,678,315
Educ. Exp. as a % GDP	5.50%	6.30%	7.90%	6.10%
Educ. Exp. as a % of GoG Exp.	22.20%	25.80%	27.20%	20.70%

Source: World Bank 2013 Base on EMIS and UNESCO Data

Table 2.4 demonstrates that, in three out of the four years, the proportion of GDP allocated to education is over the current UNESCO target of 6% and almost double the percentage invested by low income countries in sub-Saharan Africa (World Bank, 2011). This implies that Ghana is placing emphasis on education, which indicates the country's commitment to the development of its human capital. However, the emphasis seems not to be highly efficient.

Table 2.5 further presents an analysis of government expenditure on education by levels.

**Table 2.5: Trends in Education Expenditure by levels**

Level	2010		2011		2012		2013	
	Amount	%Share	Amount	%Share	Amount	%Share	Amount	%Share
Pre-school	72,036,051	2.8	103,391,337	2.9	435,502,334	7.6	363,499,436	6.4
Primary	715,160,506	28	1,234,146,460	34.6	1,302,972,161	22.8	1,388,792,576	24.4
JHS	370,235,825	14	411,648,553	11.5	969,147,257	17	965,117,148	16.9
SHS	400,030,646	16	526,809,606	14.8	1,057,413,465	18.5	1,152,064,995	20.2
TVET	38,436,313	1.5	126,982,366	3.6	163,681,164	2.9	103,039,432	1.8
SPED	17,214,633	0.7	19,149,996	0.5	21,717,157	0.4	28,064,385	0.5
NFED	13,357,023	0.5	15,154,167	0.4	40,538,896	0.7	39,952,006	0.7
Teacher Education	62,056,093	2.4	-		-	0	-	
Tertiary	511,806,744	20	639,230,889	17.9	1,081,971,635	19	1,106,283,329	19.4
HIV-AIDS	1,570,316	0.1	1,387,335	0.04	-		-	
Management & Agencies	362,459,208	14	487,809,862	13.7	631,075,530	11.1	549,865,010	9.7
<b>Total</b>	<b>2,564,363,357</b>	<b>100</b>	<b>3,565,710,570</b>	<b>100</b>	<b>5,704,019,600</b>	<b>100</b>	<b>5,696,678,315</b>	<b>100</b>

Source: MOE, 2014, Education Sector Performance Report

Table 2.5 depicts that 16% of education expenditure was on SHS in 2010 which reduced to 14.8% in 2011. In 2012 and 2013, the proportion of education expenditure increased to 18.5% and 20.2% respectively. Thus with the exception of 2011, there has been a consistent increase in the proportion of education expenditure allocated to SHS. From 2010 to 2012, the proportion of education expenditure on SHS has been the third highest relative to other levels except in 2013 where it was the second highest.

### **2.3.3 Sources of Funding Education**

The major source of funding for education in Ghana is from the Central Government. This is sourced from government's discretionary budget, the Ghana Education Trust Fund (GETFund), Highly Indebted Poor Countries (HIPC) and the Social Impact Mitigation Levy (SIML) Funds. HIPC funds were gains from joining the Highly Indebted Poor Countries which the government used to raise the standard of living of poor people. Retrospectively, from 2007, the HIPC funding was phased out and new "enhanced" modalities for debt relief, the Multilateral Debt Relief Initiative (MDRI) was gradually used to replace HIPC funding (World Bank, 2011).

The GoG Funds come in the form of Annual Budget Support to cover: compensation of employees (salaries and its related expenses as well as allowances), goods and services and the acquisition of assets. GETFund is mainly used to support the provision of infrastructure while the HIPC, MDRI and the SIML were used to pay for goods and services especially capitation grants for basic schools and the SHS subsidy.

Another important source of funding for education in Ghana is the DPs which is popularly termed as the Donor source. Notable among these DPs are; Department for International Development (DFID) also known as UKAid from the United Kingdom, International Development Agency (IDA) of the World Bank, United States Agency for International Development (USAID), the Japan International Cooperation Agency (JICA), African



Development Bank (AfDB) and the European Community (EC). Quite recently the Korea International Cooperation Agency (KOICA) and the Chinese government have also joined the major Development Partners.

District Assemblies (DAs) also constitute another source of funding for education in their respective districts. The major source of private funding in education is the Internally Generated Funds (IGF). This is a fund contributed predominantly by parents of SHS students. It has also increasingly become a major source of funding at the tertiary level. Parent Teacher Associations (PTA), old students and religious organisations also make some private contributions into education in Ghana (GES, 2013). Corporate bodies have also been supporting education on a very minimal scale but these have been mainly in the form of sponsorship of educational programmes.

Table 2.6 shows the education expenditure by levels and sources for 2013.

**Table 2.6: Education Expenditure by level and source (capital and recurrent), 2013**

Level	GoG		ABFA[1]		GETFund		IGF		Donor	
	Exp.	%	Exp. (GHS)	%	Exp. (GHS)	%	Exp. (GHS)	%	Exp. (GHS)	%
Pre-sch.	346,123,252	8	-	-	3,697,072	2	-	-	13,679,113	5
Prim.	1,219,960,251	27	-	-	32,605,514	17	-	-	136,226,810	51
JHS	898,694,253	20	-	-	5,802,317	3	-	-	60,620,578	23
SHS	838,904,968	19	-	-	22,369,462	11	286,427,504	40	4,363,061	2
TVET	66,306,361	2	-	-	751,629	0	21,559,059	3	14,422,382	5
SPED	23,447,592	1	-	-	3,952,507	2	-	-	664,286	0
NFED	31,172,245	1	-	-	187,130	0	-	-	8,592,631	3
Tertiary	595,471,839	13	9,113,628	100	99,594,475	51	395,593,954	55	6,509,433	2
Mgt.& Agencies	483,696,828	11	-	-	27,689,307	14	14,685,124	2	23,793,750	9
<b>Total</b>	<b>4,503,777,590</b>	<b>100</b>	<b>9,113,628</b>	<b>100</b>	<b>196,649,413</b>	<b>100</b>	<b>718,265,642</b>	<b>100</b>	<b>268,872,043</b>	<b>100</b>

Source: MOE, 2013

From the sources of financing, 40% of IGF expenditure was on SHS, while 18.6% of the GoG was spent on SHS. Only 2.0% of donor fund was also spent on SHS. According to

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[1] ABFA= Annual Budget Funding Amount. This is part of the inflows from the oil revenue used to support the annual budget of the Government.

the MOE (2014), GhC724,423,897 of the GhC838,904,968 SHS expenditure covered employees' compensations which constitute 86.0% of the expenditure at that level.

Furthermore, Table 2.6 reveals that 24.9% of the SHS budget is covered by IGF. This indicates that finances of the school activities have largely been sourced from their IGF. This implies that much of the cost of SHS is charged to parents. Ultimately, this has the potential of eliminating those with limited financial resources (poor households) from participating in secondary education.

In concluding the discussion on financing of secondary education in Ghana, it can be stated that secondary education's proportion of the education expenditure has increased in recent times.

Although the major source of funding for education in Ghana is from the Central Government, a larger proportion of non-salary expenditure at the SHS level is from IGF, while only a marginal proportion of donors' funds are also spent on SHS in Ghana. In terms of the cost to households, this means that a greater proportion of the cost of financing non-salary expenditure is passed on to parents. The implication therefore, is that, students from poorer households could be excluded from participating in secondary education in Ghana due to their inability to pay.

## **CHAPTER THREE: REVIEW OF LITERATURE**

### **3.1 Introduction**

In this chapter, efforts have been made to review the relevant literature related to the study. Thus, the chapter critically reviews, analyses and discusses the literature in relation to financing secondary education. The literature is reviewed from the conceptual, theoretical and empirical bases. The review is built on the framework of the research questions, which formed the basis for the development of the themes for the chapter. The chapter therefore consists of the following themes:

- The role of secondary education
- Access to secondary education
- General overview of educational finance,
- Sources of education funding
- Challenges in financing secondary education
- Subsidies in education finance
- Reasons for subsidising education
- Types of subsidies
- Accountability in the management of school subsidy
- Empirical literature
- Theoretical framework

### **3.2 The Role of Secondary Education**

Generally, the education received by children has been recognised as crucial to the development of their job skills and other attributes that affect the ability to function productively as a member of society (UNESCO, 2000). In Pakistan for example, Husain (2008) mentioned underdeveloped human resource as one of the major public policy

challenges facing the country due to low investment in education. Among 177 countries in the Human Development index, Pakistan ranked 134.

Husain (2008) therefore lamented about the high adult illiteracy rate (about half of the adult population) and the low enrolment rates at all levels of education, pointing out the tertiary education ratio as only 4% coming out with just a few professionals to support all the sectors of the economy. Similarly, the World Bank (2005) argues that:

For young people all over the world, primary education is no longer enough. Secondary education provides a specific set of competencies and skills that enable students to participate in the knowledge society. It can also contribute decisively to social cohesion and civic participation by increasing individual propensity to trust and be tolerant, thus, enabling youngsters to become active members of society (p. xix)

In another development, Lewin and Caillods (2001) maintained that:

Secondary education is indeed a crucial stage for the education system. This is where most primary-school teachers are trained; it is also where the future students of higher education are selected and taught essential foundation skills. Students enter secondary school as children and leave as young adults. What they experience there will influence the course of the rest of their lives. It is the level at which youngsters consolidate their basic knowledge gained in primary school, and also, where they acquire the common culture that will allow them to be useful citizens in a peaceful society, where they build knowledge through experience and experiments, where essential subjects such as science, health education and technology are first taught in a formal way. Finally, this is where youngsters learn how to think, how to be, how to work and how to co-operate with others (p.v).

The prospects of secondary education as a vehicle for sustainable nation-building and national development are generally acknowledged. Equally recognised is that, post-primary education is critical to skills development for growth, poverty reduction and reaching the MDGs.

According to Uyttersprot (2008), secondary education plays a very important role in the achievement of the MDGs on education. Lewin (2008) explains why the achievement of

the education related MDGs requires increasing secondary enrolment. He argues that qualified secondary-school graduates are needed to supply primary schools with teachers; without which, children would not be attracted to the primary schools.

Lewin furthermore explains that sustained demand for primary schooling will fail if it is realised that there are not enough secondary schools to absorb graduates from primary schools, thus making it difficult to achieve universal primary education. In other words, the achievement of universal primary education also depends on access to secondary education. Oluoch (2006) similarly explains that completion in primary education is likely to be high when there is access to secondary education.

The World Bank (2005) also expresses the view that it is only through systematic policies for post basic or post compulsory secondary education that the MDGs for education can be achieved. The World Bank report stresses that ‘expansion of secondary education creates a powerful incentive for students to complete primary education’ (World Bank, 2005 page xix).

Glennerster, Kremer, Mbiti and Takavarasha (2011) assert that enrolment as well as primary school completion will be enhanced with the improvement of access to secondary schooling. UNESCO (2013) found that children drop out in primary school because pupils and their parents perceive that there is no further education available. Therefore as further argued by UNESCO, It is not a coincidence that repetition and dropout rates fall in primary school when sufficient secondary school places start becoming available for the entire age cohort. Similarly, Carnoy (2013) notes that there is little incentive for teachers to put in much effort or increase efficiency if there are not enough places for a few successful pupils to take up available vacancies.

Secondary Education has been identified as one of the most important tools to fight the HIV menace (Lewin, 2008; World Bank, 2005). Lewin speculates that because people are occupied in school, they are less prone to the HIV menace and at the same time more likely to understand, accept and apply health education messages. The World Bank attributes the

ability for Secondary Education to prevent HIV to the role it plays in making youth capable of processing information and in bringing about long-term behavioural change (World Bank, 2005).

Secondary schooling is intended to equip students with the education, knowledge, and skills that will prepare them for the constantly changing workplace. Such education would enable them to respond appropriately to emerging changes throughout their lives (World Bank 2005, pg. 38).

An efficient and effective secondary education system significantly impacts on primary and tertiary education. Fundamentally, it is a link between primary and tertiary education, which serves as a point of transition from primary to the tertiary level. Against this background, the World Bank (2006) argues that secondary education may serve as a pathway for students' advancement. It is therefore expected that there will be sometimes an indication of unsatisfied demand for higher education where high repetition rates at secondary level exist. This is especially true where a greater number of students would have to repeat their years in order to improve their chances of gaining admission to the university and other tertiary institutions.

This section concludes by affirming that secondary education helps to train a citizenry endowed with the attitudes, values and skills that make them active participants in their societies thereby promoting civic participation. In summary, secondary education drives economic performance, help reach all of the MDGs and also ensure long-term sustainable developments. Thus, secondary education has the potential to create a pool of qualified people with the relevant knowledge and skills to contribute significantly to economic development, develop science and technology and deliver basic services of the contemporary society.

### 3.3 Access to Secondary Education

There has been a worldwide focus on school dropout problems. As a result, a number of policies such as the World Conference on Education for All in Jomtien, Thailand, Education for All Movement and its Fast Track Initiative, and the World Economic Forum's Global Education Initiative have been formulated to help reduce school dropout rates. Dearden, Emmerson, Frayne and Meghir (2006) recognised that one of the key policy changes in most OECD countries after World War II was to introduce free secondary school education and to increase the compulsory school leaving age.

In the UK, fees for state secondary schools were abolished by the Education Act of 1944 (The Butler Act) which saw the compulsory school leaving age increased from 14 to 15 in 1946 and then from 15 to 16 in 1974 where it remains today. In the US today, the compulsory school leaving age ranges from 16 to 18, while that of the 28 OECD countries ranges from 14 to 18 (Lewin, 2003).

The World Bank (2007) indicated that the gap between developed and developing countries as far as access to secondary education is concerned has widened since 1990. This is because the former has expanded the opportunities in secondary education more quickly than the latter.

According to Lewin (2008), only a little over one quarter of the children of secondary-school age in Sub-Saharan Africa (SSA) is able to enrol in secondary schools (25million out of the 93 million children). Lewin further points out that there is an irregular attendance even among those who enrol and many of them fail to complete lower-secondary school. For upper-secondary grades, Lewin explains that less than one-third of the cohort enrolls in the region as a whole and that there is less than 40% gross enrolment rate in 35 countries whilst in 15 countries, it is less than 20%. Relating Lewin's argument to Ghana as depicted in Table 2.1, from 2009/2010 to 2013/2014 academic years, it was only in 2013/2014 academic year that the GER went over 40%. There is therefore the need for governments in

the sub-region including Ghana, to create an enabling environment that could enhance access and participation.

Michaelowa and Weber (2007) argue that access to quality secondary education is the surest means of acquiring the necessary skills and competencies for economic success and civic participation. Furthermore, Adawo (2011) justifies the argument for expanding secondary education based on its contribution to economic growth; regardless of the length of time it will have effect as compared to the expansion of universities.

Historically, countries that have experienced the most rapid and sustainable increases in educational attainment, as well as outstanding economic performance have pursued balanced upgrading of the primary, secondary, and tertiary levels of education (World Bank, 2007). Therefore, all countries have to pursue balanced upgrading of primary, secondary and tertiary levels of education considering the assertion of Michaelowa and Weber (2007) that all the three levels are dependent on each other.

Nevertheless, Uyttensprot (2008) noted that there appears to be more concentration on the other levels while attention has been shifted from secondary education. Countries therefore have to refrain from focusing more on the primary level and pay deserving attention to expanding the higher levels.

Private schools have been suggested by Lassibille, Tan and Sumra (2000) as a means of expanding access to secondary education especially in developing countries where public resources for education are limited.

Privatisation of secondary education according to Mok (2006) has become incredibly prominent particularly as many governments have relied more upon private initiatives to expand access to secondary education. A major reason for the promotion of private secondary schools is to cater for excess demand for secondary education as the privatisation eases the pressure on governments (Belfield & Levin, 2002). However, this



cannot reach the poorest if full cost recovery is implemented. It is also clear that for some even partial cost recovery may mean non-participation.

In Ghana, this argument partly holds. For example, from Table 2.1 and Table 2.3, whereas private schools constituted an average of 32.0% of SHS in the country over the last five years, their proportion of total enrolment to Secondary Education is just about 9.0% (MOE, 2014). The low contribution of private schools to total enrolment rate is explained by the high cost involved in participation, which most poor households cannot bear.

Lassibille et al. (2000) justify the presence of private schools where there is no excess demand. They explain that “... even in the absence of excess demand, private schools can be more efficient than their public sector counterparts, delivering more value-added in student achievement per investment of resources” (P.1). The major argument against private school expansion is the issue of the children from the disadvantaged backgrounds more especially from the lower income families (Hentschke, Oschman & Snell, 2002).

Lassibile et al (2000) discovered that in spite of the general rapid expansion, access for children from disadvantaged backgrounds had declined.

They added that it is not enough to remove the barriers to private education but appropriate measures should be put in place to ensure that low-income students are not marginalised. They further suggested targeting subsidies to low income students and schools offering high value-added education. The above example supports the World Bank’s assertion that;

An unchecked and unbalanced expansion of secondary education can lead to increased social, gender, and ethnic inequality. A key policy objective is to ensure that access to quality secondary education is enhanced for those strata of society that have been excluded because of poverty, ethnicity, gender, and other related factors (World Bank, 2007, p.)

In conclusion, access to quality secondary education is essential in ensuring that students have the prospects to make significant input in the enterprise of their own education. Given the link between secondary education and economic growth, there is every need to ensure that there is a balance between expansion of access to secondary education and quality

education. Although privatisation of secondary education has been suggested as an alternative means of increasing access to secondary education, this concept marginally benefits the poor since they lack the ability to pay in private self-financing schools.

### **3.4 Secondary Education Financing**

Educational expenses seem to be the most significant feature in the budgets of all countries. However, it is regrettable that education is not seen to be contributing to development the way it is expected to, especially, in developing countries (Psacharopoulos et al. 1986). Psacharopoulos et al. (1986), attribute the inability of education to contribute to development to four major reasons; under-investment in education, misallocation of educational resources, inefficient use of resources and inequality in the distribution of educational costs and benefits among various income groups. A careful review of all the four reasons shows that they all have to do with financing of education. Indeed, there are also other non-financial factors that contribute to the failure of education systems.

According to Uyttensprot (2008), the effective and efficient financing of education has been hampered by many factors. This problem has even been compounded by the fact that demand for education keeps on rising as a result of more and more countries and people realising the important role education plays in the life of an individual and in national development (UNESCO, 2002). UNESCO (2002) further attributes the increasing demand in education to population growth and higher rates of primary school completion. Increase in demand calls for expansion of education with its associated cost, which is dependent on fiscal resources but constrained by limited budgetary allocation due to competition with other equally important sectors for the limited available resources. The major debate is about who takes the responsibility of financing education and also, how educational resources could be best utilised to achieve educational goals. Countries therefore have adopted different systems of financing as well as strategies of funding education.

The major issues on how to and who should finance secondary education have been of particular concern to all. While the system of financing secondary education addresses the

issue on how to finance education, the various sources of funds for education address the issue of who should finance education.

A good education financing system generates an adequate level of funding while promoting efficiency and equity aimed at optimising the distribution of education quality and its benefits among the members of society. Adequate levels of expenditure lead, all other things being equal, to optimum educational outputs and outcomes, while allowing for a balanced pursuit of other, competing social goals (Saavedra, 2002, p.1).

This means that a system of financing secondary education does not simply look for funds to provide education but also, how the funds could be used optimally to achieve educational goals. Therefore deciding on the appropriate sources of funds and implementing effective and efficient mechanisms for the utilisation of the funds could help achieve value for money. For the experts, emphasis should be on how countries can balance the financing approach between more funding and more efficient use of funding.

The argument about who should finance secondary education is actually centred on whether individuals or households should be made to contribute financially to the education of their wards, or whether the government alone should bear the responsibility of funding education.

While there have been different opinions on who should finance education the compelling ones seem to be those arguing on the basis of who benefits from education. On this, Psacharopoulos et al. (1986) suggest a background analysis that will help produce efficient and equitable financing arrangements. The analyses should compare the socio-economic profiles of the general population and those enrolled at different levels of education and in different types of education. The underlying conclusion of this argument is that the cost of education should be borne proportionally on the basis of benefit derived by the individual, household and government. It is therefore argued that the benefits from basic education is more nationalistic than individualistic and this tends to be opposite as the level of education progresses higher. Hence, governments are called upon to bear the cost of basic education and individuals made to contribute to their higher education.

The debate on who should finance education can also be seen from the public good or private good perspective. Graves (2009) defined public goods as goods which must be supplied communally because; they cannot be withheld from one individual without withholding them from all. Thus, if education is seen as a public good, then, the cost of education must be borne by the government but it should be borne by the individual if it is perceived as a private good. Whether a private or public good, it is quite obvious that the benefits of education are to the individual, society and the nation as a whole.

The equity and externality arguments seem to support government or state funding of education. The externality argument recognises the benefits of education accruing to the society more than the individual by helping to disseminate social values and also forge national unity (Tilak, 2009).

It is obvious that education benefits both the individual and the society. It has also become clear that governments alone cannot bear the responsibility of funding education. At the same time, it is apparent that many individuals, especially the poor and marginalised in society, cannot bear the cost of their education. It is as a result of this that resources from other sources are welcomed into the education sector. It is for this reason that Moran (2012) proposed cost sharing.

In summary, an efficient secondary education financing system should generate an adequate level of funding while promoting efficiency and equity aimed at augmenting the distribution of quality secondary education for the individual and the society.

### **3.5 Sources of Education Funding**

Education funding comes from many different sources. The total level of funding a country dedicates to education according to Saavedra (2002) is the result of the total level of funding provided by each one of these sources. Similarly, Galabawa (2007) argued that there are various sources of education revenue including fiscal sources; user charges including various forms of cost recovery and cost sharing sources and various forms of community contributions.

The heightened demand for secondary education according to the World Bank (2013) is accompanied by the need to respond to the twin challenges of increasing access to and, at the same time, improving quality and relevance of secondary education.

This therefore calls for more efficient sources of funding secondary education.

In all countries, a large portion of national resources, both public and private, are devoted to education. The rationale for sustaining this fact is compelling. A quality education, beginning with primary education, is fundamental to endow individuals with the capacity to successfully pursue their private goals, while at the same time equipping them with the knowledge and skills, as well as the values and attitudes, necessary to contribute effectively to the economic, social and political development of their societies (Saavedra, 2002).

Discussions on sources of secondary education funding cannot be complete without reviewing whether the sources are private or public.

### **3.5.1 Public sources of finance**

According to Saavedra (2002), public finance refers to the total of the resources allocated and spent in education by the central, regional and local levels of governments and also by public educational institutions. He further explains that “public financing includes both direct public expenditure on education and subsidies to (mostly) households, such as tax reductions, scholarships and loans, and living allowances. However, most poor countries do not have many of these which therefore mean that many poor households in such countries could be excluded from education. Aloysius and Tharcisse (2009) further assert that in most African countries, public finance represents about 80% of the total expenditure on education.

### **3.5.2 Private source of finance**

According to Mathew (1996), private source of finance is the major source of cost recovery in education. In other words, cost recovery is the major financial instrument in the privatisation of education. It mainly comes from households which incur direct and indirect costs. Saavedra (2002) explains that direct costs include tuition fees, transportation to and from school, uniforms, teaching materials and so on.

Indirect costs are costs that are not directly incurred by the household, but instead indirectly as the opportunity cost of having their daughters and sons in schools instead of working and earning an income. Other important sources of private financing are from communities and civil society organisations.

Cost recovery in education according to the World Bank (2007) is a sure way of trying to mobilise funds to support education in most developing countries. However, whether costs can be recovered or not depends on the specific circumstances prevailing in a particular country.

Most governments all over the world have committed to delivering education for their children. Particularly after the World Conference on Education for All, held in Jomtien, Thailand in 1990, an increasing number of countries including Ghana have attempted to reach the goal of providing education for all. However, the World Bank (1999) argued that governments have found themselves incompetent to do so because of lack of resources and capacities. In other words, community participation in education has neither been fully acknowledged nor extended systematically to a wider practice.

Consequently, there are calls by stakeholders in education including the GoG for the participation of communities in the financing of secondary education to ease the financial burden on central government in the provision of secondary education.

Within the context of Education for All (EFA), the World Education Forum (2000) also argued that community participation in secondary education financing is an alternative means to increase access to schooling.

In sum, the sources of funding secondary education generally involve a combination of public and private financing. Despite the remarkable efforts taken by governments in financing their educational sector, there is the need for support from private stakeholders including parents, NGOs/CSO communities due to government's budgetary constraints.

### **3.6 Challenges in Financing Secondary Education**

Secondary education seems to be experiencing a lion's share of the problems associated with educational financing. There seem to be over concentration on primary level financing (Uyttersprot, 2008). Uyttersprot (2008) describes the sub-sector as "the forgotten middle" when it comes to financing and is also of the view that government budgets are insufficient to expand secondary education in an equitable and sustainable way. Lewin and Caillods (2001) assert that as countries make progress in their attempt to get more children enrolled and complete primary education, financing the expansion of secondary education is one of the burning issues to grapple with in the ensuing years.

However, given the role secondary education plays in the socio economic development of countries, every investment in it is justified in the sense that; it will help achieve sustained economic growth and poverty reduction by contributing to increased productivity. Again, it will also have a positive effect on democracy, improve living conditions and reduce social vices like crime by contributing to the development of human capital.

There have been various suggestions on how to tackle the problems associated with secondary education financing. In finding ways to address these problems, Uyttersprot (2008) recommends partnerships between non-state actors and government in the financing of secondary education. In such partnerships, the government could take care of

infrastructural expenditure and employees' remuneration (compensation) while non-state actors could finance recurrent expenditure such as school uniforms and feeding.

The World bank (2007) noted that public-private partnerships (PPP) is another innovative strategy that could contribute in an important way to tackling the challenges associated with financing secondary education. Generally, PPPs are agreement between public (government) and private actors for the delivering of services which are usually provided by the public, with a clear agreement on the objectives for delivering of the service. In addition, the World Bank (2007) suggests multiple sources of funding and efficiency-enhancing measures as well as cost-sharing strategies to address the problem of financing the expansion of secondary education.

Lewin and Caillods (2001) are also of the view that; development of cost-sharing mechanisms, increase in internal efficiency, reduction in unit cost and increase in the allocations made by governments to the sub-sector will help address the problem of financing the expansion of secondary education.

Considering all the options above, reduction of unit costs by putting in place measures to increase internal efficiency sounds very convincing. This is because unit costs are already high in some countries as can be seen in table 3.1.



**Table 3.1: Average Unit Costs as a share of GDP Per Capita by Level**

Country	Primary Unit Cost (%)	Lower Sec. Unit Cost (%)	Upper Sec. Unit Cost (%)	Higher Educ. Unit Cost (%)
Ghana	19	35	55	297
Sub-Sahara Average	11	29	57	314
Burkina Faso	17	19	63	244
Gambia	16	26	47	253
Burundi	15	64	136	363
Nigeria	14	20	25	111
Benin	13	11	32	134
Mali	11	26	117	187
Guinea- Bissau	11	17	31	124
Togo	10	19	32	148
Liberia	9	21	26	98
Siera Leone	9	29	30	340
Rwanda	8	51	63	790
Cameroun	7	32	37	80
Guinea	6	11	9	153
Chad	5	19	25	420
Cote d'Ivoire	5	19	19	220

Source: World Bank (2008).

On the other hand, the call for government by stakeholders to increase the allocations made to the sector may sound like asking for too much especially in the case of Ghana. About 7% of GDP is already spent on the sector which falls within the range of 2.0% to nearly 10.0% of GDP of other developing countries such as Chad, Guinea, Guatemala, Botswana, Namibia (Mingat & Winter, 2002).

Various options however exist in relation to the allocation of more funds to the secondary education sector. One is to reduce the allocation meant for other sectors and re-allocate it to the subsector, which will soar up the already high proportion allocation to the whole sector. This does not seem that simple, since other sectors are also equally important. Another

option is to take from other subsectors of the same sector and give to secondary education. This is possible but then the risk is that, it may involve altering some policies guiding internal allocation or breaching some requirements (Toutkoushian & Michael, 2007). Additional allocation to the sub-sector as a result of general increases in GDP is the most ideal situation. The higher allocation to the basic level as depicted in Table 2.5 and Table 2.6 is explained by Ghana's commitment to international conventions on education such as the Universal Primary Education as well as the country's fCUBE policy.

The major assumption in Secondary Education cost sharing is public and private contribution. Table 3.2 shows a simple overview of models of financing and provision of education which could be applied to all levels of education.

**Table 3.2: Models of financing and provision of Education**

<b>Model</b>	<b>Public financing</b>	<b>Private financing</b>
Public provision	Free government schools	User fees complementing public financing
Private provision	Public subsidies complementing or replacing payment of tuition and other charges	Pure private schooling, including unsubsidised community schools

Source: Uyttersprot (2008)

Cost sharing would exclude the two extremes of free government schools and pure private schooling, including unsubsidised community schools and rather embrace public subsidies complementing instead of replacing payment of tuition and other charges and user fees complementing public finance.

Using the World Bank's Decision Pathways for Financing Secondary Education, there are two major ways to improve financing of Secondary Education; getting more funding as well as increasing efficiency and equity. Getting more funding may be from public or private sources.

When it is coming from public sources the implication could be that funds from other sectors are being shifted to the education sector or a shift from other areas of education such as primary or tertiary to the secondary sector (World Bank, 2007).

Private sources may involve use of PPPs, which could take the form of social responsibility and charity, such as Adopt-a-School or Private Investment. It might also involve the use of formal or informal, cash or in-kind parental contributions or fees for recurrent costs (which helps to shift public funding toward the poor) and for capital cost. Another sure means of private source is to encourage fee-based or mixed fee-with-subsidised private schools.

Generally, corporate social responsibility (CSR) demands that corporations are accountable to a community in terms of undertaking social initiatives such as formulation of scholarship schemes for the education of the citizenry communities under which they operate. However, Kielma (2015) argued that the disadvantage of CSR is that its costs fall disproportionately on small businesses. Furthermore, although major corporations can afford to allocate a budget to CSR reporting, many corporations embark on CSR for economic gains and not necessary to address the educational needs of the poor. This could result in allocation costs which are not based on equity principles and also unsustainable.

To increase efficiency and equity in the financing of secondary education is surely not an easy task to accomplish (Odden & Picus, 2004). This is explained by Reschovsky and Imazeki's (2000) assertion that there is currently no consensus in the education fraternity about the best alternatives to measure the cost of providing adequate education, which is a critical variable in measuring equity and efficiency.

A means of increasing efficiency and equity according to McGrath (1993) is by considering the use of different technology, improving management and financial mechanisms, and revising of curriculum to result in shorter duration in education. Hence, the optimisation of the curriculum to improve management and financial mechanisms, capacity building and training aimed at increasing productivity could be embarked upon.

In Ghana for example, a reduction in the duration for pre-tertiary education from 17 years in the late 1980s to 12 years currently, is an indication of reducing the cost involved in educating an individual while shortening the education cycle.

Community participation could be one of the means of financing secondary education. However, there are several reasons that prevent most communities from participating in financing secondary education. One of such reasons according to Shaeffer (1992) is the length of time required for the community to realise the benefits of secondary schooling coupled with the fact that the social benefits accruing to secondary education are not limited to the community. This is because beneficiaries could sell their labour outside the community

Furthermore, due to the diversity of the population that participated in secondary education, Shaeffer (1992) argues that it is unlikely that secondary education would attract the needed funding from the community. Miller-Grandvaux and Yoder (2002) and Rose (2003) also argue that communities may not be able to or would not be attracted to finance secondary education because it is likely to be more expensive than financing primary education.

The private sector is currently playing a crucial role and has become a prominent, useful and inevitable tool in the provision of education (Komba & Yohana, 2013).

Private financing could also take the form of increasing user charges. However, conditions like degree of excess demand and the elasticity of demand must be considered.

Another major challenge in the financing of secondary education using private financing is the absence of established regulations and policies governing the relationship between the government and private actors as noted by Lerotholi (2001).

Therefore, there can be regulations to control private provision of secondary education. Nevertheless, the major challenge could be the enforcement of the regulation.

Additionally, the World Bank (2007) has cautioned that even though this private provision of secondary education is worth considering, it could work well in countries with expansion

of secondary education as a major concern and whose private financial sectors are well developed. Mostly, poorer countries have their financial sectors undeveloped hence privatisation of secondary education might be difficult.

In summary, although the arguments for financing secondary education have received global attention, there are equally several barriers and challenges that must be addressed to ensure that subsidies are adequate and efficiently utilised to promote equitable access. Mechanisms such as PPPs as well as cost-sharing strategies could be innovative ways to tackling the challenges associated with financing secondary education. However, there is the need to ensure that in a cost-sharing environment, the poor are adequately targeted and their education paid for.

### **3.7 Subsidies in Education Finance**

This section gives a general overview of subsidies in education financing. Specifically, the section reviews literature on reasons for subsidising education, types of subsidies, impact of subsidies on enrolment, impact of subsidies on human capital development and accountability in the management of school subsidy.

#### **3.7.1 Overview of education subsidies**

Subsidising education seems inevitable in both developed and developing countries. According to Sowa (2014), it is a type of market intervention that can be used to get around the market system in resource distribution in order to improve welfare.

Sowa (2014) explains that it is one of the ways governments through economic policy making balance trade-offs that results from economic solutions.

In relation to education, educational subsidy could be defined as the difference between the long-run cost of the service to the government and the price charged to students and their parents (Şahin, 2004).

Generally, there have been several arguments as to which levels of education need to be subsidised and what type of subsidies must be applied, giving rise to the major issues of equity, affordability, efficiency and sustainability.

Thus the question as to whether or not education should be subsidised is a policy issue which hinges on the issue of equity and affordability (Trostel, 1996). However, Trostel (1996) argues that there are no clear reasons why education should be subsidised. This argument stems from the fact that markets are able to and continue to provide education. Trostel's argument presumes that there are no poor households and that everyone can afford to take part, which is not the case in poorer countries.

### **3.7.2 Reasons for Subsidising Education**

Dur and Teulings (2003) argue that globally, education is highly subsidised and that there are several reasons in support of subsidising education. Akyeampong (2009) further expanded the argument on the need for subsidies by indicating that subsidies make participation in education possible for the poor.

From the paternalistic point of view, Miron (2009) argues that left on their own, some people will not pay for enough education just because they are not adequately enlightened to be fully aware of the benefits associated with education. Penrose (2010) is of the view that this is caused by imperfections in the availability of information. Hence, the argument in favour of subsidies is to help to make it easier for such people to make the right decisions concerning education.

According to Miron (2009), acquiring education is like making a physical investment, which in most cases requires some crediting. However, Penrose (2010) notes that the absence of credit facilities or borrowing constraints is one of the major reasons to support subsidies on education.

Beside, Miron (2009) argues that some people are too poor to purchase education; moreover, they cannot borrow because of credit constraints as asserted by Penrose (2010) due to high default rate. In Ghana, Amissah-Arthur (2010) observes that the prevalence of high non-performing loans in the banking industry has a fundamental effect on how banks set rates which prevents reliable customers from accessing credit. This limitation also affects those who need credit to finance their education. Against this background, there is the need for government to subsidise secondary education in order to benefit the poor who cannot afford the cost of education.

The absence of credit facilities which constrain people from borrowing to finance their education is explained by Knopf (2001) that, unlike tangible assets like lands and buildings, it seems almost impossible to collateralise human capital. Under this circumstance, subsidies might not be the best; government-supported loans would do. Subsidies would rather lower the private cost of education and redistribute income inequitably.

Another argument that has been put across in support of subsidies is the externality argument by Pettinger (2012). From this perspective, education benefits the society more than the individual by helping to disseminate social values and also forge national unity. Again, social and economic transactions could be conducted easily by a literate society equipped with numeracy. For these and other reasons, Miron (2009) argues that subsidies on education are justified. This justification is backed by a simple explanation from Trostle (1996), that if education is seen as providing other external benefits, the subsidies will therefore internalise the externality and encourage the acquisition of more efficient amounts of education.

The equity argument for subsidising education by Garcia-Penalosa and Wald (2000) regards the acquisition of literacy and numeracy as basic human need, yet there are some people who cannot afford the acquisition of this need as noted by Miron (2009). This argument points to the fact that the disadvantaged in the society must be assisted to acquire this basic human need. This assertion is in support of the redistribution concept, which stipulates that all people must start from equal foothold.

Education subsidy is therefore an efficient mechanism for the redistribution of a country's resources, since it cannot be guaranteed that parents use the finances for the education of their children when the money is given to them. However, this redistribution argument cannot hold if subsidies are not targeted.

In conclusion, although there are mixed reactions as to whether education should be subsidised, generally, the arguments for the subsidisation seem to far outweigh the arguments against. The major arguments for subsidising education are seen from the paternalistic point of view that some people are unaware of the benefits of education and left on their own, will not participate in education. The other argument is from the externality perspective where education benefits the society more than the individual, hence the need for government to subsidise education.

### **3.7.3 Types of Subsidies**

#### **Partial Subsidies:**

Moyano and González (2009) observe that a partial subsidy received by everyone does not affect rich parents while poor ones cannot cover the cost of education. They also have negligible impact on middle income households as compared to poor households. In a context of economic crisis, Moyano and González argue that government might decide to cut education costs through a reduction in partial subsidies.

However, only poor agents would be negatively affected by this regressive and inefficient measure. This confirms the assertion that;

By choosing to subsidise only partially the cost of an education, higher-income individuals can effectively exclude poorer individuals from receiving this education and simultaneously extract resources from them (Fernandez et al, 1994, p 250).

This means that by choosing to subsidise education partially for both the rich and poor, the poor who lack the ability to pay will not be in a position to afford the rest of the cost of



education. Hence they will be excluded from participation in education leaving more rich students in school. Therefore, the partial subsidy will not benefit all income groups.

### **Cross Subsidisation**

According to Usher, (2005), cross-subsidisation refers to a situation where “average” borrowers who repay their loans steadily over a long period of time provide governments with a stream of revenue. This in turn helps to pay for the loan losses incurred by other students who do not or cannot repay their loans, or to cover other subsidies embedded in the loan system.

Cross-subsidies are a defining feature of public secondary schools: low-cost programs subsidise high-cost programs; high-income students subsidise low-income students and low-division students subsidise high-division students. Many of these cross-subsidies are not sustainable (Abdallah, 2013). According to Greenhill and Ali, (2013), this has implications for burden sharing, in that it effectively shifts the burden of financing onto richer households and businesses within the same country

### **Uniform Subsidies**

Romero, Levi and Perakis (2014) argue that under the uniform subsidies policy, all students experience an increase in their per-period amount. This is an important insight because uniform subsidies are a policy commonly used in practice, primarily because of its simplicity and perceived fairness. Although in many cases, uniform subsidies provide the optimal aggregated market consumption, from the equity perspective, they do not provide the best social welfare solution.

According to Garriga and Keightley (2007), lowering the costs of schooling to households through the implementation of uniform subsidies enables some of the poorer students to enrol and eventually complete their education while it also encourages less well prepared students to attempt college. However, Blanchard and Willmann (2013) also found that a

uniform subsidy does not affect individuals' educational choices; rather, it is the marginal cost of additional education.

Generally, uniform subsidy could cover incidental as well as the opportunity cost of making a child go to school instead of going to work. This could definitely pass the adequacy test but might not necessarily meet the efficiency standard as well as equity tests. Ghana's secondary education subsidy is a uniform type of subsidy given to all public schools based on their enrolments.

Uniform subsidies could also lead to inefficient selection of students. Here, poorer students who might not get the extra funds to meet their personal costs of attending school might be forced to drop out and their places taken by less motivated or less talented students.

### **Selective Subsidy**

Selective subsidy has specific audience as its targets. The audience must satisfy required criteria to qualify for selective subsidy. In education, the most popular type of this subsidy is the one that targets disadvantaged people, especially, low income people. Selective subsidies are subsidies which are targeted at either a special group of people or geographical location. This requires determining eligibility using special criteria (Eriksson et al., 1998).

#### **3.7.4 The Impact of Subsidies on Enrolment**

Globally, high education accessibility is becoming a major concern for all countries. Patrinos and Ariasingam (1997) argue that subsidies should be channelled directly to individuals, or to institutions based on expression of demand by users, and that this will effectively lower or eliminate the education cost burden on households to increase enrolment.

For poor households in particular, such actions will motivate demand and change attitudes towards education by lowering the opportunity cost (Patrinos et al., 2002; Ravallion &

Wodon, 1999). Besides, once schools receive direct subsidy, this can be channelled to improve classroom level investments and the quality of education. As a result, the value households place on education will improve and create increased demand for education. Theoretically, the impact of education subsidies on enrolment is positive and it is believed that this theoretical prediction has been proved with empirical evidence from both developed and developing countries.

A typical example is the Education Maintenance Allowance (EMA) in England which increased post compulsory secondary education in England and caused it to be rolled-out in the whole nation in 2004 (Dynarski, 2003; Battistin et al., 2004; Dearden et al., 2006). According to Dearden et al. (2006), the EMA increased the initial participation in education of eligible male and female by 4.8 and 4.2 percentage points respectively in the first year and again by 7.6 and 5.3 percentage points respectively in the second year. See Table 3.3

**Table 3.3: Education Management Allowance (EMA); Increase in Education Participation**

<b>Year</b>	<b>Male (% Points)</b>	<b>Female (% Points)</b>
Yr1	4.8	4.2
Yr2	7.6	5.3

Source: Dearden et al. (2006)

The Programa de Educación, Salud, y Alimentación (PROGRESA) programme introduced in Mexico in 1997 is an example from a developing country. A major goal of PROGRESA was to provide households with sufficient means and resources to allow their children to complete basic education (Behman et al., 2005). This helped to increase school enrolment in such a way that many countries had to emulate it, mostly across Latin American countries and in Ghana. The Livelihood Empowerment Against Poverty (LEAP) is a conditional cash transfer programme in Ghana which has one of the conditions as participation in education (Department of Social Welfare, 2009).

The Capitation Grant of Ghana is also another typical example of subsidising education which increased enrolment in the forty most deprived districts at the pilot stage. The results were so impressive that instead of the original plan of being rolled out to the whole country after the third year of piloting, it was rolled out only after the first year. See Table 3.4

**Table 3.4: Impact of Capitation Grant on Enrolment (Pilot Stage)**

<b>Enrolment</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>Increase</b>	<b>% Increase</b>
Boys	551,462	624,559	73,097	13.2
Girls	461,825	536,363	74,538	16.1
<b>Total</b>	<b>1,013,287</b>	<b>1,160,922</b>	<b>147,635</b>	<b>14.6</b>

Source: GES (2005)

There has been an increase of 49.4% in enrolment from 3.7million to 5.5 million since 2005/2006 academic year to 2013/2014 academic year. However the increase in enrolment cannot be solely attributed to the Capitation Grant. This is because there have been several interventions, since capitation grant was rolled out in the whole country, to help increase enrolment such as free school uniforms, free exercise books and school feeding at the basic level.

**Table 3.5: Impact of Capitation Grant on Gross Enrolment Ratio (Pilot Stage)**

<b>District</b>	<b>Total GER 2003-04</b>	<b>Total GER 2004-05</b>	<b>% increase in total GER (2003/4 to 2004/5)</b>
Deprived	76.06%	80.12%	5.34%
Non-Deprived	90.37%	90.86%	0.23%
Nat. Average	83.83%	87.5%	1.36%

Source: GES Budget Presentation, 2006.

In summary, there are several arguments for subsidising secondary education. Major among these is that some groups of the society for whom education would be a productive investment do not have the resources to pay for tuition or living expenses while in school, whereas there are no credit facilities available for persons who do not have such resources. Education subsidy therefore provides a platform for the development of human capital especially among the poor.

### **3.7.5 Impact of subsidies on Human Capital Development**

Human capital involves having a highly-educated labour force that possesses the knowledge and skills needed for innovation and productive growth. It is the cornerstone of success for societies living and working in today's knowledge-based, globalised environment (Nikko, 2002). The major assumption of the concept of human capital development is that, an educated population is a productive population (Babalola, 2003).

Yakita (2003) posits that most countries subsidise education to a greater or lesser extent. One of the justifications for a government education subsidy policy is the presence of intergenerational externality associated with education.

In contrast, Şahin (2004) maintains that education subsidies such as those on tuition create two distinct adverse effects on human capital. Firstly, a low-tuition, high-subsidy strategy causes an increase in the ratio of less able and less highly-motivated students among college graduates. Secondly, all students, even the more highly-motivated ones, respond to lower tuition levels by decreasing their effort.

The argument is further expanded by fgatabu (2012) that, education subsidies in forms such as bursaries, free day tuition and school physical infrastructure funds increase enrolment rates, retention and completion rates of secondary school students in public secondary schools. Acquiring education is like making a physical investment which improves the quantity and/or quality of your human capital. The purpose is to increase productivity (Miron, 2009).

On the contrary, increase in government subsidies for education promotes individual investment in human capital, and consequently economic growth is accelerated (Shindo, 2010). Similarly, advocates of human capital development (Bronchi, 2003; Castronova, 2002; Crepaz & Moser, 2004) assert that educational subsidies have not led to commensurate economic gains for the development of the human capital. Thus educational interventions such as subsidies on their own cannot achieve the desired societal goals of development without structural reforms.

### **3.7.6 Accountability in the Management of School Subsidy**

Schools receive revenue from many sources including secondary education subsidies. Mobegi, Ondigi and Simatwa (2012) noted that financial accountability is one of the major responsibilities of the school board and the school head. In this regard, it is essential that public funds including secondary education funds be directed effectively and used for the purpose for which they are allocated.

It is highly acknowledged that management plays a very important role in the provision of education at all levels. It is therefore essential to ensure that there is effective and efficient management system in place for delivery of education. The World Bank (2008) defined management in relation to school subsidy as the processes and practices established by legislation or through practice to realise educational funding objectives at the level of the school where the education system holds itself responsible for delivering the appropriate services and meeting its goals for educating students.

Government statutes usually include sections outlining the financial principles and practices which boards and heads must follow to achieve accountability for the funds they collect and receive to run their schools (UNESCO, 2009). The Ministry that overlooks educational issues also issues financial regulations from time to time whereby audited accounts of a given financial period must be submitted to facilitate financial decisions on, for example, allocation of grants and giving of loans (UNESCO, 2009).

In the context of school fund management, Rechebei (2010), asserts that accountability may take other additional meanings:

- (i) the act of compliance with the rules and regulations of school governance;
- (ii) reporting to those with oversight authority over the school and
- (iii) linking rewards and sanctions to expected results. Accountability in relation to management of school subsidy is therefore seen as a demand for efficiency, effectiveness and being held responsible for failure to meet expectations.

Heads of public schools prepare budgets for their schools and administer the funds each year. The budget serves as a guide to spending the school funds. The budget, according to Bisschoff (2003), is a mission statement of a school expressed in monetary terms. How the income is divided depends on the mission statement. The budget must reflect the school's prioritised educational objectives, seek to achieve the efficient use of funds and to be subjected to regular, effective financial monitoring (Mestry, 2004).

The schools prepare the budget and administer school funds. This is because schools are state institutions and heads are expected by law to be accountable for the funds they manage. They account to all stakeholders who contribute to the school fund. Governments in Sub-Saharan Africa are seeking ways to improve the quality of secondary education in their countries. Governments worldwide are turning to school leaders to improve educational quality and are responding to greater demands for accountability from the public for the education system in which children are learning (World Bank, 2008).

Contemporarily, school leadership is becoming more challenging. Therefore, empowering school leaders is essential in making them more efficient. However, Bimpeh (2012) notes that making school leaders self-governing requires the institutionalisation of higher accountability mechanisms.

According to Nwadiani and Igbineweka (2005), there is a strong relationship between funds disbursement and accountability systems. Public expenditure is channelled through

government departments which are authorised to budget and spend money in the provisions of public utilities (Esser, 2010).

Public entities such as schools that utilise public resources for public service delivery can only be coerced to account for the resources allocated, used and spent through monitoring by external agencies (Mullins, 2010). Gautam (2009) describes the ways used by public agencies in overseeing the use of public funds as involving the total adherence to internal controls as measures put in place to limit the potential risk of fraud and mismanagement of finances. In a system where resources are properly managed, substantial benefits accrue to schools by way of high productivity and reduced wastage. Poor academic performance in most schools seems to have reached an epitome in the wake of the alleged inconsistencies in funds disbursement due to inadequate monitoring (World Bank, 2005).

Dubnik (2010) explains various modes of enforcing financial accountability using sources of control which are either internal or external and degree of control being tight or loose. Jamil, (2010) notes that external mechanism for enforcing accountability in public places include the legislature probing into the use of funds, control of political executives over public agencies, public hearings , interest groups, opinion polls and the use of the media.

Generally, to promote efficiency in the management of secondary education subsidies, the schools' authorities must become more goal-oriented. In addition, there is the need to establish transparent and responsible expenditure mechanisms with increased accountability. To achieve this, requires the use of generally acceptable financial reporting procedures by school administrators.

In summary, there seems to be several issues associated with subsidising secondary education including equity, affordability, sustainability and efficiency. While some governments may be reluctant to subsidise education, the positive returns from this investment will significantly outweigh the costs. Many of the developing nations have thus realised that the principal mechanism for developing human capital is the education system. Thus, they invest large sums of money in education, not only as an attempt to



impart knowledge and skills to individuals, but also to impart values, ideas, attitudes and aspirations, which may be in the nation's best developmental interest.

### **3.8 Empirical literature: Case Studies on Secondary Education Subsidies**

This section is devoted to the relevant empirical studies on subsidies in education. The case studies have been carefully selected to reflect main issues raised in the previous chapters as well as the earlier sections in this chapter. Even though some of the cases were studies on higher education, most of them are general in nature and as such, apply to all levels of education. Specifically, all the four case studies selected for this study highlights the effects of different forms of interventions on improving access and participation in education.

The PROGRESSA, Familias en Accion and Education Maintenance Allowance were all conditional interventions unlike interventions such as the uniform subsidy in Ghana which everyone is benefiting. The key issue in these cases is that for students to benefit from subsidies, they should be able to satisfy certain key conditions as outlined below. In other words, each of these cases demonstrates the importance of identifying criteria and conditions for who benefits from financial assistance. Thus, the cases stand in sharp contrast to the Ghanaian approach to subsidy, which had no conditions attached for either schools or households to meet.

The PROGRESSA paid a cash grant to mothers based on the school attendance of their children. Here the fact that the grant was paid to mothers would made them appreciate what was been done as well as encourage their wards to attend school. This at the same time enhances transparency. It is therefore not surprising parents had to encourage their younger children who do not qualify to receive subsidies yet under the programme, to progress consistently in anticipation to receiving the grant in the future. This is in contrast to the Ghana's subsidy given to schools which parents do not seem to know much about.

The “Familias en Acción” also targeted the poor but this time the poor households in selected rural areas or communities. This can serve as another example for Ghana to follow in a decision to target.

With The Education Maintenance Allowance (EMA), apart from paying a weekly allowance and a retention bonus every term for those who attend school every time, there was also an achievement bonus. This would ensure effective and efficient utilisation of the grant.

Besides, there are some fundamental principles (adequacy, affordability, and efficiency) which must be considered in using subsidy as a system of funding education. In particular, the higher education case study, demonstrated the importance of the efficiency and equity effect of subsidies.

### **3.8.1 Case 1: Progressing Through ProgresA: An Impact Assessment of A School Subsidy Experiment in Rural Mexico**

In 1997, the Mexican government launched a large-scale cash transfer programme targeting the rural poor. The programme, which was called Programa de Educación Salud, y Alimentación (PROGRESA), paid a cash grant to mothers based on the school attendance of their children.

The Programme according to Eun-young Shim (2014) was to help children complete basic education by supporting their households with the necessary means and resources. Behrman, Sengupta and Todd (2005) evaluated the Programme. In relation to the methodology employed, village and household-level survey data was collected in 506 randomly selected villages through the randomization of treatment villages and control villages. Thus the survey data was collected in both treatment and control villages before and after the implementation of the programme.

The evaluation revealed that: the programme had a beneficial effect on the educational accumulation process and that participation in the programme is associated with higher

enrolment rates, less grade repetition, better grade progression, fewer dropouts (especially during the transition from primary to secondary school), and higher school re-entry rates among dropouts. Even for younger children who do not qualify to receive subsidies yet under the programme, there was evidence of progression consistent with the forward looking behaviour on the part of their parents. Children who dropped out prior to the commencement of the programme were encouraged by the programme to re-enter school. Girls were more prone to dropping out after completion of primary and were unlikely to re-enter increasing the need for greater monetary transfers for girls in secondary school. The programme impact in school attainment for boys was greater than for girls.

Another very interesting revelation from the study was the fact that the tests failed to reject the hypothesis that “schooling transition patterns are the same among ineligible children in the treatment and control communities.

This implies that demand side effects rather than supply side improvements in the schools were the reason behind the impact of the programme. This supports the assertion by Bardley (2000) that it is not only financial constraints that prevent people from going to school.

This means that when the financial barrier to enrolment is removed, only those who want to go to school but cannot afford will respond. The findings of Behrman et al. (2005) also supports Ghana’s example where there has been a drastic increase in enrolment after fees have been removed at the basic level.

The fees have been replaced with the Capitation Grant from 2005/2006 academic year; yet, there are still children who are not enrolled as can be observed from the net enrolment rate in Table 3.6

**Table 3.6 Trend in Primary Enrolment (Ghana)**

Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GER (%)	94.9	94.9	96.4	96.5	105.0	107.3
NER	88.5	83.6	77.8	81.7	84.1	89.3

Source: MOE EMIS, 2014

As a result of this one of the major activities that feature in the budgets of the districts annually is enrolment drive purported to sensitise people on the importance of education to make them participate at the basic level even in the era of the fee-free environment (GES, 2010). It is therefore better to identify reasons for others not recognising the importance of education and address those reasons.

### **3.8.2 Case 2: The Impact of a Conditional Education Subsidy on School Enrolment in Colombia**

Attanasio, Fitzsimons and Gomez (2005) conducted a study into the short term impact of a conditional education subsidy on school enrolment in Columbia. The study looked at the welfare programme “Familias en Acción” (FA) which began implementation in 2001 and became fully operational in all 57 targeted (treatment) communities. The targeted population was made up of individuals living in the poorest 20% of households in selected rural areas. The education ‘treatment’ was a monthly subsidy offered to eligible mothers on condition that their children attended school. Other eligibility requirements included having a household welfare indicator that is below a predetermined level and having at least one child between the ages of 7 and 17 and residing within the treatment community.

Attanasio et al. (2005) made use of a baseline dataset comparing enrolment rates in rural and urban centres in Columbia before and after the commencement of the programme. An underlying factor for these comparisons was that they examined at least two pre-programme periods to establish whether there were differences between treatment and control areas. This was to enable them to determine whether those differences were the result of anticipation effects and/or fundamental factors that vary across areas. This is because, for half of the ‘treatment with payment’ areas, the programme had already begun by the time the baseline data was collected. This however raises concerns about the anticipation effects of the programme for the areas under the ‘treatment without payment’.

The study found that the programme had been effective as it helped increase enrolment amongst 14-17 year olds in both rural and urban areas. As indicated in their statistics, enrolment in rural areas without subsidy was 54.4% as against 60.3% for enrolment with subsidy. In the urban centres, enrolment rates for ages 14-17 was 72.0% without subsidy and 77.3% with subsidy. In addition, with respect to gender, the study showed that males benefited more than females. Furthermore, for the age group of 13-18 years there was a marginal increase in enrolment levels as attendance before the commencement of the programme were relatively high. Therefore, it can be deduced that subsidies impact on enrolment rates.

### **3.8.3 Case 3: Education Subsidies and School Drop Out Rate, England**

Dearden, Emmerson, Frayne and Meghir (2005) examined the impact of the Education Maintenance Allowance (EMA) programme that was launched in September 1999 in 10 local education authorities in England. The EMA was paid to 16-18 year olds who remained in full-time school after the end of the statutory education age of 11 years. The 16-18 year olds were paid a weekly allowance (during school term only), retention bonus every term for those who attend school every time as well as an achievement bonus at the end of the course for those who achieved goals set out in a learning agreement signed by parents and students when they started receiving the EMA. As part of the scheme, benefits could be claimed for two years and up to three years for young people with special educational needs.

Dearden et al. (2005) examined the impact of the EMA taking into consideration four different variants of the EMA which were piloted. They were interested in finding out whether the impact varied according to either the generosity of the scheme and/or the recipient (parent or child) of the scheme. They sampled the population partially eligible for the subsidy and those ineligible comparing the outcomes relative to the appropriate comparison group and used propensity score matching to balance the distribution of observable characteristics.

They also carried out sensitivity analysis using differences based on aggregate data and on behaviour of older siblings. In doing so, they explored aggregate school participation data for 16 year olds and also compared the changes in school participation between the younger and older siblings in the pilot and control areas.

The results of the study revealed that the EMA had a positive and significant effect on post-compulsory education participation among eligible young people with an overall estimate of 4.5 percentage points from a baseline of 64.7% in their matched samples of controls. According to Dearden et al. (2005), the EMA increased the initial participation in education of eligible male and female by 4.8 and 4.2 percentage points respectively in the first year and again by 7.6 and 5.3 percentage points respectively in the second year.

#### **3.8.4 Case 4: Efficiency and Equity Effects of Subsidies on Higher Education, Germany**

Garcia-Penalosa and Walde (2000) compared the efficiency and equity effects of three financing systems for higher education; namely traditional tax-subsidy system, loan schemes, and graduate tax. According to the findings, all three have their advantages and limitations in relation to efficiency and equity in financing higher education.

A careful review of these financing systems however revealed that the graduate tax has an edge over the other two since the two cannot be used to achieve efficiency and equity targets simultaneously. This is because when there is uncertainty about the outcome of education, the graduate tax is to be preferred to a pure loan scheme because of the greater insurance provided by the former.

The paper indicated that many advanced economies subsidise non-compulsory education, particularly higher education with the justification that there are imperfections in the capital market which makes borrowing against future human capital income difficult. Subsidies to higher education are therefore intended to provide equal chances to all the players in this

category. The paper also noted differences that exist between subsidies to higher education and expenditure on compulsory education.

While individuals who choose to continue their studies enjoy reduction in the private cost of higher non-compulsory education, subsidies to compulsory education benefits all.

The graduate tax system as a public subsidy to education makes payment contingent on income with high repayment. An income contingent loan scheme has similar efficiency effects as a graduate tax system, provided the graduate tax is high enough. The two have advantages over the traditional system due to the insurance nature, although there is the possibility of defaulting, which is highly dependent on the risk recovery strategies implemented.

Garcia-Penalosa and Wald (2000) compared the efficiency and equity effect of three financing systems for higher education. Analysing their findings critically, one could say that subsidies are meant to provide equal chances.

The traditional method gives every individual the opportunity to go to school regardless of their financial status. But for one reason or the other, some choose to go beyond the ordinary but others refuse to continue or drop out completely thereby creating three different groups in the labour market – skilled, semi-skilled and unskilled. These groups are however not created by education but rather the labour market. The subsidies might not necessarily lead to high enrolment.

In the case of Ghana, a lower middle income nation, the educational system has seen and benefitted immensely from the traditional tax-subsidy system, which comes with both positive and negative effects. Positive in the sense that it has afforded most people the opportunity of attending school to the basic level. Unfortunately, some individuals have refused to take advantage of it.

The proportion of children who are not in school in some regions such as the Upper West in Ghana is alarming despite government subsidies (UNICEF Ghana, 2012). In looking at how efficient the three major financing systems of higher education have been, Garcia-Penalosa and Klaus (2000) made their comparison with two main schools of thought – should subsidies be abolished so as to avoid reverse redistribution or should subsidies be increased in order to increase the number of individuals from low-income families to have access to education?

In the current study it was found that graduate tax system avoids the efficiency equity trade-offs of the traditional subsidisation system. It serves as a form of insurance when the outcome of education is not certain. Also, the income contingent loan scheme tended to have a similar efficiency effects; making them better options in terms of efficiency.

In conclusion, the graduate tax increases the payoff to an agent who studies and fails and decreases the payoff to one who succeeds, thereby reducing the risk associated with education investment without changing its expected payoff. This system in a way serves as a form of insurance. Thus, it induces more people with low wealth to invest in education thereby increasing efficiency if the agent is risk averse.

The income contingent loan system also has more advantages over the traditional system. A closer look at the two systems other than the traditional still gives the graduate tax system the upper hand over the income-contingent loan system since it is an improvement of systems currently in place.

### **3.9 Theoretical Foundation**

This section deals with the theoretical foundation in relation to education financing. The key theoretical concepts that follow are directed towards understanding equity in education financing with specific focus on equity in relation to adequacy of funding, equity in relation to affordability and the equity criteria used for the school subsidies. The most common



fundamental criteria guiding all forms of funding decisions in education are equity, efficiency, adequacy, affordability and sustainability (Tsang, 2001).

According to Pedone (2009), the education financing field presents not only a landscape of theories but also a proliferation of approaches, which are controversial, complex and unclear. They include economic subsidy theory, the distributive justice theory and equity theories (the other two principles of equity (fiscal neutrality and horizontal equity)).

### **3.9.1 The Vertical Equity Theory**

Equity in school funding has been and continues to be a critical concern for policymakers both within and outside the education fraternity. In explaining the vertical equity theory, Alaka (2010) explained equity as fairness in mobilisation and allocation of educational resources. The basic proponent of the vertical equity theory is examining whether people of different income groups are treated differently.

The vertical equity theory asserts that, when individuals are in different income groups and have different capabilities to pay, they should not be taxed at the same rate. The philosophical connotation of the vertical equity theory according to Vesely and Crampton (2004) is ‘the unequal treatment of unequals’. This means that the theory of vertical equity is violated if people with a different ability to pay, or income, pay the same rate. A vertical equity approach recognises that different groups have different starting points and therefore require differential treatment.

It appears to offer an appropriate basis for considering how best to redress the vast inequities which exist in education financing on the globe. The Center for American Progress (2015) found that children attending school in higher-poverty districts in Illinois, Texas, New York, Pennsylvania, Missouri, and North Carolina still have substantially less access to state and local revenue than children attending school in lower-poverty districts.

### **3.9.2 Application of Vertical Equity Theory to Education Financing**

Historically, equity in school financing can be traced back to the late 1970s and early 1980s where Berne and Stiefel (1984) proposed an equity framework that helped to bring conceptual, intellectual, technical and philosophical clarity to school finance within the equity discourse. According to Hsuan-Fu, Sheng-Ju, Liang-Ching and Pi-Yu Chen (2014), equity is one of the most important principles of financing education with the common understanding that everybody should be given equal opportunity. Despite the growing attention directed towards adequacy in school financing, the issue of equity remains important to policymakers as well as to the academia and the education community. The intention is to draw attention to the insight that there is currently no consensus in the education fraternity about the best alternatives to measure the cost of providing equitable and adequate education (Reschovsky & Imazeki, 2000; Odden & Picus, 2004).

Of high importance is the issue of equity in education to the extent that there have been various legal challenges in the United States in cases such as *McInnis v. Shapiro* (1968), *Burruss v. Wilkerson* (1969), and *Serrano v. Priest* (1971), some of which ruled that states were constitutionally duty-bound to ensure that education funding was increased and distributed in a fair and equitable manner. Again, in the US, various studies (Johns and Salmon, 1971; Berne, 1977, 1978) have been conducted to examine whether school funding was equitable from the point of view of the providers of education resources (tax-payers) and the beneficiaries of education resources (students and school districts).

Generally, there are varied means to conceptualise and also operationalise how to assess a country's school finance system of which classically, focus has been placed on equity. According to Picus, Odden and Fermanich (2011), there are four different but related equity principles: Fiscal Neutrality; Horizontal Equity, Vertical Equity and Adequacy. Fiscal neutrality targets the traditional school finance problem and states that resources, or educational objects, should not vary with local fiscal capacity, such as property, wealth per-pupil, property value per-pupil, household income, or any other measure of local fiscal capacity.

On the other hand, horizontal equity provides that students who are alike should be treated the same. “Equal treatment of equals” reflects the horizontal equity principle (Picus, Odden & Fermanich, 2001).

In this study, focus is placed on Vertical Equity and Adequacy. In other words, school funding in this study has been assessed in terms of fairness through vertical equity, efficiency and adequacy. These characteristics are often evaluated separately rather than in relation to one another and frequently at the district level (Warth, 2012). For the purpose of this study, the vertical equity theory is applied within the context of equal access and participation in the educational system through school subsidies.

According to the Public Policy Foundation of Public School Finance, Manitoba, two key policies intrinsic to public school funding are equity and access. The document points out that the foundation of public schooling is equity and further explained that public schooling can provide quality educational services when equity is upheld and strengthened continually.

For the Saskatchewan teachers and others, equity in education is a principle that calls for fair and equal treatment of all people who have the right to education. In a jointly produced policy framework, they mentioned that “..... Equity is fundamental to the concept of public education and to a publicly funded school system”, and further argued that equity goes beyond equality. This suggests that some people need additional assistance to be able to succeed in education.

The theoretical impetus in relation to vertical equity and education financing in this study is segmented into two including per-pupil equity and per-school equity. In relation to per-school vertical equity, Toutkoushian and Michael (2007) noted that the argument of vertical equity is for education funding to be equitable. School districts with higher costs to educate student populations should receive more funding than their counterparts to compensate for this difference in order to have equitable education funding. In this regard, the New America Foundation (2014) posits that education funding across schools varies

widely and that some schools have very high per-pupil expenditures, while other districts in the same state may spend a significant amount less per student.

On the other hand, in relation to per-pupil vertical equity, Rubenstein et al. (2000) noted that the concept of vertical equity holds if students have different educational needs. In this case, an equitable state funding system should provide different levels of funding to meet these needs. Similarly, the Public Policy Foundation of Public School Finance, of the Province of Manitoba-Canada, relates vertical equity in education to the variety of learning needs that students are facing. There is therefore the need to ensure that educational programmes and services provided are in accordance with the learning needs of students. However, meeting particular learning needs imply the need for additional resources. This justifies the philosophical notion of the vertical equity theory by Vesely et. al (2008), “the unequal treatment of unequals” (p.56).

Vertical equity occurs when students with different needs are given different amounts of resources so that each may be given equal opportunity for education since the idea of public education is to provide each student with equal opportunity to effectively participate in the education system. Also, since students are not born equal, additional resources in the form of school subsidy should be allocated for assisting students with unequal economic abilities.

The application of vertical equity theory to educational financing therefore suggests the categorisation of secondary school students on the basis of ability to pay, with the most disadvantaged group receiving the most resources (subsidy). The unequal economic background of Ghanaian students links the operation of educational subsidies with the vertical equity theory where funding should be allocated to students on the basis of their educational needs. These needs could be defined using social and economic indicators such as family and economic background.

However, Gjaja, Puckett and Ryder (2014) argue that many states are far from achieving different levels of funding for students at different incomes. Thus, many states are in fact quite inequitable in how they allocate education funding, paradoxically investing much

more in the richest students than they do in the poorest students, as a result of a combination of complex state spending formulas and a heavy reliance on local funding. The most powerful reason could also be the uneven survival rates to higher grades.

The application of the vertical equity theory in this study means that a student from low-income background would have equal opportunities for access to participate in secondary education. Implicit to the theory is the school expansionary system in relation to enhancement in enrolment. Furthermore, the deductions of the theory means that secondary education should not be perceived as a privilege thereby forming the underlying foundation that access is contingent on economic ability. Instead, access to education should rather be seen as a right if the vertical equity theory is to be seen as an integral theory to enhancing equitable access and participation in the educational system.

Although there are other eminent theories such as the economic subsidy theory, the distributive justice theory and the principles of equity (Fiscal neutrality and Horizontal equity), this study places emphasis on the vertical equity theory rather than the other theories. The economic subsidy theory for example, lacks vertical equity and also reduces distributive justice since it benefits high-income persons more than low-income (Frye, 2014).

### **3.9.3 Measuring Indicators of Vertical Equity in Education Funding/Subsidy**

Park (2004) observed that the amount of educational funding distributed to meet vertical equity needs varies greatly by state and that the decision about the amount of funding provision is usually determined by the state's legislative instruments. Thus, the final amounts assigned to each factor could be affected by the political process.

To achieve vertical equity, Toutkoushian and Michael (2007) indicated that states modify their funding formulas to provide more money to schools with more need.

Generally, the two major funding formulas which have used the philosophical notion of the vertical equity theory are Needs-based School Funding and Resource-based Funding. According to the Research Base (2014), need-based school funding is used to allocate resources according to the needs of individual students using socio-economic indicators such as the living conditions of parents, income levels, health etc. Where it exists, it tends to form only a small proportion of total public education funding, and the rest is allocated partially while in the resource-based funding formula, allocations are based upon the resource requirements of individual schools in terms of teachers, learning materials and equipment.

The vertical equity metrics are based on either descriptive statistics of the variations in per-pupil revenues after adjusting for a vertical equity factor, bivariate correlations or regressions between per-pupil revenues and selected vertical equity characteristics of districts, or ratios of per-pupil revenues for two groups. According to Toutkoushian and Michael (2007), vertical equity is said to improve when there are reductions in adjusted variations in per-pupil revenues or increases in the ratios of per-pupil revenues between groups or the correlations between per-pupil revenues and vertical equity characteristics.

#### **3.9.4 Equity in Relation to Adequacy of Education Funding**

Adequacy of school finance is receiving much attention, yet there is no consensus among educationists about the measure of the cost of adequate education provision (Reschovsky and Imazeki, 2000; Odden and Picus, 2004; Toutkoushian and Michael, 2007). Even where such consensus did exist, the cost involved in providing education are often so large that not so many countries would be expected to achieve adequate funding levels in the near future. The first judicial attempt to define an adequate education provision was in West Virginia's *Pauley v. Kelly* in 1979. In the ruling, the court defined adequate education provision as:

One that teaches students literacy; the ability to add, subtract, multiply, and divide numbers; knowledge of government to the extent that each child will be equipped as a citizen to make informed choices; self-

knowledge and knowledge of the total environment so as to allow each child to choose life work intelligently; and to facilitate compatibility with others. (p. 8)

Chi and Jasper, (1998) further point out that, adequacy of education provision focuses on providing sufficient and absolute levels of funding to enable all children to achieve at high levels. In support, Odden (2004) also argues that for school financing, adequacy of provision means providing sufficient funds for the average school district to teach the average child to state standards. In addition, sufficient additional revenues for students with special needs to allow them to meet performance standards are required. It follows that in education, adequacy of provision is linked to the sufficiency of funds. Adequacy in terms of quantity and quality refers to the sufficiency of resources available to support the execution of educational services to achieve educational goals. Subsidies are inadequate if they are unable to cover for the cost they are supposed to.

The consequence of having an inadequate subsidy is that families may be forced to withdraw their wards if they cannot afford any extra it takes to complement. However, in relating adequacy and equity, Costrell (2005) argues that although some countries may view adequacy as an unattainable short-run goal, equity should be achievable for any level of education funding. This presupposes that it is in the situation of inadequacy where the theory of vertical equity can be operationalised.

According to Sullivan and Thomas (2008), the education finance system in countries with high level of public education financing cannot be entirely considered adequate if high variability and deviations exist in funding the education of students with equal levels of educational needs. Thus, in relation to the vertical equity theory emphasised in this study, there is the need to examine equity in the distribution of school funding in Ghana from the perspective of adequacy and equity.

### **3.9.5 Critiques against Vertical Equity Theory**

In relation to limitations of the vertical equity theory, Berne and Stiefel (1999) argue that there is little agreement as to which groups of students require additional resources and

how many additional resources they require. Despite the conflicting perspectives, vertical equity appears to be the appropriate theory for this study. However, the conceptualisation of ability to pay is not observable and how much those considered better off should pay is unclear. Vertical equity lacks normative content for which, Baker and Friedman-Nimz (2003) raise two key questions:

- i. Who is unequal?
- ii. What constitutes appropriately unequal treatment (e.g., how unequal is unequal enough)?”

Based on the assertion of Baker and Friedman-Nimz (2003) on vertical equity and an examination of equity in school financing, this study further develops three key philosophical questions:

- i. What is the object of measuring equity?
- ii. What are the specific equity principles used to determine whether an educational subsidy system is equitable?
- iii. What is the statistic used to measure the status of equity?

Generally, the most crucial challenges in measuring vertical equity include determining which individual differences should be considered in defining groups of students and determining how funding should vary among these groups. Fundamentally, to achieve vertical equity, the Ministry of Education should modify the criterion in relation to the subsidy formula to provide more money to schools with more need.

Determining how much funding is required to ensure that all students in all school districts have an opportunity to attain state specified outcome is proving to be a particularly difficult facet of these efforts (LaPlante, 2012). There is the need to ensure that educational programmes and services provided are in accordance with the learning needs of students, and meeting particular learning needs implies the need for additional resources. Equity requires that every student and school receives sufficient resources to have the same chance to succeed, rather than every child getting the same level of funding. Thus, equity relates to fairness in mobilisation and allocation of educational resources.



However, theoretical discussions of equity are often distanced from the practical world of policy, although equity in education financing is essential for meaningful access and participation in educational system.

In addition, equity and access are much contested terms due to the varied conceptual perceptions that often see the other as insufficiently describing the observed or experienced situation. Furthermore, equitable subsidies should enable individuals within every society to access education benefits.

### **3.10 Chapter Summary**

In exploring issues related to education financing, it has been possible to shed light on the rationale advanced for granting subsidies to support secondary schooling. Throughout this review, there has been the presumption that for equity, subsidies should enable individuals within every society to access education benefits. It has also been revealed that education in Africa has long attracted government subsidies, not only because of the expected high social externalities involved, but also because of equity considerations. The review has established that governments recognise the important role played by secondary education in the development of skills and for the achievement of the MDGs. As asserted by Lewin (2001), sustained universal primary completion will fail if there are not enough secondary schools to absorb primary school graduates. Yet, previous governments have been unable to formulate sustainable policies to finance secondary education.

Policies on access and participation have made primary education the focus of governments almost to the neglect of secondary education. The case for subsidising primary education is particularly strong, given the wide benefits it brings. Literacy and numeracy are critical to sustaining modern democracies. A growing weight of evidence from the endogenous growth literature highlights the favourable growth effects of primary education (Bruno, et al., 1996; Demery, et al., 1995).

In most countries, the major source of public funding in the education sector is the government. Drawing from the literature, governments alone cannot continue to fund education. It is for this reason that the issue of cost sharing has been proposed. With this arrangement other stakeholders are therefore required to partner with the government in the financing of secondary education.

There is little consensus on how much additional funding per student is needed for poor students relative to non-poor students in determining equity in education financing.

Therefore, exploring how equity could be determined to ensure proper targeting of disadvantaged students is critical. The subsequent chapter outlines the methodology employed in obtaining the views of stakeholders in management and use of educational subsidies in determining the provision of equitable educational subsidies.

## **CHAPTER FOUR: METHODOLOGY**

### **4.1 Introduction**

The purpose of the study is twofold:

- i) To explore whether there is efficient disbursement and utilization of educational subsidy to public senior high schools in Ghana; and
- ii) To explore whether the policy on the subsidy is helping to improve equitable access and participation in secondary schools in general.

This chapter outlines the research methods that were used to explore the research questions. Generally, the methodology was carved out to meet the research objectives and address data gathering problems imminent in research. The major components of this chapter are the research design, study population, sample and sampling technique, data collection including sources of data, data collection instrument and procedure for data collection. The methods used for analysing the data from the field are also discussed in this chapter.

It is important to note that the major variables developed in the study for measuring equity, efficiency as well as affordability, were based on the concepts and theories developed in Chapter Three. Furthermore, based on the empirical studies conducted in other countries, this chapter was able to develop the appropriate research design as well as the typology for the methodological framework of the study.

### **4.2 Research Approach: Concurrent Triangulation Strategy**

An assessment of the overall and secondary objectives of the study's research questions and objectives indicates that a mixed design (combining both qualitative and statistical analysis) was necessary due to the wide range of data needed to draw the necessary conclusion on effective funding mechanism for secondary education. Generally, depending

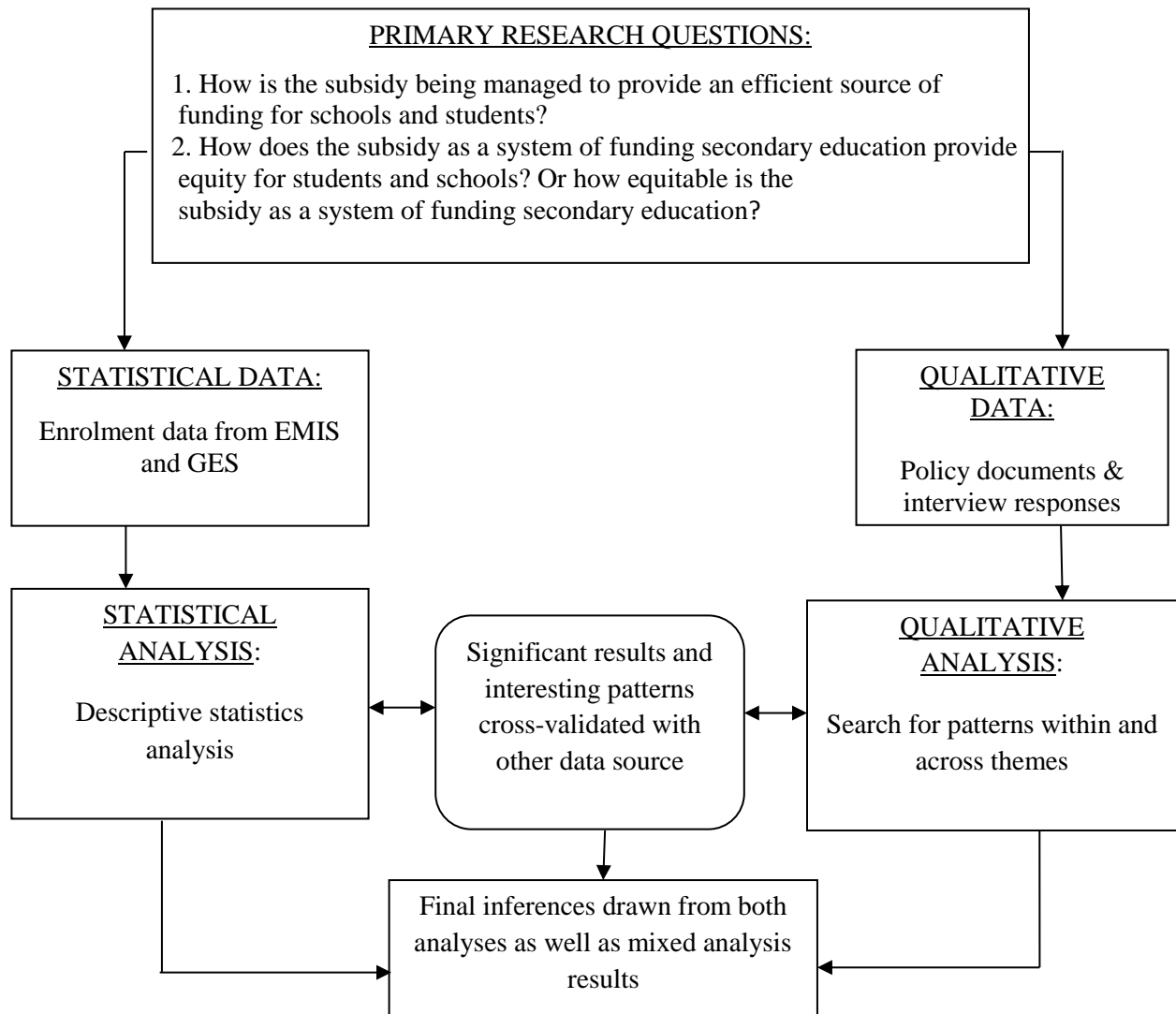
on the goals of each component, the phases of data collection can either be sequential or concurrent. In this study, the concurrent triangulation strategy which involves conducting qualitative and statistical analysis at the same time was used to reduce the amount of time required to collect data.

According to Jennifer and Mihas (2013), the term, "mixed methods" usually refers to contexts in which a researcher collects, analyses, and integrates both qualitative and statistical data and methods within a single study. Thus mixed methods research is an approach to enquiry that combines or associates both qualitative and quantitative forms. Reviewing the philosophical foundation of the mixed research design, Creswell (2009) indicates that mixed methods research involves philosophical assumptions, the use of qualitative and statistical analysis, and the mixing of both approaches in a study.

Qualitative data were collected through in-depth interviews with the Heads of the Secondary Schools, Management of Ghana Education Service as well as the Parents of Students in Public SHS while statistical data were obtained from the analysis of EMIS and GES data on enrolment and subsidy. Generally, an exploratory approach was adopted towards obtaining the relevant data for the study. This approach entailed the participation of relevant key stakeholders in relation to the financing of secondary education in the process of data collection and analysis.

Although there are both conceptual and practical challenges in dealing with data from mixed methods research studies the rationale for employing mixed methods in this study is grounded in the view that it broadens understanding by incorporating both positivist and interpretivist paradigms. Integrating statistical data and qualitative research methods in this study was relevant to discover the multi-level coordination mechanisms relevant for secondary education financing while uncovering the strengths, weaknesses, opportunities and threats for enhancing effective sustainable mechanisms for improving participation and access to secondary education through education subsidies. The integration of the mixed research approach in this study further provided a trade-off between the breadth and depth

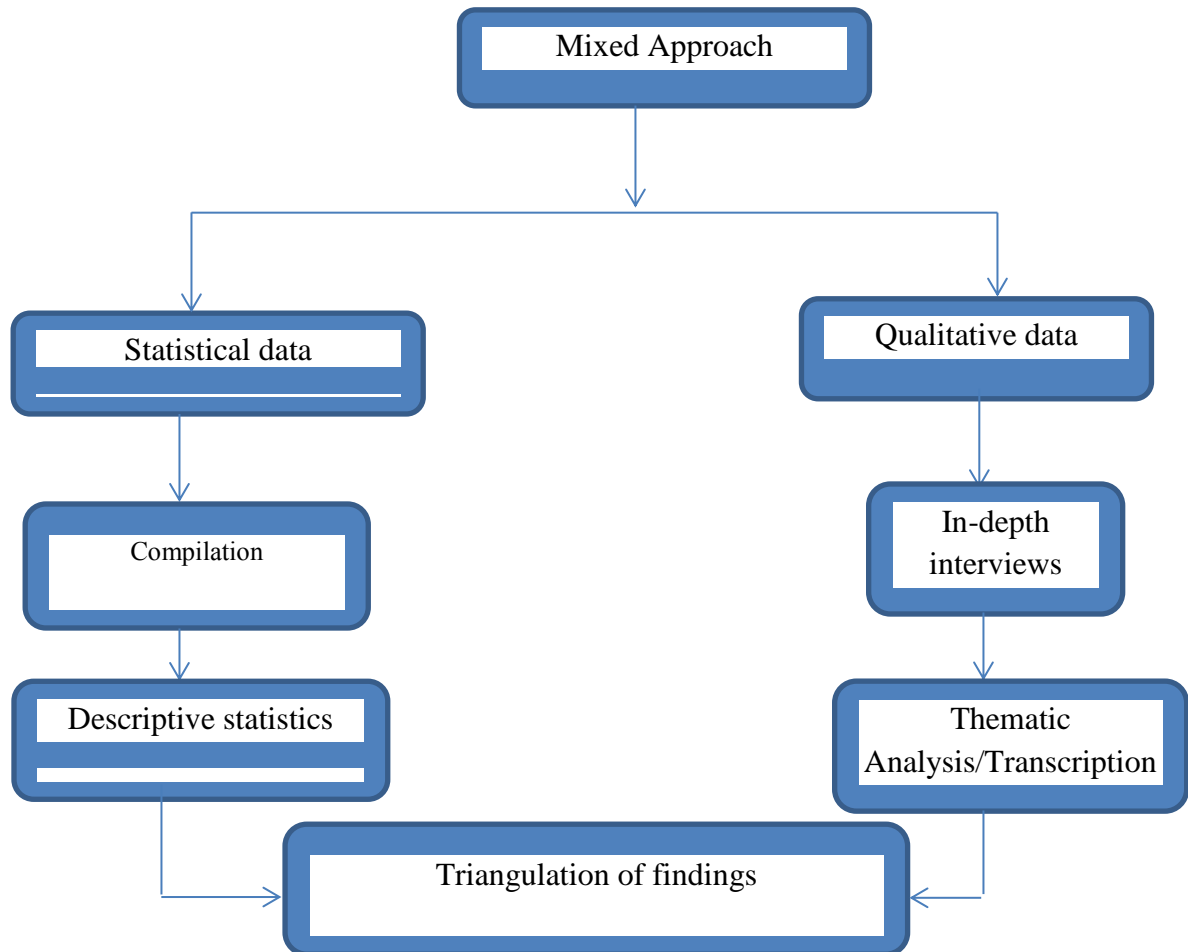
of the field data. Figure 4.1 illustrates the topology of the research approach adopted in relation to the primary research question across the methods used in the research.



**Figure 4.1: Concurrent Triangulation Design**

Source: Author's Construction

Figure 4.2 also gives a detailed graphical view of the logical foundation of the research approach adopted in the study in relation to the qualitative and quantitative paradigms.



**Figure 4.2: Topology of the survey approach**

Source: Author's Construction

### 4.3 Study Population: Unit of Analysis

Since there are different stakeholders in the process of managing public education financing at the secondary level, this study involved a multi-target population. Specifically, the study population included the secondary schools, the MOE, the GES and the parents of students at the secondary school level. In other words, there were more than one unit of

analysis. However, the units of analysis in relation to the GES Headquarters were limited to the Finance and Secondary Education Divisions.

The unit of analysis for the secondary schools was limited to the heads of the schools as well as the parents of the students.

Specifically, the following units of analysis were included in the study:

- i. Heads of schools
- ii. Parents
- iii. Management of GES, Finance and Secondary Education Divisions

These stakeholders were considered very relevant to the study since they are practitioners directly involved with the disbursement and management of the subsidy to schools and offices. Although the accountants also played a major role during the research, their role was limited to providing the relevant financial records and giving technical interpretations to the records.

#### **4.4 Sample and Sampling Design**

Since there are different target populations for the study, this study employed the quota sampling method in the selection of the participants to ensure that all the relevant stakeholders in secondary schools funds transfer and management were included. During the quota sampling, the population of the stakeholders was divided into mutually exclusive sub-groups using the role they play as far as subsidy is concerned.

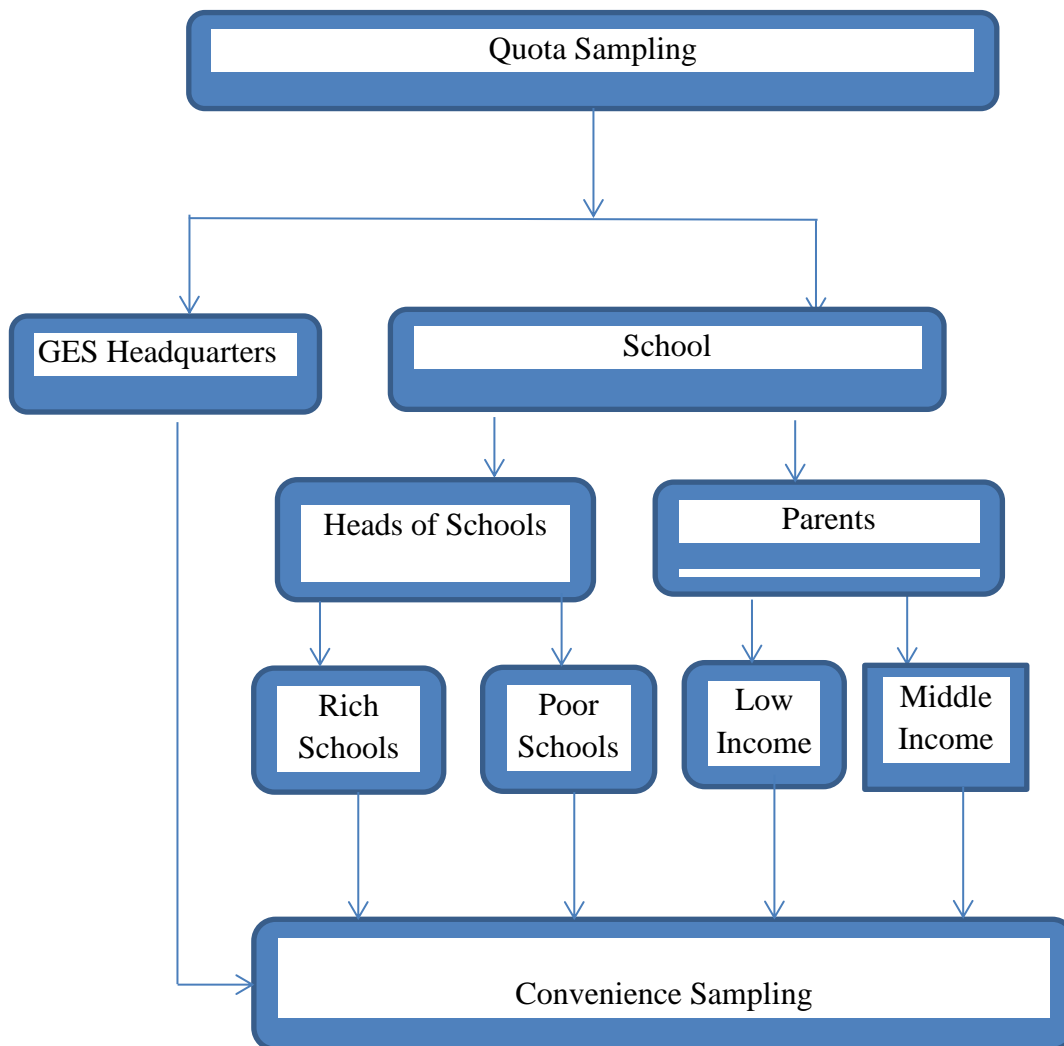
Generally, quota sampling is defined as a non-probability sampling in which units are selected into a sample on the basis of pre-specified characteristics so that the total sample has the same distribution of characteristics assumed to exist in the population being studied. According to Ashley (2014), the difficulty in quota sampling is that the researcher has to decide in advance, the specific characteristics on which to base the quota. In this study, the characteristic used was the role played in relation to secondary school education financing.

In quota sampling, strata must be mutually exclusive so that a subject can be assigned to only one stratum, and convenience sampling used to select subject from each stratum.

Specifically, the following chronological steps were employed in the quota sampling:

- i. The population of stakeholders was divided into exclusive sub-groups (role )
- ii. The number of stakeholders selected in each sub-group
- iii. Convenience sample used to select subjects from each stratum

Figure 4.3 shows the topology of the sampling design



**Figure 4.3: Topology of the sampling design**

Source: Author's Construction



In other words, after dividing the target population into mutually exclusive groups, the convenience sampling was used to select each of the stakeholders from each corresponding subgroup. Furthermore, since financing of secondary education is an economic concept, the selection of the parents also took into consideration the income status of the parents by categorising the parents into low and middle income groups.

The upper income groups were exempted because in most cases, it is common to find their wards in the most prestigious senior high schools. Similarly, in relation to the sampling of the schools, consideration was given to the economic condition of the place where the school is situated. Thus schools in both rich and poor communities were represented. Again since the unit of disbursement for the subsidy is enrolment in the school and the higher the enrolment the bigger the amount received the sampling method ensured that heads of schools were selected across the two streams to ensure representativeness.

The application of the quota sampling in this study allowed the researcher to observe perceptions, attitude and opinions in relation to the efficient disbursement and utilization of the subsidy. Also, the method was applied in this study because it was much quicker and easier to carry out since it does not require a sampling frame and the strict use of random sampling techniques. In other words, the application of the quota sampling allowed for the sampling of the subgroups that were of great interest to the study to help ensure that all the relevant stakeholders for enhancing sustainable secondary school education financing were included in the sample.

However, the quota sampling has the following weaknesses: The sample has not been chosen using random selection, which makes it impossible to determine the possible sampling error. Indeed, the selection of units included in the sample was based on ease of access and cost considerations, resulting in sampling bias. By ease of access, it means those who would be willing to grant interview readily and sincerely without any fear or suspicion with regard to my position in the GES. It is also impossible to make statistical inferences from the sample to the population. This could lead to problems of generalisation.

Limitations of the quota sample technique were off-set by the integration of the statistical analysis into the study. For example, with the statistical analysis of enrolment data, the study was somehow able to establish the extent to which secondary school subsidy has enhanced access and participation of students in the educational system.

A sample size of 14 key informants was considered for the study. This is in relation to Crouch's (2006) assertion that, in the case of qualitative research, thus, for interview-based research, small samples of less than 20, enhances the validity of fine-grained and in-depth inquiry.

Purposive sampling was further used to select the units from each quota. This was considered appropriate for the sampling of the key informants because it is based on the assumption that the research wants to discover, understand and gain insights into the management and equity nature of secondary education subsidy and must therefore select a sample from which the most can be learned. Gay (1992) argues that the logic and power of purposive sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn about issues of central importance to the purpose of the research. Table 4.1 shows the distribution of the sample size across the units of analysis.

**Table 4.1: Sample size across units of analysis**

<b>Sample</b>	<b>Sample Size</b>
Heads of School	3
Parents	8
Management of GES, Finance and Secondary Education Divisions	3

Source: Researcher Construction, 2015

Thus, eight parents in all were interviewed while from the management of GES headquarters, three key informants were interviewed including two directors from Secondary Education Division and one director from the accounts section. For the three heads of schools who participated in the interviews, one was a leader of the Conference of Heads of Assisted Secondary Schools (CHASS), an experienced and seasoned head of school.

In order to validate the findings of the leader of CHASS to ensure that his position does not influence the findings, relevant documents were demanded from him. Beside this, two other Heads of Schools (HOSs) who do not hold any position in the management of the association were also sampled as indicated. The parents were basically selected to respond to the management and affordability of secondary education financing.

In relation to management, although parents might not have much information about the subsidy, HOSs involvement of the parents in the management of the subsidy as part of enhancing transparency was examined from the perspective of the parents. With regard to affordability, the views of the parents on their ability to pay school fees with or without the subsidy were also assessed. Since the ability to pay school fees could be influenced by the economic status of the parents, the income levels of the parents were considered in the sampling process.

According to the Ghana Living Standard Survey (2008), average annual household income in Ghana is about GH¢1,217 whilst the average per capita income is almost GH¢400. In terms of the quintile groups, the highest quintile has an average per capita expenditure of about GH¢1,261 per person per annum. This is nine and half times higher than the per capita expenditure of households in the lowest quintile (GH¢132) and about two times more than the national average of GH¢644. The HOSs were very instrumental in determining the income levels of parents. Four out of the eight parents, were in the low income group while the other four were in the middle income group.

## 4.5 Instrumentation

In relation to the objectives of the study and to ensure that the relevant data is adequately collected for the study, the instrumentation section of the chapter is structured into two phases. Phase one (1) focuses on the relevant qualitative data collection methods for the examination of the following research sub-questions:

- What are the main causes of delays in the release of the subsidy?
- How adequate are the control mechanisms guiding the request for and management of the subsidy?
- To what extent do heads of schools adhere to the control mechanisms for the management of the subsidy?
- What is the contribution of the subsidy to the running costs of schools?
- How helpful is the subsidy as a mechanism for improving access and participation in secondary education?

Phase two (2) on the other hand focuses on reviewing the relevant secondary data to statistically examine whether or not the policy on the subsidy is helping to improve equitable access and participation in secondary schools in general.

Since there could be other extraneous variables which could influence access and participation in secondary education, the study isolated any relevant factor during the period of data selection for the analysis which could have implications for access and participation. The impact of the subsidy is measured by the enrolment data presented in Chapter Two. The major secondary data obtained in this regard included:

- i. Enrolment data
- ii. Expenditure of the schools
- iii. Dates of releases and transfer of the subsidy

### 4.5.1 Qualitative techniques

Unstructured interviews are a data collection method that is usually conducted face to face between the interviewer and the participants allowing the researcher to control the process,

and allowing freedom for respondents to express their thoughts (O'Leary, 2004). In this study, the interview guide was designed using open-ended items to allow for further probing and discussions. In-depth interviews were used in this study based on Guion, Diehl, and McDonald (2013) assertion that qualitative interviews are excellent tools to use in planning and evaluating programmes because they use an open-ended, discovery-oriented method, which allows the interviewer to deeply explore the respondent's feelings and perspectives on a subject.

The key respondents who participated in the in-depth interviews included:

- i. The heads of senior high schools
- ii. Parents of students in the senior high schools
- iii. Management of GES, Finance and Secondary Education Divisions

Specifically, the application of the in-depth interviews allowed for the deeply exploration of how the participants feel about the subsidy and how it affects access to secondary education in Ghana.

The questions used in the interviews were unstructured (began with “why” or “how,”) which gave the respondents the freedom to answer the questions using their own words. This choice was based on Guion et al. (2013) assertion that interview questions need to be worded so that respondents expound on the topic, not just answer “yes” or “no.”

#### **4.5.2 Enrolment Data**

To be able to determine whether school subsidies have enhanced equitable access and participation in the educational system as well as the effect of the subsidy on the finances of secondary schools and the management capacity of the schools, some secondary data were obtained.

Specifically, the following secondary data were obtained: Enrolment figures submitted by HOSs for a specified subsidy (2009/2010 to 2013/2014 academic years), financial statements of the schools indicating the approved areas of expenditure, data on number of

trainings held for managers of the funds and the number of beneficiaries as well as budgetary and current GoG financial contribution into the education sector at the pre-tertiary level. Since three schools are too small as units of analysis to determine the broader trends of the impact of the subsidy on access and participation, further research in this area should consider a large population of schools to be able to determine the impact of the subsidy on participation in education.

#### 4.5.3 Reliability and Validity

Validity of data can generally be defined as whether the data is plausible, credible and reliable, and can be defended when challenged. These principles were addressed when designing the interview guide through the pre-testing of the instruments.

Four types of validity were addressed in this study:

**Descriptive Validity:** This is defined as the accuracy of the behaviours, events, objects, settings and others reported by the researcher. For example, that which is reported is actually what happened or what was heard or observed.

**Interpretive Validity:** This is defined as the accuracy of interpretation as to what happened in the minds of subjects and the extent to which the researcher understands exactly the opinions, thinking, feelings, intentions and experiences of subjects.

**Theoretical Validity:** This is defined as the extent to which the theoretical explanations developed are congruent with the data and are reliable and can be defended.

**Construct validity:** The extent to which a test measures what it is purported to be measuring. To ensure the validity of the instruments, the interview guide was given to the supervisor for scrutiny, since validity is determined by expert judgment.

Apart from this, the instrument was pre-tested in determining how reliable it was for the data collection in the main survey.

Pretesting of the instruments helped to identify potential challenges to be encountered during the main study. Few revisions including the reframing of the items, identifying

repetitive items, ambiguous items as well as ensuring that the key issues to be investigated were included in the guide.

In relation to the reliability of the EMIS and other secondary data used for analysis, an evaluation process was undertaken of which the following factors were considered:

- i. The data collector: The process of data collection for the EMIS is the responsibility of GES and MOE; which are credible institutions.
- ii. How the data was collected: The first stage to this process involved the development of a census questionnaire. The whole process of data collection at pre-tertiary level education has a number of checks and balances in order to ensure that data are reliable and valid. The head teacher of each school completes three census questionnaires. The first of the questionnaire remains at the school. The second questionnaire is forwarded directly to the MOE in Accra where data is checked, collated and analysed. The third questionnaire is forwarded to the district offices where it is also checked and passed onto the regional office for further checks. After undertaking these further checks, the questionnaire is forwarded onto the MOE in Accra.
- iii. The type of data collected: The EMIS collects data on the following:
  - a. Number of schools
  - b. Number of school building (i.e. some schools are sharing the same facilities)
  - c. Number of classes per school
  - d. Enrolment by sex and grade
  - e. Teachers by sex and rank
  - f. Non-teaching staff by rank and sex
  - g. Other facilities (gender friendly toilets and urinals , water and electricity)

#### **4.6 Procedure for Data Collection**

Prior appointments with the key informants were secured. At the meeting with each respondent, the purpose of the study was explained, and all questions in this regard were explained. The responses to the interviews were tape-recorded with the permission of all the key informants and these were supported with notes taken by the researcher. Each interview lasted between 20-25 minutes. This was necessary in eliminating the boredom often associated with long interviews including interviewer fatigue.

The interviews took place in a location selected by the respondents to ensure that the respondents were comfortable. In other words, all interviews were conducted in private rooms. In relation to the administration of the semi-structured questionnaire to the parents, the face to face interview for questionnaire administration was used. This was due to the fact that some of the parents were either entirely literate or partially literate hence the need to explain the items to them to enable them participate comprehensively in the study.

#### **4.7 Research Ethics**

Ethical matters or considerations are very important for every research adventure or study. This is most important for studies that involve the use of human subjects. Participants have a right to know what the research is about, how it will affect them, the risks and benefits of participation and the fact that they have the right to decline to participate if they choose to do so. Therefore, the policy of voluntary participation was strictly adhered to during the data collection phase for the purpose of ensuring the privacy as well as the safety of the participants.

This project has been given ethical approval by the Social Science/Arts Research Ethics Committee. As part of obtaining ethical clearance from the University, an ethical application form was obtained from the University of which the following relevant information were supplied by me. These included:



- i. The title of the thesis
- ii. The level of risk involved in the project
- iii. Risk-free zone nature of the country of study
- iv. Confidentiality and anonymity
- v. Informed consent and process involved in the recruitment of research participants
- vi. The involvement of minors

The Ethical Committee having satisfied with the fact that the risk level in the project is low approved the project and issued a letter to that effect. (See Appendix A)

Gaining access to research sites involved obtaining permission to sites and individuals as well as negotiating approval with these individuals at a site which could facilitate the collection of research data. An approval letter (Appendix B) was obtained from the Management of GES (The Director-General) to the key informants, which granted me the permission to conduct the study. Additionally, a form (Appendix F) containing detailed information about the study, was provided to each respondent.

Other significant ethical issues that were considered in this research process include respondents' consent and confidentiality. To secure the consent of the selected participants, the researcher relayed all important details of the study, including its aims and purpose. Specifically, the consent of the respondents was obtained by giving a written explanation of the study (Consent Form, Appendix C) for their perusal before signing. However, the illiterate parents received a verbal explanation of the study to ensure that they agreed before giving their consent.

On the other hand, confidentiality of the participants was assured by not disclosing their names or personal information in the research. Only relevant details that helped in answering the research questions were included. Specifically, to ensure the confidentiality of the participants who gave written consent, codes were used on the form instead of their names. The specific locations of the participants were also not reported as this could lead to easy identification of the people who took part in the study. In addition, only codes were

written on interview transcripts. Further, the respondents were told that they could decline to participate or withdraw from the study at any time without the need to offer any explanation.

Thus only participants who were willing to participate in the study, after being fully informed of the aim of the study and methodology, were included in the target sample of the study. Participants were also asked not to mention their names during the interview so as to be anonymous.

One of the major ethical issues addressed was my position as the Acting Financial Controller of the Ghana Education Service. In other words, I occupy a very influential position in the Service. Hence care was taken in identifying and nullifying any actual or perceived issues where power between me and participants could be abused. This was achieved by explaining to the participants that the purpose of the research was purely academic. However, considering the diversity of data needed for this study, it would have been extremely difficult although not impossible to have access to all the relevant data. But my position made accessibility to the relevant data very easy.

In summary, the key relevant ethical issues considered in this study were that: there was voluntary participation as respondents were made to understand the purpose and procedures as well as potential benefits of the study. The privacy of respondents was greatly respected by not disclosing their names. Similarly, respondents had the right to withdraw at any stage or not to respond to particular items.

#### **4.8 Data Analysis**

The results of both the qualitative and statistical data were interpreted concurrently to determine whether there was agreement in the data collected through each approach. However, the qualitative and statistical strands of data were analysed independently.

Thematic analysis was employed for the qualitative data gathered from the interviews while descriptive statistical analysis of the statistical data (enrolment data) was done.

Specifically, in relation to the thematic analysis, both written and recorded materials were immediately transcribed. The actual analysis began with reading through the transcribed responses and listening to the audio records in order to have a good grasp of all the data. The transcriptions were very detailed to capture features of talk such as emphasis, speed, tone of voice, timing and pauses since these elements can be crucial for interpreting data. The key ideas and emerging themes were identified from all the groups. These themes were then pooled together and integrated into a common one. Thereafter, there was a generation of concepts for ease of organising the presentation of the study findings.

Qualitative analysis involved the categorisation of data from interviews and field notes into common themes. Specifically, the following steps were taken in analysing the qualitative data: I read through the interview responses and looked for patterns or themes among the participants, where a variety of themes were found, I tried to group them in any meaningful way, such as type of participant. I also identified the responses that seem to have been emphasised, as opposed to those that were answered in only a few words and then checked whether or not there were deviations from the patterns and common themes that emerged; and interpreted the data by attaching significance to the themes and patterns observed.

In relation to the statistical data, descriptive statistical analysis was employed using percentages and frequencies. Trend analysis was further used to show the graphical distribution of enrolment data.

**Table 4.2: Data collected across research questions**

Research Questions	Data Collected	Data Analysis Technique
1. Management of the subsidy	<ul style="list-style-type: none"> <li>▪ Interview Data</li> <li>▪ Enrolment Data</li> <li>▪ EMIS Data</li> <li>▪ Expenditure of the Schools</li> <li>▪ Dates of releases and Transfer of the subsidy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thematic Analysis</li> <li>▪ Descriptive statistical analysis (frequency and percentages)</li> </ul>
2. Equity	<ul style="list-style-type: none"> <li>▪ Interview data</li> <li>▪ Data of students schools fees defaulters</li> <li>▪ Fees covered by the subsidy</li> <li>▪ Occupation of parents</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thematic Analysis</li> <li>▪ Descriptive Statistical Analysis</li> </ul>

Source: Authors' Construction 2015

## 4.9 Study Area

This section provides a background of the schools that participated in the study.

### 4.9.1 School One

Established in 1931, School One operates as a non-denominational day and boarding boys' school in the Greater Accra Region. Current total student population of the school is 1,978. This is made up of 1,210 boarding students and 768 day students<sup>8</sup>. School one is one of the most preferred schools for placement from junior high school to senior high school. It is always oversubscribed in the sense that every year more students select the school for placement than the vacancies declared by the school. There are 151 members of staff in the school, made up of 98 teaching and 53 non-teaching staff.

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<sup>8</sup> Footnote: Day student is a student who does not reside on campus and therefore does not use the boarding facilities

School One is endowed with a lot of facilities which include: an assembly hall, a basketball court, a boarding house, a bookshop, a cafeteria, a clinic, a Guidance and counselling centre, a dining hall, a football park, a Gymnasium, an interact square, an information and communications technology centre, a library, a Physics Laboratory, a Chemistry Laboratory, a Biology Laboratory, a science resource centre, Staff bungalows, a lecture theatre, an administration block, a Business classroom block, a General Arts classroom block, a General Science classroom block, a Visual Arts classroom block and a volleyball court.

The school runs courses in Business, General Science, General Arts, General Agricultural and Visual Arts leading to the award of a West African Senior High School Certificate. It admits students with aggregates six (6) to nine (9) for science and up to aggregate 12 for all other course options.

#### **4.9.2 School Two**

School Two was established in September 1973 by a faith based organisation. The school is a mixed sex school and it is located in Kumasi in the Ashanti Region. The school has a student population of about 3,300 out of which about 1,200 are day students and the remaining 2,100 are boarding students. School two is always oversubscribed in the sense that it is also one of the most preferred schools for placement to SHS (GES 2015). The staff strength of School Two is made up of 117 teaching and 128 non-teachings staff.

School Two is well endowed in terms of infrastructure with the following facilities; six modern blocks for dormitories (five for boys and one for girls), a very big multi-purpose assembly hall, five 12-unit Classroom Blocks, one Library Block, six modern equipped laboratories, two well-equipped computer laboratories and two recreation grounds. The school offers course options including; General Science, General Arts, Business, Home Economics, and Agricultural Science but does not offer Technical option. Students who gain admission to School Two have aggregates between 10 and 12 for science and between 15 and 18 for all the other courses in the BECE.

### 4.9.3 School Three

School Three was established in 1996 and is a Secondary Technical School located in the Greater Accra region. Incidentally it is located in a poor fishing community in the country. The school has a student population of about 890 made up of 340 day students and 550 boarding students. According to the head of the school, this school is always undersubscribed. For example in the 2013/2014 academic year the school declared a vacancy of 400, but 360 students were placed from the Computerised Schools Selection and Placement Centre out of which a little over 60 reported. School Three has staff strength of 115 out of which 78 are teaching staff and 47 are non-teaching staff.

In terms of infrastructure, school three is not as well-endowed as schools one and two. There are only two modern twelve unit classroom blocks. All other structures were inherited from a defunct factory in the area. The school has facilities to house only nine teachers on the compound. It has only a small science laboratory.

The school offers course options including; General Arts, Business, Vocational, Technical and Agricultural Science but does not offer Science option. On the average students who gain admission to School Three have aggregates between 20 and 25 in the BECE.

**Table 4.3: Summary characteristics of the schools**

Variables	School One	School Two	School Three
Year of establishment	1931	1973	1996
Location	Urban	Urban	Rural
Student Population	1978	3300	890
No. of Teaching Staff	98	117	78
No. of Non-Teaching Staff	53	128	47
Facilities	Well-endowed	Well-Endowed	Less-Endowed
Subscription for placement	Oversubscribed	Oversubscribed	Undersubscribed

Source: Author's Construction

## **CHAPTER FIVE: ROLE AND MANAGEMENT OF THE SUBSIDY FOR SENIOR HIGH SCHOOLS**

### **5.1 Introduction**

This section elaborates on the argument for the role of the subsidy in increasing participation and access, and discusses how the subsidy has been administered, including the challenges. The chapter also presents the statistical findings of the secondary data obtained from EMIS and GES in relation to enrolment and subsidy.

### **5.2 The Argument for Subsidies in Increasing Participation and Access**

According to UNESCO (2009), access to secondary education in Ghana is seen as both a fundamental human right and an essential element in the national development strategy to promote growth and ensure that young people are prepared for a productive adult life. Ghana's aspiration to become a middle income country by 2020 rests in large part on her ability to improve educational access to the point where its highly educated population can provide the human resource base for accelerated development (Akyeampong et al., 2007).

School fees remain a major barrier to access, especially for students from certain parts of the country. There are several charges to education cost. These include fees such as; registration, technology, examination, academic facility user, medical services. This according to Atuahene and Owusu-Ansah (2013) make it very expensive for individuals from low socioeconomic status to afford the cost of participation. In this regard, Glennerster, Kremer, Mbiti and Takavarasha (2011) argue that school subsidies and scholarships become important factors to ease the financial burden of individuals and thereby increase access to secondary schools.

In Ghana, every student attending a public SHS is eligible to benefit from the subsidy. Therefore, it is important that government institute very equitable, efficient and adequate

measures to ensure that the subsidy sufficiently meet the educational needs of students, especially those from poorer households.

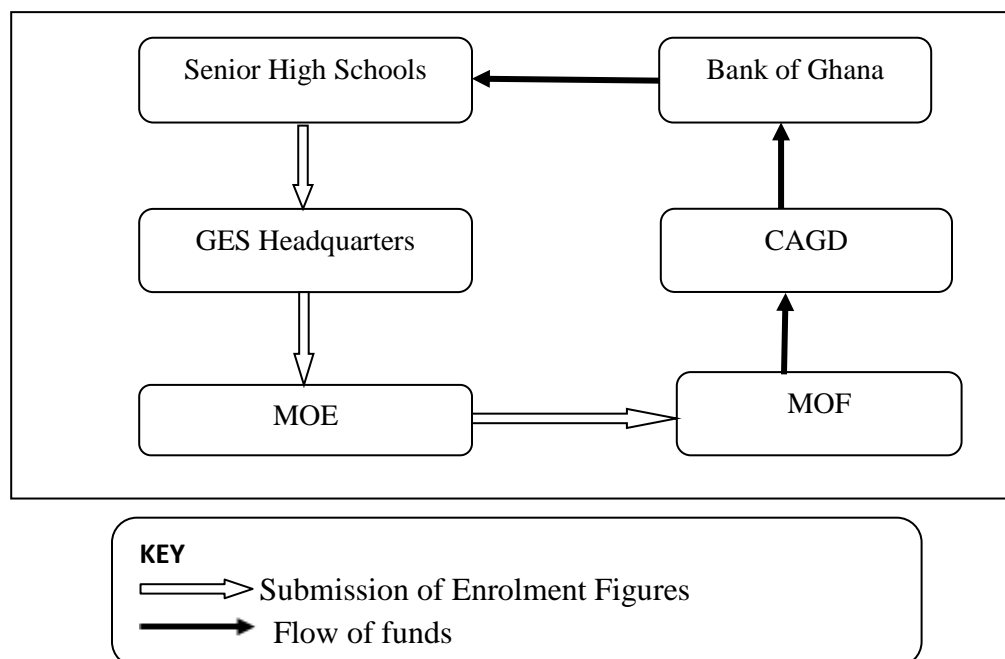
### **5.2.1 Structure and Management of the Subsidy**

Ghana operates a centrally controlled fund management system. The GoG finances and manages the education system through the Ministry of Education (MOE) and its departments and agencies. While the MOE formulates educational policies and oversees budget allocation, its departments and agencies are responsible for implementation. The GES is responsible for the implementation of pre-tertiary education policies. Its decentralised functions mandate directorates at the regional and district levels to implement financing policies.

The Controller and Accountant General's Department (CAGD) oversees the disbursement of all government funds. These include the consolidated and other special funds such as the HIPC Fund. The Capitation Grant and SHS subsidy used to be sponsored from the HIPC fund.

The transfer of the subsidy is depicted in Figure 5.1





**Figure 5.1: Flow of funds for subsidy in Ghana**

Source: Author's Construction

The basis for the disbursement of the funds is the enrolment figure submitted from the schools.

The process involved in the release of the subsidy include the submission of the signed list to the headquarters, GES writes to the MOF through the MOE to request for funds for the payment. The MOF then issues a release letter advising CAG to effect the payment. A warrant is then issued to the GES by the CAG, copied to the Bank of Ghana. The Bank then issues a Bank Transfer Advice (BTA) for the transfer of the amount to MOE account at the Bank of Ghana. Finally, GES instructs the Bank of Ghana to credit the accounts for the beneficiary schools as per the allocation list given them.

The amount of the subsidy has increased over time, as Table 5.1 demonstrates.

**Table 5.1: Subsidy per Student across Secondary and Technical**

<b>Students</b>	<b>2009/2010 GH¢</b>	<b>2010/2011 GH¢</b>	<b>2011/2012 GH¢</b>	<b>2012/2013 GH¢</b>
General Students	40.35	64.35	64.35	92.40
Technical Students	44.85	65.85	65.85	93.90

Source: Author's Calculation from GES Data

Table 5.1 above shows that the amount paid by government per student has increased since 2009. These amounts are spent on utility, postage, building and furniture maintenance, sports, sanitation, general stationery, first aid and culture.

### **5.2.2 Challenges with the Management of the Subsidy**

This section explores the main challenges associated with the administration of the subsidy. The section specifically focussed on the following; delays, mismanagement and refusal to authenticate the enrolment data submitted by schools to GES headquarters.

#### **Delays**

The GES applies through the MOE to the MOF to request for the release of funds for the payment of the subsidy to schools as explained in figure 5.1. For first term of the academic year, the subsidy is based on estimated enrolment figures using the immediate previous academic years' enrolment, while actual enrolment figures are used for the second and third terms.

According to Akyeampong (2011), the mechanism for delivery of subsidies to schools risks delays that could limit the intended impact on quality. Striking a balance between procedures to ensure accountability in the use of school subsidy and ensuring that schools access the funds without delay is a challenge. Similarly, the Ghana National Association of Teachers, GNAT (2014) also indicated that delays in payment of the subsidy, feeding and capitation grants to schools in Ghana is stalling effective running of schools in the country.

Table 5.2 presents the dates on which the subsidy was supposed to have been released against the actual dates it was released.

**Table 5.2: Timing of Releases of the Subsidy**

GOVERNMENT SUBSIDY - RELEASES				
ACADEMIC YEAR	TERM	EXPECTED DATE	DATE OF RELEASE	COMMENTS
2003/2004	1st	Sept. 2003	28/11/2003	Delayed
	2nd	Jan. 2004	18/12/2003	On-Time
	3rd	April. 2004	25/06/2004	Delayed
2004/2005	1st	Sept. 2004	01/05/2005	Deferred
	2nd	Jan. 2005	01/05/2005	On-Time
	3rd	April. 2005	08/07/2005	Delayed
2005/2006	1st	Sept. 2005	27/01/2006	Deferred
	2nd	Jan. 2006	22/04/2006	Delayed
	3rd	April. 2006	06/07/2006	Delayed
2006/2007	1st	Sept. 2006	01/01/2007	Deferred
	2nd	Jan. 2007	13/04/2007	Deferred
	3rd	April. 2007	03/07/2007	Delayed
2007/2008	1 <sup>st</sup>	Sept. 2007	03/12/2007	Delayed
	2 <sup>nd</sup>	Jan. 2008	17/03/2008	Delayed
	3 <sup>rd</sup>	April. 2008	24/04/2008	On-Time
2008/2009	1 <sup>st</sup>	Sept. 2008	18/04/2009	Deferred
	2 <sup>nd</sup>	Jan. 2009	18/04/2009	Delayed
	3 <sup>rd</sup>	April. 2009	22/06/2009	Delayed
2009/2010	1 <sup>st</sup>	Sept. 2009	22/01/2010	Deferred
	2 <sup>nd</sup>	Jan. 2010	03/05/2010	Deferred
	3 <sup>rd</sup>	April. 2010	03/05/2010	Delayed
2010/2011	1 <sup>st</sup>	Sept. 2010	19/11/2010	Delayed
	2 <sup>nd</sup>	Jan. 2011	13/05/2011	Deferred
	3 <sup>rd</sup>	April. 2011	13/05/2011	On-Time
2011/2012	1 <sup>st</sup>	Sept. 2011	05/02/2011	Deferred
	2 <sup>nd</sup>	Jan. 2012	17/07/2012	Deferred
	3 <sup>rd</sup>	April. 2012	18/10/2012	Deferred
2012/2013	1 <sup>st</sup>	Sept. 2012	08/11/2012	Delayed
	2 <sup>nd</sup>	Jan. 2013	19/04/2013	Delayed
	3 <sup>rd</sup>	April. 2013	15/07/2013	Delayed

DEFERRED: Was not paid in that term but postponed

DELAYED: Paid in the same term but not on time

Source: Author's Calculation from GES, 2014

It is noted that for each academic year, there have been at least two terms in which the subsidy was delayed, thus paid in the same term but not on time. For the 30 terms under review in Table 5.2, there were only four terms in which the subsidy was paid on time. There were also quite a number of terms (11 out of the 30) when the payments were deferred, thus, the subsidy was not paid at all in those particular terms and payments had to

be done in subsequent terms. This implies that the implementation of planned activities could be affected due to the unavailability of funds. This also meant that the funds might not have been used for the intended purpose since they were not available at the time needed.

A review of the literature presents the following key factors that contribute significantly to the delays in the transfers of the subsidy for secondary education.

- **Late Submission of Enrolment Data:** Projected enrolment figures are used for the computation of the subsidy in each school at the beginning of the academic year. This estimate is based on the previous academic year's enrolment and it is used to transfer subsidy funds to the schools at the beginning of the first term. Though accountability is ensured through this process, Akyeampong (2011) further notes that the late submission of enrolment data causes delays in the release of grants. This is because, while some heads of schools delay in the submission of their enrolment figures, the arrangement is such that all schools have to submit their enrolment figures before they are used to request for the second and third terms payments. However it appears there is no penalty for those who submit their data late and hence no deterrence for heads to submit late.
- **Lack of Coordination:** The lack of coordination between the various units (BOG, MOF, CAGD, MOE) that must work to ensure that the subsidy gets to the schools is one of the major factors that often delays payment of the subsidy (*Daily Guide*, January 17, 2014).
- **Lack of Funds:** Too many competing demands on resources contribute to the delay in fund disbursement to schools (Azeem, King, Abbey, Boateng & Mevuta, 2003).

The MOE (2014) further supported the arguments of Azeem et al. (2003) that for the past three years, funds have never gone to the districts from the government sources. This is due to government's inability to release the funds, thereby accumulating the arrears to be paid by government for the performance of their goods and services activities. This caused many of the districts to depend solely on

donor and other sources of funding which could only last for the short term and may not be the optimal solution in the long term.

- **Formula for Disbursement:** In Ghana, the disbursement of The Ghana Education Trust Fund (GETFund) is based on a formula that must be approved by Parliament. In the instance where the subsidy is paid from the GETFund (as it used to be) a delay in getting the proposed formula approved leads to delayed disbursement (Azeem et al., 2003). GETFund is supported with contributions equivalent to: “two and one half percent or such percentage not being less than two and one half percent of the Value Added Tax rate, as Parliament may determine out of the prevailing rate of the Value Added Tax”
- **Government’s fiscal and monetary policy:** The Government's fiscal and monetary policy concerns sometimes also lead to delays as Government deliberately decides to control money supply by withholding disbursements (Azeem, et. al., 2003).
- **Lack of record keeping:** According to the MOF (2008), District Education Offices (DEOs) fail to keep records of the distribution of funds. Record keeping is especially poor for the transfer of funds to schools. This lack of data about the distribution of funds to schools raises serious questions about accountability at the DEO level, with funds actually received by schools falling both short and in excess allocations. The loss of control of records has consequences. Relevant and accurate public records are essential to preserving the rule of law and demonstrating fairness, equality, and consistency in the transfer of funds (World Bank, 2000). In current arguments, Amanchukwu and Ololube (2015) studied excellent school records behaviour for effective management of educational systems in Nigeria and concluded that poor records management results in difficulties in administering, development and supervision of educational systems. According to them, poor school records management are responsible for a number of management and policy implementation problems in schools.

Table 5.3 shows a summary topology of the causes of delays in the release of the subsidy and their corresponding explanations.

**Table 5.3: Typology of types of delays in the releases of subsidy and their causes**

<b>Causes of Delays</b>	<b>Underlying Reasons for the Delay</b>
Submission of enrolment data	While some heads of schools delay in the submission of their enrolment, the system waits for all data to be collected.
Coordination	Lack of proper coordination between the various units (BOG, MOF, CAGD, MOE) thereby somehow slowing the process
Funds	There are always arrears to be paid by government to the heads of schools due to government inability to release the funds.
Formula for disbursement	Approval of the formula for the disbursement of funds to schools by parliament usually takes a longer time.

Source: Author's Construction

### **Mismanagement**

Afful-Broni (2004), and Oppong (2011), report of several cases of financial misappropriations among educational administrators and financial staff of the GES. These are confirmed by reports by the Auditor General (2013) and the Internal Audit Unit of the GES (2013) which reveal that large sums of school funds are misappropriated. The misappropriations occur as a result of breaches of rules and procedures on cash control and the absence of effective supervision in the institutions.

Reporting the performance of the management of secondary education subsidy is critical to understanding the impact of the subsidy in enhancing equitable access and participation in secondary education. Fundamentally, management of school subsidy by school authorities is strongly influenced by the undue delays in the releases of the subsidy.

### Authenticity of Enrolment Data Submitted by Schools

As part of determining the authenticity of the enrolment data provided by the heads of the schools for the subsidy, the variation across the enrolment data submitted for subsidy against that captured through the EMIS census is analysed.

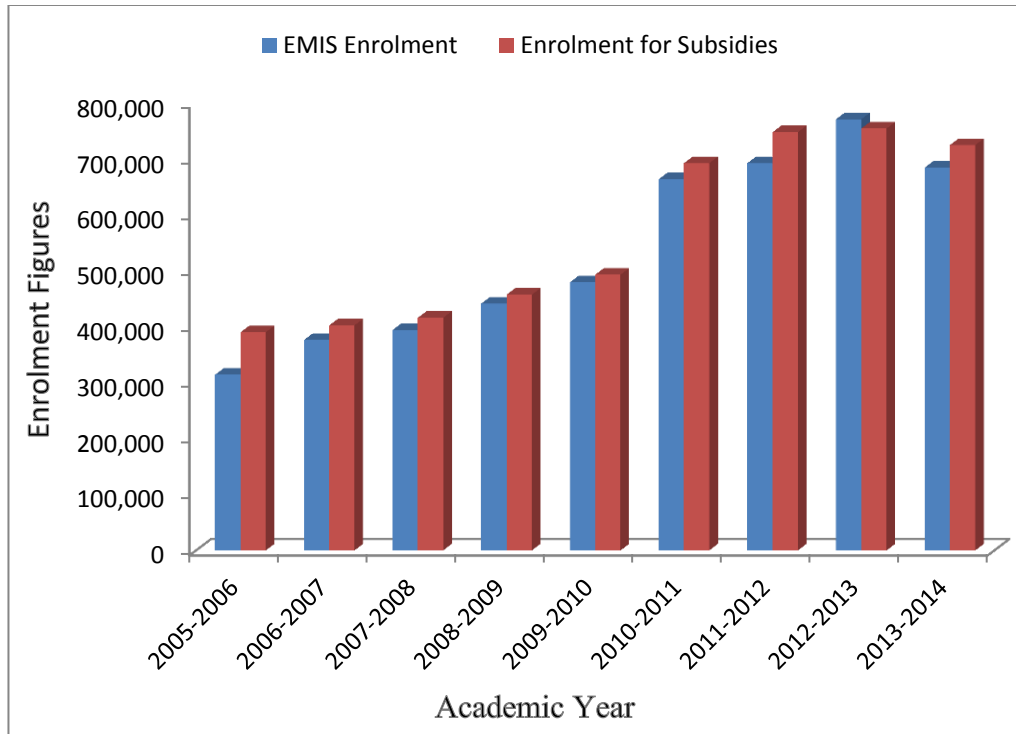
Table 5.3 shows the percentage increases over the years for both the EMIS enrolment figures and the enrolment figures for the subsidy as well as the percentage change between the two of them.

**Table 5.4: Variance between EMIS Enrolment Data and Enrolment for the Subsidy**

<b>ACADEMIC YEAR</b>	<b>EMIS ENROLMENT</b>	<b>% INCREASE</b>	<b>ENROLMENT FOR SUBSIDY</b>	<b>% INCREASE</b>	<b>%CHANGE EMIS \$ SUB. ENR.</b>
2005-2006	314,159		390,015		24.15
2006-2007	376,049	19.70	402,278	3.14	6.97
2007-2008	393,995	4.77	415,990	3.41	5.58
2008-2009	441,324	12.01	457,214	9.91	3.60
2009-2010	479,296	8.60	493,000	7.83	2.86
2010-2011	663,500	38.43	692,396	40.45	4.36
2011-2012	692,328	4.34	747,788	8.00	8.01
2012-2013	770,925	11.35	754,349	0.88	-2.15
2013-2014	684,388	-11.23	724,893	-3.90	5.92

Source: Author's Calculation from EMIS and GES

Figure 5.2 also shows graphical view of the variance between EMIS enrolment data and enrolment for subsidy from 2005/2006 to 2013/2014 academic years.



**Figure 5.2: Variance between EMIS enrolment data and enrolment for subsidy**

Source: Author's Calculation from EMIS and GES

An assessment of the results in both Table 5.4 and Figure 5.2 shows that both sets of data (EMIS and Subsidy) depict the same trend. They all increase over the years from 2005/2006 academic year to 2012/2013 academic year and drop in 2013/2014 academic year with the highest percentage increase for both of them in the 2010/2011 academic year.<sup>9</sup> It can be observed from Figure 5.2 that, with the exception of the 2012/2013 academic year, the EMIS enrolment data was lower than the enrolment data submitted for the subsidy in all the years. These differences raise concerns about the authenticity of both data sets.

To further investigate the disparities between the enrolment figures submitted for EMIS and that for the subsidy, the two dataset were analysed for selected schools over a five year

<sup>9</sup> The significant increase in both sets of data in 2010/2011 was due to the fact that there were four cohorts when the SHS was made four years instead of three years. The drop in 2013/2014 can likewise be attributed to the fact there were three cohorts when the number of years for SHS was reduced from four years back to three years.



period. Specifically, in the selection process, the schools were stratified across the ten regions. In this case, the schools were grouped into homogenous sub-groups (regions) before sampling where every school was assigned to only one stratum (region). Sampling in each region involved systematic random sampling technique with specific sampling interval for each region. The number of schools sampled was determined using the Slovin Formula (Umar, 2000), stated below:

$$n = \frac{N}{1 + N(e)^2}$$

Where

$n$  = number of SHS selected

$N$  = total number of SHS

$e$  =significance level in percentage of error that was allowed is five percent

Therefore, with a total of 558 SHSs in the country, inserting this into the formula gives:

$$n = \frac{558}{1 + 558(0.05)^2}$$

$$n = 233$$

The calculated sample size was further distributed proportionally across the ten regions using proportional allocation formula by Neyman (1964) stated below:

$$nh = \left( \frac{Nh}{N} \right) n$$

Where

$nh$  =stratum sample size for a particular region

$Nh$  = population size for a particular region

$N$  = Total population across the ten regions

$n$  = total sample size for the study

For example the calculation of the number of schools selected from the 102 schools in the Ashanti region is shown as follows

$$nh = \left( \frac{102}{558} \right) 233$$

$$nh = 42$$

**Table 5.5: Population and Sample size across Regions**

Regions	Number of Schools	Selected Schools
Greater Accra	40	17
Brong Ahafo	66	28
Ashanti	102	42
Eastern	81	34
Central	55	23
Northern	40	17
Volta	79	33
Western	47	20
Upper East	23	9
Upper West	25	10
<b>Total</b>	<b>558</b>	<b>233</b>

Source: Author's Calculation, 2015

Since the assumption from Table 5.4 and Figure 5.2 is that the enrolment figures for subsidy are normally higher than the enrolment figures submitted to EMIS, the enrolment figures submitted to the EMIS were subtracted from the enrolment figures submitted for the subsidy.

Table 5.6 shows the details of the results. Higher subsidy enrolment means that the enrolment figure submitted for subsidy was more than the figure submitted to EMIS. At the same time, lower subsidy enrolment means that the enrolment figure for subsidy was less than the one presented to EMIS.

**Table 5.6: Difference in EMIS Enrolment and Enrolment for Subsidy**

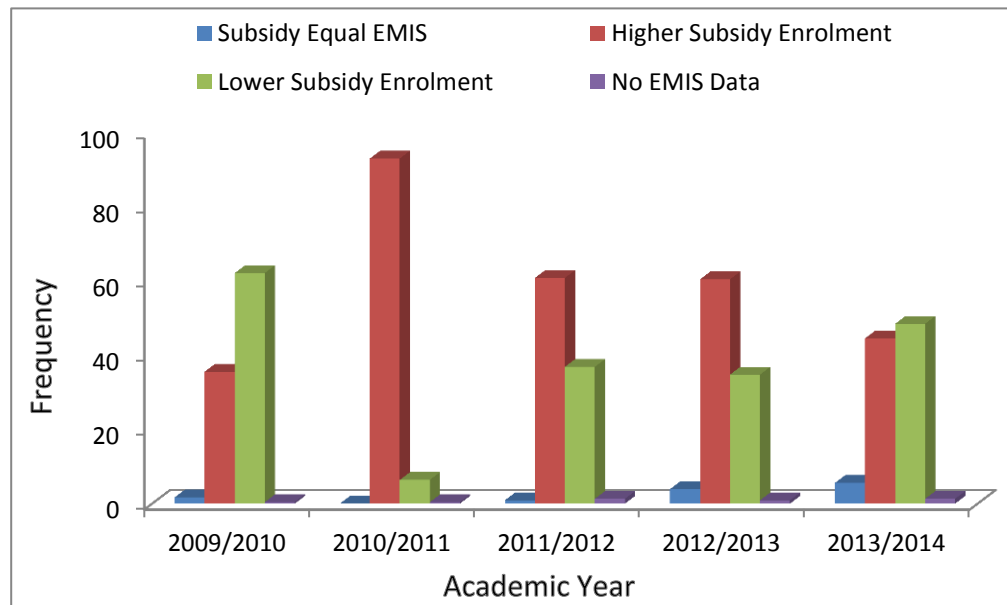
Variable	2009/2010		2010/2011		2011/2012		2012/2013		2013/2014	
	f	%	f	%	f	%	f	%	f	%
Subsidy Equal EMIS	4	1.7	0	0.0	2	0.9	9	3.9	14	6.0
Higher Subsidy Enrolment	83	35.6	217	93.1	142	60.9	141	60.5	103	44.2
Lower Subsidy Enrolment	145	62.2	15	6.4	86	36.9	81	34.8	113	48.5
No EMIS Data	1	0.4	1	0.4	3	1.3	2	0.9	3	1.3
<b>Total</b>	<b>233</b>	<b>100</b>	<b>233</b>	<b>100</b>	<b>233</b>	<b>100</b>	<b>233</b>	<b>100</b>	<b>233</b>	<b>100</b>

Source: Author's Calculation from EMIS and GES

An assessment of the results in Table 5.6 shows that for the 233 selected schools, there are more cases where the enrolment figures submitted for subsidy were more than those submitted for EMIS. Apart from 2009/2010 and 2013/2014 academic years, at least 60% of the schools selected submitted higher enrolment figures for the subsidy as compared to those submitted to EMIS. As many as 93% of schools submitted higher enrolment figures for the subsidy as compared to those submitted to EMIS in 2010/2011 academic year. Furthermore, in 2010/2011, there were variations between enrolment figures submitted to EMIS and that submitted for the subsidy in all the selected schools.

The vast variations noted between the EMIS enrolment and that of the enrolment for subsidy brings to question which of these two data sets is accurate. It is also important to note that whilst there was no case of non-submission of enrolment figures for subsidy by any of the schools in all the years, some of the schools did not participate in the EMIS census. This raises the issue of the relevance and commitment heads of schools attached to the participation in the EMIS census.

Figure 5.3 further illustrates the graphical view on the EMIS enrolment figures and that of enrolment for subsidy.



**Figure 5.3: Enrolment data for subsidies and EMIS**

Source: Author's Calculation from EMIS and GES

Figure 5.3 shows that for each of the five years studied, there were few cases where enrolment figures for the subsidy were consistent with that for EMIS enrolment. This trend seemed to be consistent with observations in Figure 5.2 where aggregated enrolment figures for subsidy were higher than that for EMIS.

The magnitude of the disparities between the EMIS enrolment and the enrolment figures for subsidy was considered during the analysis. Table 5.7 shows the results of the magnitudes of the variation:

**Table 5.7: Magnitude of difference in EMIS enrolment and enrolment for subsidy**

<b>Magnitude of Variation</b>	<b>Description</b>	<b>2009/2010</b>	<b>2010/2011</b>	<b>2011/2012</b>	<b>2012/2013</b>	<b>2013/2014</b>
-2000 and Above	Lower subsidy enrolment	0	0	0	0	0
-1000 to -1999		0	2	1	1	2
-100 to -999		63	5	23	27	31
-1 to -99		82	8	62	53	80
0	EMIS = Subsidy	4	0	2	9	14
1 to 99	Higher subsidy enrolment	59	19	80	91	75
100 to 999		23	194	60	49	28
1000 to 1999		1	3	2	1	0
2000 and Above		0	1	0	0	0
Nil	No EMIS Data	1	1	3	2	3
<b>Total</b>		<b>233</b>	<b>233</b>	<b>233</b>	<b>233</b>	<b>233</b>

Source: Author's Calculation from EMIS and GES

The analysis involved magnitudes of the variations for the higher subsidy enrolment figures as well as the magnitude of the variation for the lower subsidy enrolment figures.

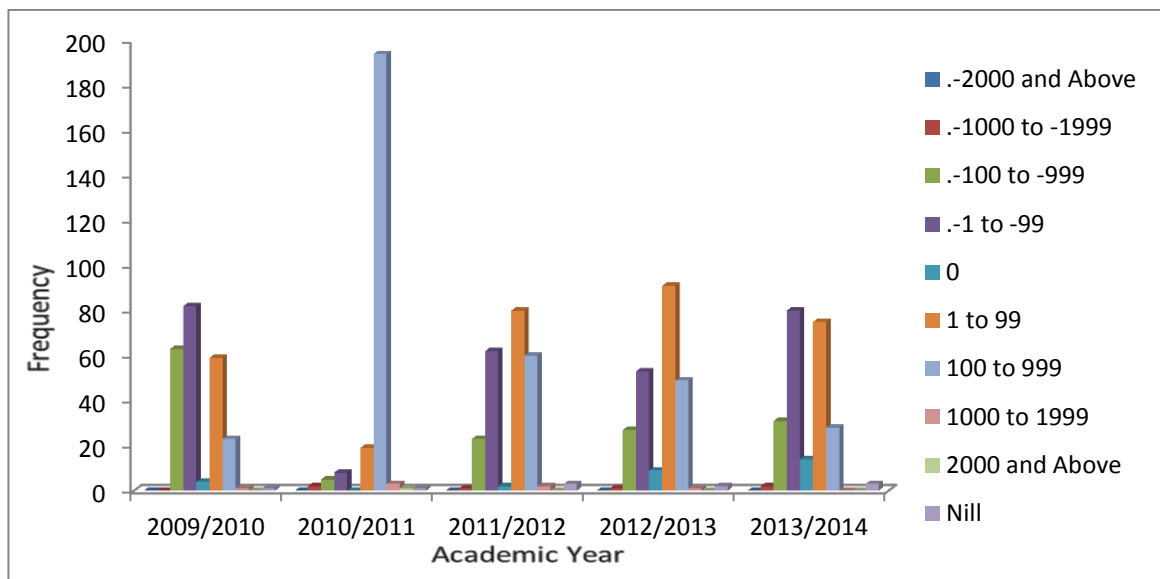
For all the years under consideration, the general trend is that over 20 schools submitted lesser enrolment figures for the subsidy with a difference of over 100 than they submitted to EMIS with the exception of 2010/2011. Furthermore over 20 schools submitted higher enrolment figures for subsidy with a difference of over 100 in all the years.

In 2009/2010 academic year, of the 145 schools with lower subsidy enrolment, 82 (56.6%) were in the range of -1 to -99. Thus more than half of the schools with lower subsidy enrolment had differences less than 100. On the other hand, of the 83 schools with higher subsidy enrolment, 59 (71.1%) had differences less than 100.

Of much concern is 2010/2011 where as many as 198 (85%) of selected schools) submitted higher subsidy enrolment figures with a difference of over 100 than what they submitted to the EMIS. Again, the fact that, three schools submitted enrolment figures with differences of 1000s higher than what was submitted for EMIS, demands further investigations.

Additionally, one school submitted an enrolment figure for subsidy which is higher than that submitted to EMIS by 2000 in 2010/2011. A similar trend was noted for 2011/2012. There were 142 schools with higher subsidy enrolment. This represents 61% of all the selected schools. 60 out of the 142 (42.3%) had differences in 100s while two schools submitted enrolment figures which were more than that submitted for EMIS by 1000s.

Figure 5.4 shows the graphical view of the results in Table 5.7



**Figure 5.4: Magnitude of difference in EMIS enrolment and enrolment for subsidy**

Source: Author's Calculation from EMIS and GES

In concluding the discussions on the challenges with the management of the subsidy, there appears to be no fixed time period for the release of the subsidy. Several contingent factors

contribute to the undue delays in the transfers of SHS subsidy in Ghana. Prominent among these factors are inconsistent time periods for the release of the subsidy to the beneficiary schools. Also, the procedural mechanisms involved in the coordination for the release of the subsidy have not been highly synchronised thereby introducing some level of fragmentation which results in delay. Additionally, the lack of funds by the government has contributed significantly to the delays in the release of the subsidy. There seems to be greater variation between EMIS data and that submitted for subsidy. This therefore is a cause of concern and raises the importance of performing reconciliation exercises to ascertain the authenticity of the two sets of data.

In summary, Ghana's middle income status will require more secondary level graduates with the relevant skills to continue their education and/or enter the labour market, hence investing in secondary education at this time will improve the human capital of the country, and also improve long-term competitiveness, access jobs, improve people's lives and incomes.

### **5.3 The Adequacy of Subsidy Payments**

This section uses secondary data to question whether the subsidy payments are adequate.

#### **5.3.1 Approved fees**

It was essential to do an analysis of the approved fees by the government to determine whether or not the schools were charging unapproved fees. Table 5.8 depicts the approved fees for day and boarding students in academic years 2011/12 and 2012/13.

**Table 5.8: Approved fees in Gh¢ (per annum)**

Status	Students	2011/12	2012/13	% Change
Boarding students	Continuing Students	526.50	746.5	41.8
	New Entrants	623.7	886.5	42.1
Day students	Continuing Students	<b>22.5</b>	<b>37.5</b>	66.7
	New Entrants	119.7	177.5	48.3

Source: Author's Calculation from GES

It is clear from Table 5.8 that for continuing boarding students fees increased by 41.8 % whilst it increased by 42.1% for new entrants boarding students from 2011/2012 academic year to 2012/2013 academic year. Again, for day students, fees increased by 66.7 % for the continuing students and 48.3% for the new entrants from 2011/2012 academic year to 2012/2013 academic year.

It is further noted that feeding fees constituted 95.7% of the total approved fee in 2010/2011 while in 2012/2013, boarding and lodging fee constituted about 82.4 % of the approved fees.

Further analysis was done to determine the proportion of the fees students pay that is covered by the subsidy. Table 5.9 shows the results.

**Table 5.9: Proportion of fees covered by subsidy of Gh¢92.40 in 2012/2013**

	Day	%	Boarder	%
	Amt of Fees (Gh¢)		Amt of Fees (Gh¢)	
New Entrant	269.9	34.2	978.9	9.44
Continuous Student	129.9	71.1	838.9	11.01

Source: MOE, 2014

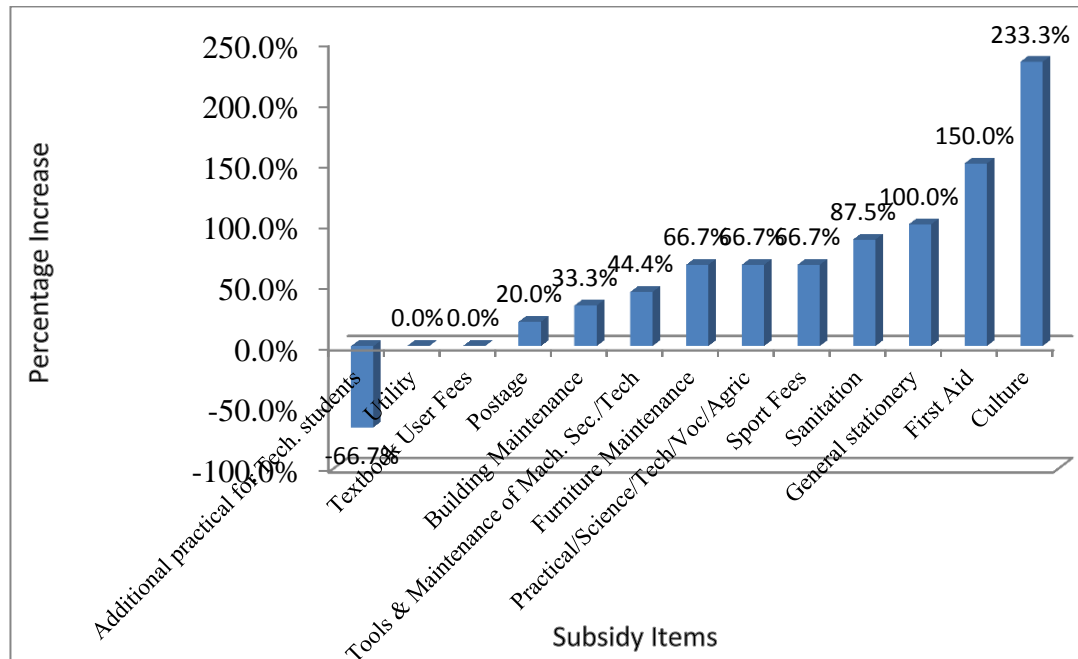
Table 5.9 above depicts the proportion of the fees students are supposed to pay that is covered by the subsidy for the 2012/2013 academic year. The actual fees that students were

supposed to pay is made up of the approved fees in Table 5.8 above and the subsidy for that academic year which is Ghc92.4 paid by the GoG. The results show that 9.4 % of the fees paid by a new entrant boarding student is covered by the subsidy, while 34.2 % of that paid by a new entrant day student is also covered by the subsidy. This means that the impact of the subsidy on the students in terms of adequacy is dependent on whether the student is a day or boarder, a new entrant or a continuing student.

### 5.3.2 Change in Amount of Subsidy

In response to the change in the amount of approved fees, the subsidy amount has to adjust. Tables 5.1 and 5.8 show the changes in the total amount of the subsidy and that of the fees respectively.

Figure 5.5 depicts specific amount and yearly allocation across the various items covered by the subsidy as a percentage increase in the various items from 2009 to 2013.



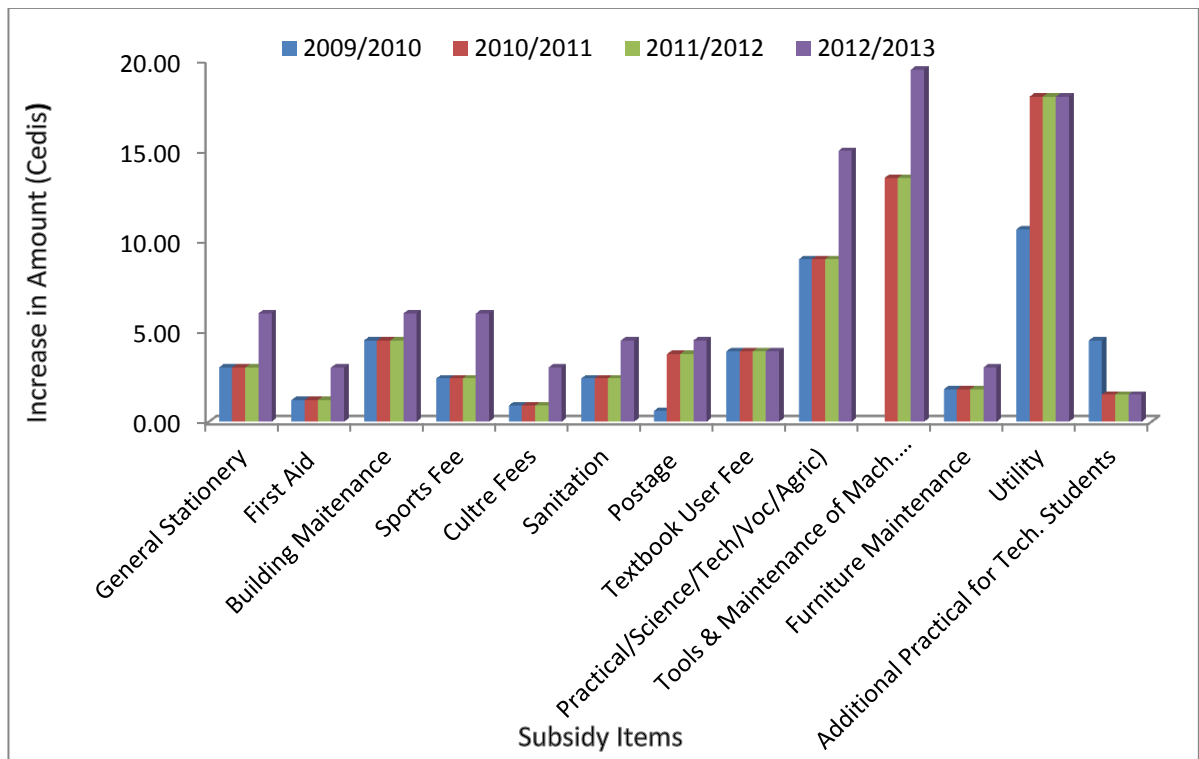
**Figure 5.5: Percentage Increase in the Subsidy Items (2009 to 2013)**

Source: Author's Calculation from GES



It is clear that the item under the subsidy with the highest increment was Culture where there was a 233.3% increase. The second highest increment was for First Aid (150.0%) and General Stationary (100.0%). Other items which experienced more than half increment include Sports, Additional practical for Science, Technical/Agricultural students, Furniture maintenance, Practical Science/Technical/Vocational/Agricultural and Sanitation while Utility and Textbooks respectively had no increment. There was also a decrease in additional practical for Technical students.

Figure 5.6 further shows the annual increment in subsidy for the various items of the subsidy.



**Figure 5.6: Yearly Trend of Increase in Subsidy Items**

Source: Author's Calculation from GES

Figure 5.6 shows that with the exception of textbook user fees and utility, there was an increase in the subsidy for all the other items between 2009/10 and 2012/13 although some of them had not been increased previously for three consecutive years. Textbook user fee recorded a constant figure since 2009 and has not been upwardly adjusted while utilities

although increased in 2009, remained constant between 2010/2011 and 2012/2013 academic year. The highest increment in 2013 was noted for tools and maintenance of machinery for practical/science/technical/vocational/agriculture. However, the amount for additional practical for technical students, decrease between 2009/10 and 2010/11 academic year and since remained constant. Generally, government allocations seem to be the major driving force behind these changes.

Further analysis was also done to determine the proportion of the total annual expenditure of the schools covered by the subsidy. Table 5.10 illustrates the findings.

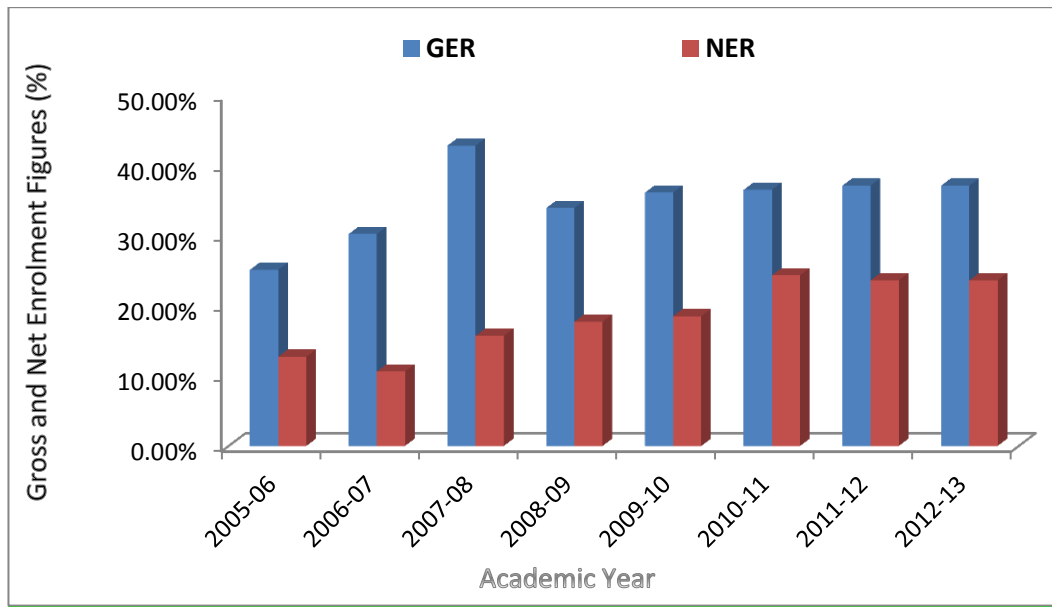
**Table 5.10: Proportion of Subsidy Expenditure against Total School Expenditure and Data on Student Debtors**

Expenditure	2011			2012		
	School One	School Two	School Three	School One	School Two	School Three
Total Expenditure	2,074,339.07	2,971,903.96	993,071.28	3,074,319.94	5,337,813.18	1,798,528.58
Non Salary Expenditure	666,683.07	1,726,381.81	385,054.29	880,486.52	2,911,880.24	639,770.62
Expenditure On Subsidy	77,848.79	122,562.19	38,336.00	159,904.07	257,883.75	108,885.85
%Subsidy Vrs Total Expenditure	3.75	4.12	3.86	5.20	4.83	6.05
%Subsidy Vrs Non-salary Expenditure	11.68	7.10	9.96	18.16	8.86	17.02
Projected Fees	539,506.25	1,623,163.93	396,260.66	800,551.02	2,783,806.7	605,958.39
Debtors Amount	9170.25	20377.69	28471.66	10261.62	42793	29282.00
%Debtors	1.70	1.26	7.19	1.28	1.54	4.83

Source: Author Calculation

### 5.3.3 Increasing Enrolment

This section presents a fluctuating trend in enrolment, which could possibly be attributed to inconsistencies in government budget relative to education. Figure 5.7 illustrates GER and NER from 2005/2006 to 2012/2013 academic years.



**Figure 5.7: Gross Enrolment Rate and Net Enrolment Rate**

Source: Author's Calculation from EMIS

Figure 5.7, shows that there is a consistent increase in GER from 2005/06 to 2007/08 after which there is a decrease of 20% in 2008/09. An increase in GER was again observed for 2009/10 with a marginal increase in 2010/11 after which there was a gradual increase from 2010/11 to 2012/13. With regards to NER there is a consistent increase from 2006-07 to 2010/11 after which there is a gradual decline for 2011/12 and 2012/13 academic years. The explanations for the results in Figure 5.7 are supported by the reasons given in Table 2.1 in relation to the large intake of students in 2013/14 when the two cohorts left the system concurrently.

From the analysis above, it is deduced that in relation to the school the subsidy is inadequate and cover only a marginal proportion of the total expenditure of the schools. Also, although the subsidy has covered some proportion of the fees paid by the students, the impact is strongly dependent on whether the student is a day or boarder, a new entrant or a continuing student. Continuing day students seemed to benefit more from the subsidy as compared to new entrants boarding students.

## 5.4 Chapter Summary

An efficient funding mechanism of the secondary education sector is important to help improve the human capital of the country. This makes education subsidy a very important mechanism for improving access and participation in secondary education. Although Government has shown interest in the financing of secondary education, the subsidy provided is inadequate in schools. Furthermore, the subsidy seems to be unduly delayed. For the 30 academic terms reviewed, there were only four terms in which the subsidy was paid on time. Thus there appears to be no fixed time period for the release of the subsidy. Also the procedural mechanisms involved in the coordination for the release of the subsidy have not been synchronised thereby introducing some level of fragmentation which results in delay. In another development, the existence of the disparities between the enrolment figures for EMIS and that for subsidy require a reconciliation exercise to determine the reasons accounting for the differences in the two datasets. This is relevant to ensure that resources are efficiently disbursed and utilised.

## **CHAPTER SIX: MANAGING THE SUBSIDY TO PROMOTE EQUITY**

### **6.1 Introduction**

This chapter presents the qualitative analysis of data gathered from field notes and interviews with the key informants in relation to the management of the secondary school subsidy to promote efficiency and equity. The analysis involved the categorisation of the data into common themes and presentation of the results in sections based on the research objectives of the study.

The chapter is organised in three sections. The first section presents the background characteristics of the participants while the second and third sections are based on the two main research objectives. However, there are other sub-sections under each of the main sections. Specifically, the second section covers the first research question on how secondary education subsidy is being managed to provide an efficient source of funding for schools and students. Equitability of the subsidy as a system of funding secondary education is the focus of the third section which provides answers to the second major research question.

The themes developed in relation to how secondary education subsidy is being managed to provide an efficient source of funding for schools and students include:

- i. The school subsidy and other charges
- ii. Capacity of school heads to manage the subsidy
- iii. Financial control mechanisms in accounting for subsidy
- iv. Delays in the release of the subsidy

The themes developed on the equitability of the subsidy as a system of funding secondary education include:

- i. Equity in relation to the criterion use to disburse the subsidy

- ii. Equity in relation to affordability
- iii. Equity in relation to adequacy of the subsidy

## 6.2 Background Characteristics of Participants

There were 14 participants for the study, comprising Heads of Schools (HOSs), management of GES and parents. The recurrences in the responses of the participants of the interviews provide evidence and support for the thesis assumption that Ghana's policy on subsidy should be targeted to enhance equitable access and participation.

As indicated in Chapter Four, there were eight parents and three HOSs that participated in the interviews. There were also three officials from GES who comprised two Top Officials of the Secondary Education Division (TOSED) and one Financial Management Officer (FMO).

All the eight parents were selected from the three SHS that participated in the study. Three parents each from each of the schools were supposed to have responded to the study making a total of nine parents. However, only two of the parents were readily available at the time of the interview for one of the schools giving a total of eight parents.

The three GES staff members operate from the headquarters of the service and occupy top management positions in secondary education and finance. Their critical role in the disbursement, monitoring and management of the school subsidy both at the GES Headquarters and school level is viewed as essential evidence for the study.

In relation to the gender and occupation of the participants, there was equal representation of parents in terms of gender, there were four men (Korby, Linus, Kwame and Ben)<sup>10</sup>, and four women (Julie, Jane, Edem and Abena)<sup>11</sup>, to minimise bias. Incidentally, all the top officials in management at the headquarters (Abu and Rich) as well as the FMO (Dela)

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<sup>10</sup> Pseudonyms

<sup>11</sup> Pseudonyms

were males. Two of the HOSs were all males (David and Sam) while the other HOS was a female (Linda).

The interviews also covered the occupation of the parents in exploring whether incomes of parents were also linked to the ability to pay. With regards to the occupation of the parents, there were three bankers (two males and one female); a trader (female); a secretarial practitioner (female); a teacher (male); and two retirees (all males). The data shows that six of the parents were in active employment and engaged in diverse formal and informal occupations.

Additionally, HOSs and top officials of GES were asked to respond to the number of years they have served in their current positions. The numbers of years participants have been employed in the GES as HOSs and in management positions indicate that, two of the HOSs have been in headship position for five years, while the other has held such position for seven years. Similarly, all the TOSED have been in management position for over 10 years while the FMO has been in his current position for six years. Participants' responses affirm that they have had great experience and interaction with the subsidy process, and are therefore in a position to provide more credible information to enhance the validity of the findings of the study.

### **6.3 Management of secondary School Subsidy**

This section covers the first research question and is divided into sub-sections which are based on the sub research questions. Specifically, the following are covered in the section:

- i. The school subsidy and other charges
- ii. Capacity of school heads to manage the subsidy
- iii. Financial control mechanisms in accounting for the subsidy
- iv. Delays in the release of the subsidy

Although parents could have limited information on the subsidy, their views were also explored in this section to determine their level of awareness on the subsidy.

### **6.3.1 Charges and Subsidies**

This sub-section presents an analysis of the approved fees for secondary education, the amount of the subsidy as well as the items covered by the fees. It also provides a response to whether schools charge additional fees besides the approved fees and if there is any authorisation to collect such fees.

An examination of the documented process for subsidy clearly indicates that the Government has instituted approved fees for secondary schools. There are three categories of the approved fees. The highlight was given by one of the TOSED:

"Fees are paid by day students who are in their first year of secondary schooling. The amount is subject to change every year based on decisions by GES management. Fees are also paid by continuing day students' and 'Fees paid by students who are boarders" [Rich].

The above citation shows differences in the approved fees for boarding and day students/schools. Boarding fees are higher due to charges on boarding and lodging facilities, feeding and utilities. New entrant students were found to pay the highest fees. They are required to pay additional fees covering admission, cumulative record cards, school uniforms (two sets), house attire (two sets) and kits for physical education. These additional fees were, however, a one-time payment for all fresh students.

Some evidence emerged pertaining to the additional fee charge. It is evident that, all the schools charge additional fees. These were: Parent Teacher Association (PTA) fees, special levies for school buildings, furniture, purchase of school cars, buses, teacher motivation, and fees for supplementary books. One TOSED (Abu) confirmed that all students now pay the PTA approved fees.

In relation to how parents feel in paying these additional fees, a parent lamented concerning the manner in which the additional fees were making the fees generally unbearable:



"In reality, the school fees for the day students is not much, but because of the additional fees charged such as teacher motivation fees<sup>12</sup>, books, PTA, it is becoming too much" [Edem].

All participants in principle agree that approval should be sought before additional fees are charged, because, authorisation is a policy requirement for charging any additional fees. The HOSs affirmed this in their responses; however, evidence from the interviews indicated that some HOSs do not seek approval before charging additional fees. One of the TOSED confirmed:

"Yes, there have been complaints of heads collecting unapproved fees. Definition of Unapproved fees-collection of monies other than standardized fees, Ghana Education Service approved PTA Levies/Dues. There are procedures for the collection of these fees. If the procedures are not followed before the fees are collected, they become unapproved fees"[Abu].

A TOSED commented on the behaviour of some heads by sharing information on the collection of unapproved fees:

"Yes, my outfit sometimes receive complaints directly or indirectly of some school heads collecting unapproved fees. Directly because there have been a few times that parents have come to me complaining and asking why they should be paying certain fees" [Rich].

Some schools charging unapproved fees without authorisation suggest that there is no strict enforcement of the policy to obtain approval before fees are charged. It also suggests some lapses in supervision and monitoring by GES on the charging of fees by HOSs.

In other words, the control mechanisms for monitoring to ensure HOSs do not put additional burdens on parents by charging unapproved fees are weak. It is therefore more likelihood that a number of HOSs have breached the rules and procedures on charging additional fees. The complaints of the parents also suggest that they find it difficult to pay the additional fees. Thus, they expect the GES officials to help address the issue of charging unapproved fees.

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<sup>12</sup> Teacher motivation fees : Amount paid by parents on behalf of their children as incentives in enhancing the performance levels of teachers

However, further probing reveals that the HOSs charge additional fees due to the fact that the subsidy is inadequate in running the schools, although this would need further investigation for validation. HOSs also charge these fees because the subsidy is unduly delayed. In this regard, a TOSED confirmed:

"Yes we charge additional fees because, with the subsidy alone, then no head of school can run the school effectively. Just consider the inadequacy of the subsidy and even the fact that the small subsidy will also not come early, you need these additional fess to get the school run" [Abu].

Consequently, the additional fees charge enable heads to run the schools even in the face of several challenges associated with the subsidy in terms of adequacy and delays in disbursement. The alluded reasons for the charging of additional and unapproved fees by the HOSs are consistent with the Ghana Centre for Democratic Development (CDD) empirical findings in 2010. The findings showed that the persistent delays in accessing the subsidy puts pressure on schools to fill in the funding gap using unauthorised means including charging of unauthorised fees. Section 5.2.2 in Chapter Five gives a detailed analysis of the causes of the delays.

The overall expectation is that GES will take some actions or measures at the instance where a head collects unapproved fees including withdrawing and suspension of the charges.

The findings show that suspension can only be applied if the fees charged are with the consent of the PTA but not with approval from GES management. In such instances, the charges are also suspended until approval is granted.

This sanction may be consistent with parents' expectation and government procedures. This is reflected in the response of a TOSED on actions taken against school heads who collect unapproved fees:

"I have always tried to explain when they come personally, sometimes too in a query, I call on the heads of schools for them to give the explanations, while in few instances, we have asked the heads to pay back the amount of money of which they have credited the students' accounts with these monies collected" [Rich]

The management of secondary schools in Ghana has been decentralised with District Education Offices (DEOs) of GES being responsible for the management of schools at the district level. Therefore, direct complaints from parents to the Headquarters without channelling these complaints through the DEOs have several implications. Firstly, DEOs have possibly not been very instrumental in monitoring the kinds of fees charged by the HOSs. Secondly, parents possibly have low confidence in some DEOs in responding to their concerns with regards to HOSs charging additional fees. Thirdly, parents have not been sufficiently sensitised on where to channel their concerns regarding the education of their wards at the secondary level.

For heads failing to comply with the directives on the authorisation, the study sought to explore the specific steps taken to get authorisation to charge additional fees. The following steps were noted: First a school has to get approval from the PTA. This involves discussing the project at the PTA meeting level while any approval secured is documented in the minutes of the meeting. The number of parents at the meeting and the list of attendees are very important.

Additionally, there are forms A – C (See Appendix E) where the total cost of the project is considered, students' enrolment, the duration of the project, payment mode and the unit cost to pay. Since this is a standard requirement for seeking approval to charge additional fees, the same procedure is required by the schools selected for the study.

On the form, there are columns to be signed by the PTA Chairman, the Board Chairman and then the HOS. The form is then sent to the Regional Director for recommendation following a discussion with the head. The signed form is then sent to the GES headquarters for review by the Secondary Education Division which gives recommendations for the approval.

When finally the Director-General gives the approval, the school can then apply the charges on the students. Approval is given for three years, but, if the project is not completed at the expiry date, the school needs to apply for a renewal. However, schools can

initiate a process to charge additional fees using an approved channel. The charge of additional fees is most likely to impact negatively on students from very poor backgrounds.

One of the parents affirmed:

"Even with the government subsidising some of the fees, I am struggling to take care of my child in school. The charge of additional fees means that I cannot afford and have to take the boy out of school"[Jane].

In other words, charging higher and additional fees aside what has been approved implies that some families and parents may be forced to withdraw their wards if they cannot afford the extra it takes to complement even if government subsidises. However, Glennerster et al. (2011) note that the provision of senior high school subsidy is an important step towards boosting the primary to secondary school transition rate. Parents' inability to afford the financing of the education of their wards has excluded the very poor from accessing and participating in secondary education. This study shows that the extra fees charged by the schools make it very expensive for individuals from low socioeconomic status to afford the cost of participation in education.

Although the HOSs are likely to follow the official procedure in obtaining authorisation for charging additional fees, many are unlikely to go back for renewal of authorisation. The reasons heads fail to renew authorisation was further probed. It is clear that the HOSs appear to find the authorisation process cumbersome. It is also evident that they know their refusal to follow due process is in conflict with guidelines for charging extra fees.

Yet, they persist in this behaviour knowing the cumbersome nature of the process; the undue delays in obtaining an approval and the possibility of not obtaining the approval. This can be deduced from the response of one HOS who once sought approval:

"After the approval by headquarters to charge the fees, there is always duration for charging the approved fee depending on the project. This might be for one, two or three years. If the project is not completed within the approved period, you have to go for a renewal, but I must confess that sometimes we do not go to renew and this is a problem we are trying to resolve. I know that a few heads have not done the right thing; they have not gotten the approval let alone the renewal" [David].

The failure of many HOSs to seek further renewal for an expired fee authorisation suggests that schools that receive approval require strict supervision and monitoring by GES management at the local district, regional and Headquarters level. This further suggests that there have not been efficient and effective control mechanisms to regulate the types of fees HOSs charge as well as the duration for which they charge such fees after the approval has been given. Again, it could be deduced that the schools are not regularly audited to reveal such irregularities. It is therefore clear that the renewal is obviously determined by other things such as the ability of the GES management to enforce its accountability protocols and the ability of HOSs to comply with policies.

To clarify the intention why government instituted the subsidy in secondary schools, the various items of the fees absorbed by the government through the subsidy were explored. It was clear that the absorbed fees are expected to cover; maintenance, sports and culture, first aid (school health management), postage, practical fees for science, agriculture and vocational, sanitation and utilities.

The maintenance covers both electrical and construction works such as maintenance of tools and equipment and machinery, painting of school buildings, changing of mosquito nets, electrical fittings, repairs of roofs/doors/locks among others. Subsidy for tools and machinery were mainly meant for the technical students while there is a general subsidy for maintenance for all schools irrespective of whether they are technical, vocational or secondary students. Utilities are cost covering electricity, water, telephone and fuel for cooking.

All schools were found to receive the same amount for utilities irrespective of whether they are boarding schools or not. One HOS lamented:

"The day students attend school in the morning and leave in the afternoon while boarding students stay in school all the 24 hours each day to use the school facilities. Again, day students spend only Monday to Friday in school except on special occasions and functions. In contrast, boarding students remain in schools throughout the seven days of the week and their use of the utilities extends over the weekends. [David].

Furthermore, a more in-depth exploration of a complete day school with a student population of 1000 and a complete boarding school with similar student population reveals that both schools receive the same amount of subsidy for utilities. Meanwhile, in practice, the boarding school spends far more than the day school. With this example in view, the effect is disproportionate. Either the day school is receiving money it does not deserve or the boarding school is being cheated. The latter is the case if the rate for the utility is sufficient only for the day student while the former is true if the rate is sufficient for the boarding student as well.

As a trend, the participants expected that day schools would have fewer funds for utilities than boarding institutions. The scenario described suggests an apparent problem for the government in subsidy allocation to day and boarding schools. It also reflects difficult choices to be made between the desires to achieve equity in allocating resources against other interests.

It was clear from the study that many of the parents were aware that the government provides subsidy for secondary education; however, they could not mention what the subsidy is meant to cover. Of key concern was the ignorance exhibited by all the parents on how much government is subsidising for their wards' secondary education. The fact that almost all parents, including the parent who was a teacher, could not mention the amount of money government is paying for the subsidy means that the schools together with the GES and MOE have not developed a culture of reporting on activity at determined intervals to general staff and school community. The low level of awareness of the subsidy among the parents could also be explained by the fact that the releases of the subsidy are not published in the newspapers. The lack of publication could also be explained by the fact that the management of GES has possibly not appreciated the need to undertake such publication.

In responding to a question on how much the government is actually paying on parents' behalf, a parent said:

"Anyway, I don't actually know" [Linus].

Another parent stated:

"It is something I don't know at all but I will assume it is about 50% of what you pay every term, I mean what you pay is 50% what you actually should pay and now as at now we know the PTA's do so much, so much in ways of school, ..... that is what the PTA's are interested to do" [Ben]

Parents' lack of knowledge of how much of the fees they were supposed to pay that has been absorbed by government was found to be independent of the occupation of the parents.

Those working in both the formal and informal sectors as well as those retired could not give the exact amount government is subsidising for the payment of their wards' education. This information was supposed to have been included in the termly bills students send to their parents. This suggests that some parents might not have been extensively informed about subsidy at the school level.

However, parents' knowledge about how much government is subsidising for the education of their wards is necessary to make them appreciate and also understand how much they have to contribute to the education of their wards. Also, knowing how much it cost to educate the child could enhance their level of appreciation.

The new entrants' fee, as the study revealed, was slightly higher by GhC97.0 and GhC140.0 in 2011/2012 and 2012/2013 respectively in comparison to what was paid by continuing students in 2011/2012 and 2012/2013 academic years. This difference is the admission fee, which is paid once by new entrants. For equity, no category of students should be overburdened. Poor students among them would find it more difficult to pay. A parent of a new entrant, who is into banking commented:

"They say there is stationery usage, library, they say PTA dues, so many things" [Abena].

The inability of some parents to pay the bills levied was very evident. In responding to whether parents are able to pay the additional fees they charge, one HOS said:

"Here again, we have defaulters like 25% to 30% default rate and that those who cannot pay, we resort to all kinds of measures, refusing them access to classes, entering dormitories and so on" [David].

The main purpose of instituting the subsidy is to relieve the financial burden of parents. However, the inability of some parents to pay the remaining fees suggests that the additional fees are worsening their plight.

In responding to the importance of the subsidy in general, all the TOSED, the parents as well as the HOSs pointed out that the subsidy is good but there are challenges emanating from the ways it is being administered.

The perception is that the subsidy has not achieved the intended purpose because there has not been proper targeting while the concept of vertical equity has been underplayed. Here is a suggestion from a TOSED:

"The subsidy should be provided for only deprived communities and students who cannot meaningfully get effective operation in a cost sharing system" [Rich].

In sum, it can be deduced that there are numerous fees that students pay aside the provisions of school subsidy. This therefore raises issues as to whether the supreme principle for the introduction of the subsidy which is to lessen the financial burden of parents is being defeated.

Furthermore, there seem to be some level of flexibility for HOSs to charge additional fees. However, many HOSs are not adhering to the guideline for seeking approval to charge additional fees. The major factor which contributes to the non-adherence to the guideline seems to be the cumbersome nature of the process which discourages HOSs to seek for approval.



### 6.3.2 Capacity of school heads to manage the subsidy

Considering the fact that the subsidy process must be managed efficiently, to maximise return on any investment, education and training of HOSs is very significant. In this regard, this section focuses on the support and training opportunities available for HOSs in the management of school subsidy. The primary concern here is on whether HOSs are empowered to manage the subsidy successfully through courses and workshops organised for the purpose.

Heads of schools were therefore asked to respond to the question whether they have received any training in connection with the use and management of school subsidy, and if they have a handbook stipulating the guidelines for the utilisation of the subsidy. Similarly, respondents of GES at the Headquarters were asked whether GES has provided HOSs with subsidy utilisation guidelines to assist in the use and accounting for the subsidy as well as the frequency with which GES conducts training for HOSs on the management of the subsidy.

It was evident that none of the HOSs has received any planned training in the management of school subsidy, although they have received general training on financial management. One HOS stated:

"I have not really received any special training on school subsidy but have received general training on financial management"[Linda].

The management of GES affirmed that there is lack of capacity building programmes for HOSs on the management of the subsidy. In responding to whether GES organise any specific training for the management of this subsidy, a TOSED stated:

"No!!! We do not; we only deal with subject training such an in-service training on Mathematics "[Abu].

There were, however, divergent views between the HOSs and management on the need for the training. This was evident particularly when all the three HOSs stated that they think no special training is required for subsidy management.

They felt the general training on financial management was adequate to enable them manage the subsidy. One HOS stated:

"No I don't think so, the one I have is enough in Public Finance Administration and that there is nothing exceptionally different with subsidy. Financial Administration Regulation (FAR) and Financial Administration Act (FAA) are there" [David].

That notwithstanding, one of the heads who said earlier that there was no need for the training indicated:

"The absorbed fees have been outlined for us so the guidelines are there for you to follow. However, a new head should be trained to be able to manage it so that they do not misapply the funds" [Sam].

A TOSED disagreed with the headmasters on the organisation of training for HOSs on the management of the subsidy. He explained:

"I would perfectly agree that training should be held for the heads in the use of the subsidy, because, so many heads are doing things in their own way. There is the need to train them on how the subsidy should be used and accounted for" [Abu].

Therefore no specific manual seems to exist to guide subsidy management except for the instructions accompanying the release of the subsidy. The instructions only provide a list of the various components of the subsidy and corresponding figures. Another HOS pointed out:

"We do not have any specific manual on the subsidy. We just use the FAA and the FAR. Unless of course there are new directions, there is no need for any special manual on this"[David].

A TOSED seemed to be unaware of any guidelines. He remarked;

"To the best of my knowledge I am not aware and I think they are using the general financial regulations and manual" [Abu].

While there are divergent views on the need for training HOSs on the management of the subsidy, training in this regard has a lot of implications on the extent to which HOSs are adhering to accurate fund disbursement and financial reporting guidelines. Therefore, it might also address the need for efficient and effective utilisation of the subsidy.

However, UNESCO (2009) recommends that government statutes should include sections outlining the financial principles and practices which boards and heads must follow to achieve accountability for the funds they collect and receive to run their schools. This means that it is inadequate to just accompany the subsidy with schedules, but rather, there should be training as well as monitoring to help determine if there are some challenges in adhering to the schedules. The lack of effective training on the management of the subsidy could be one of the reasons to explain MOF (2008) observation that DEO failed to keep records on the distribution of funds.

The situation demonstrates a disconnection between the focus of the government to meet a financial goal and the reality on the ground where those implementing the subsidy are not given the requisite capacity to have a clear understanding of what they are expected to do.

### **6.3.3 Financial Control Mechanisms in Managing the Subsidy**

Transparency and accountability are needed in order that state-funded subsidies are not misapplied. This section therefore examines the internal and external financial reporting mechanisms instituted to ensure transparency and accountability in the use of the subsidy. Thus, whether the subsidy is being utilised for the purpose for which it is released and if due processes are adhered to in its administration.

A number of control procedures are captured in the use of the subsidy and these occur during sourcing and distribution of the subsidy. This involves stakeholders taking decisions concerning the use of the subsidy at the school level, allocating subsidy to the expenditure areas in the schools and accounting for the use of the funds.

The study identified those involved in making decisions in relation to the use of the subsidy to include HOS, Assistant HOS, Accountants, beneficiary departments and the school governing boards. It was clear from the study that only the HOS, Assistant HOS and the Accountants take major decisions in the use of the subsidy. This was affirmed by Rich, a TOSED. According to him, the principal authority to make decisions concerning the use of the subsidy at the school level is the HOS, in collaboration with Accountants and Assistant HOS. According to Abu:

“The principal signatories to the school accounts are the HOS and the Accountants while the Assistant HOS acts in the absence of the HOS”

However, beneficiary departments such as the sports and science departments are only involved at the budget preparation stage. It is also important to note that all other teachers and students do not participate in taking decisions in relation to the management of the subsidy.

The assertion by the HOSs seems to suggest that they are confusing the responsibility of the principal signatories to the school accounts with who should take decision on the use of school funds.

The subsidy affects the general administration of all secondary schools. The voices of all actors, including the practitioners and subjects must therefore be heard when decisions are taken on the use and management of the subsidy. This therefore raises concern about transparency and accountability and as to whether the subsidy is being used for the intended purpose.

It is also possible that the absence of strict rules and control mechanisms to guide the use of funds transferred to various second cycle schools have contributed to the non-involvement of other stakeholders. Furthermore, the lack of transparency could be explained by the hierarchical nature of school management system where the hierarchy might be so rigid due to the bureaucratic procedures and therefore does not create adequate rooms for involvement. The involvement of other stakeholders could minimise fraudulent activities

by deterring people from engaging in those activities. This enhances transparency. However, care should be taken so that the involvement of all stakeholders does not affect efficiency.

Further, on transparency and accountability, a TOSED suggested setting up a committee to represent all voices that relate to issues of the subsidy. He stated:

"Decision should be based on advice of school committees and managers existing within the school structure" [Rich].

All the HOSs stated that they had not thought about informing teachers and students about issues concerning the subsidies. However, they admitted that informing teachers about the receipt of the subsidy and the formation of a committee would ensure transparency. One HOS also suggested that information could be given at staff meetings:

"Although I have never put up any notices on subsidy, I think for the sake of transparency, during staff meetings, teachers should be made aware anytime the government releases subsidy to the schools. We must, however be careful so that the publicity does not make parents think they should not pay fees anymore"[David].

The study revealed that, there are both internal and external procedures in place for auditing subsidy expenses. The internal auditing mechanism involves auditors moving from the region and district levels periodically from GES to audit the books of the schools once a year. The external audit involves officers from the Ghana Audit Service (GAS) auditing the books of the schools annually which is a statutory audit. One HOS confirmed:

"Auditors do come around from the regions and the districts. We do also prepare annual accounts and present them to the regions to be forwarded to the Headquarters"[Linda].

It appears HOSs are unaware of how the internal auditing is done and relied largely on external auditing. One HOS stated:

"I think they have a format in which they fill in something" [Linda]

Internal auditors are responsible for ensuring that there are effective internal control mechanisms in place and adhered to.

Their infrequent presence (once a year) in the schools suggests that effective internal controls in the use of the subsidy to limit the potential risk of fraud and mismanagement are limited. The use of external auditors as the main mechanism for holding HOSs accountable for using the subsidy could be explained by Mullins (2010) assertion that public entities, such as schools that utilise public resources for public service delivery, can only be coerced to account for the resources allocated, used and spent through monitoring by external agencies, although internal auditors remain relevant.

In summarising this sub-section of the chapter, the internal control mechanisms for the utilisation of the subsidy are somehow weak and do not largely enhance transparency and accountability at the school level. This is explained by the lack of an all-inclusive-participatory approach in the decision making process in relation to the utilisation of the subsidy at the school level.

#### **6.3.4 Delays in the release of the Subsidy**

The most recurrent complaint emerging from the interviews with policy makers and HOSs was the delay in the release of the subsidy. The timing for the release of the subsidy and the causes of delay of the releases are therefore discussed in this section.

With reference to Table 5.2 in Chapter Five, it is deduced that there is no specific timeline for the release of funds. The subsidy is paid very late and in most cases deferred to subsequent terms making planning very difficult. This was affirmed by all the HOSs and TOSED. One HOS complained:

"The subsidy does not come, as I speak to you, last term they paid only half (50%). The subsidy payment for last term came at the end of the term. The truth is that we have never received the subsidy at the beginning of any term" [Linda]

Due to the frequent delays of subsidy releases, HOSs pointed out that they are unable to predict when to expect future tranches. One HOS noted:

"As at now, I do not know when the next tranche of subsidy would be released, but we would have loved it if we can receive it at the beginning of the term, then we can plan how to use the funds. We do not know, we actually do not know!" [Sam]

A TOSED shared his views on some of the challenges associated with the subsidy:

"I think that because the funds delay, the subsidy does not achieve their purpose. It is supposed to help the schools to run sports and so on, so the schools are forced to borrow the money from elsewhere to do the activity" [Abu].

This implies that the current mechanism for delivery of the subsidy to secondary schools risks delays that could limit the intended impact on quality as noted by Akyeampong (2011). The findings are also consistent with that of the GNAT (2014) who finds that delay in payment of the subsidy to schools in Ghana is stalling effective running of schools in the Country.

Various reasons were given to explain the causes of the delay. The first was linked to the sourcing and distribution of the funds as shown in Figure 5.1 in Chapter Five. The FMO commented on the processes associated with sourcing for the subsidy. According to him, the process is complex. He stated:

"We can't tell on the average, how long it takes to complete the process because; everything is depended on the MOF. The GES is always ready with its data and send requests to MOF each term. So we only make payments when funds are made available to us which sometimes are unduly delayed" [Dela].

Also, one of the delays in the release of the subsidy has to do with the processes which HOSs have to go through to get the subsidy from the headquarters. The process consists of submission of students' signed lists to the Director General, copying the Secondary Education Division; and depositing funds into the school's accounts. It is clear that one of the key bottlenecks in the process of sourcing funds is the submission of the signed list. The signed list is an enrolment data which indicates enrolment by gender, class, programme of study and the status (Boarding or Day).

A HOS confirmed:

"Since the funds are per capital, what does this mean, what we do is that we send the students signed list. The students would have to sign to indicate that the child is in the school. This is a central measure and no initials are accepted. The students actually sign. That is why it delays us. We do actually find it very difficult in getting this signed" [Sam]

Another HOS added:

"We have to chase the students to sign the list. We find it difficult to get some of them. We cannot, however, submit the list without getting every enrolled student to sign "[David].

The late submission of the enrolment data from the schools to MOF through GES headquarters has been perceived to be the major cause of the delay in the release of the subsidy. Nonetheless, a careful analysis of the procedure and timing in relation to the release of the subsidy as shown in Figure 5.1 and Table 5.2 in Chapter Five shows that this argument does not hold entirely. For example, estimated enrolment figures in each school are made at the beginning of the academic year based on the actual enrolment for the previous academic year. These estimates are used to transfer the first term subsidy to the school at the beginning of the first term, while later transfers for the other terms are dependent on the submission of actual enrolment figures for the schools.

However, as shown in Table 5.2 in Chapter Five, the releases of the first term subsidy which is independent on the submission of the actual enrolment for the school were either delayed or deferred. It is therefore plausible to argue that the late submission of the enrolment data by the schools could not have been the major cause of the delay. The above notwithstanding, the reasons for the late submission of enrolment figures have to be identified.

Since the enrolment figures are final once submitted and cannot be updated later, schools have no option other than to delay the submission until they are satisfied that they have completed the admission exercise. The study identified another major internal problem at the school level which contributes to the delay in the release of the subsidy. Heads delegate the process to other teachers without any consistent monitoring and follow up, thus delaying the whole process. One of the HOSs stated:



"Some of our colleagues delegate the signing of the list to some teachers which take longer period for completion"

Still alluding to the evidence that the delay is partly due to the signed list, it was evident that the slow manual process in the preparation of the signed list and in submitting the information to the headquarters was also a major cause of the delay. One HOS argued that the use of ICT might help to address this challenge. The HOS recommended:

"The schools should be made ICT friendly and can be made to submit the signed list to the headquarters via the internet since all of them are doing ICT" [David].

The study further identified processes which delay the release of the subsidy at the national level after the submission of the signed list. The following specific steps in Figure 5.1 from Chapter Five were noted; following the submission of the signed list to the headquarters, GES writes to the MOF through the MOE to request for funds for the payment. The MOF then issues a release letter advising CAG to effect the payment. A warrant is then issued to the GES by the CAG, copy to the Bank of Ghana.

The Bank then issues a Bank Transfer Advice (BTA) for the transfer of the amount to MOE account at the Bank of Ghana and the MOE subsequently pays the money into the GES account at the Bank of Ghana. Finally, GES instructs the Bank of Ghana to credit the accounts for the beneficiary schools as per the allocation list given them. The transfer process suggests that the timing of the release of the subsidy is not directly under the control of GES management.

Thus one of the causes of the delay in the release of the subsidy is the complex nature in sourcing for the funds and that the process is fragmented, going through a number of departments.

Understanding the impact of the delays on school management is crucial for the study. It affects the adequate planning of school finances and distorts the implementation of activities in the school; the money gets devalued (specific to Ghana) and there are poor quality teaching and learning outcomes. A HOS complained:

"The erratic release of the subsidy is worrisome. It means that if the money could buy an item in February, when the money is delayed and released in June, it is already devalued; you know the value of our money" [Sam].

This means that the late release of the subsidy has largely distorted the financial budgeting and planning of the schools.

The study also shows that the extent to which the delays impact on the schools depend on whether a school charges feeding fees or not. Boarding schools charge feeding fees and are therefore able to use some of the fees to run the school administratively until the subsidy is received. This is in contrast with day schools who do not charge any feeding fees. A HOS indicated:

"The day schools do not have money to buy stationery and when it is time for exams, they will have to be running up and down crediting things. Also, the utilities of the school like electricity and water are disconnected as the utility companies have outsourced their services to private companies" [David].

This suggests that the delays in the release of the subsidy affect both boarding and day schools systems differently. In other words, the delay in the release of the subsidy has affected the non-salary expenditure of the schools especially the day schools. Glennerster et al. (2011) are of the view that the introduction of secondary school subsidy, coupled with availability of scholarship goes a long way to ease the financial burden of secondary schools.

In examining how the issue of the delay in the release of the subsidy could be resolved, one HOS suggested a temporary solution. According to him, if government delays, students should be allowed to pay and the money refunded when government pays. Critically, this suggestion has implications for the poor students accessing and participating in secondary education.

Inferring from the FMO claim, GES only makes payments when funds are made available to the service which sometimes are unduly delayed. Additionally, from the results of the

statistical analysis in Table 5.2, it was noted that for the 30 terms under review, there have been only four terms in which the subsidy was paid on time.

There were also quite a number of terms (11 out of the 30) where the payments were deferred. It could therefore be deduced that the major source of the delay in the release of the funds is from the MOF.

In sum, the delay in the release of the subsidy has significantly affected the non-salary school expenditures of the schools especially the day schools and that there appears to be no fixed time period for the release of the subsidy. There seems to be several contingent factors both internal and external that contribute to the delays in the release of the school subsidy. Internally, many HOSs do not extensively monitor the process of getting students to append their signature on the signed list (late submission of the sign list) whilst externally, the process for sourcing for the funds is too complex and fragmented. However, the untimely release of funds from the MOF to be disbursed to the schools seems to be the major factor.

In concluding the section on the management of the subsidy, it is noted that the major purpose for the introduction of the subsidy, which is to lessen the financial burden of parents, seems to be defeated with the charging of many additional fees. In relation to the financial control mechanisms in accounting for the subsidy, it is deduced that the internal controls for the administration of the subsidy do not largely enhance transparency and accountability at the school level. Additionally, the releases of the subsidy are unduly delayed thereby affecting the financial planning and budgeting system of the schools.

#### **6.4 Equity in the Disbursement of the Subsidy**

This section covers the second research question and is divided into sub-sections which are based on the sub research questions. The section explores how the concept of vertical equity has been operationalised in the disbursement of subsidy and examines whether the subsidy as a system of funding secondary education provides equity for students and schools. Specifically, the following are covered in the section:

- i. Equity in relation to the criterion used to disburse the subsidy
- ii. Equity in relation to affordability
- iii. Equity in relation to adequacy of the subsidy

It is also important to note that the unit of analysis for equity was based on both schools and households.

#### **6.4.1 Equity in Relation to the Criterion used to disburse the Subsidy**

The current criterion for distributing secondary education subsidy is using the enrolment figures for the schools. Thus, the system of targeting in the country appears to be school-centred and not student-centred. In other words, there is currently no criterion for targeting students who cannot pay for secondary education. However, one of the common setbacks observed was that the enrolment data used in distributing the subsidy is inequitable. A HOS criticised the criterion as follows:

"The criterion used is more of the student numbers (Enrolment). I have problems with this in the sense that the bigger schools are always getting more even though some have structures and they do not need to do any serious maintenance among other expenses, but we the smaller schools who have the smaller numbers get less" [Linda]

Thus more endowed schools always have students who can pay fees as compared to the less endowed ones, yet, such endowed schools are allocated higher subsidy, although the ability to pay is dependent on household. Furthermore, bigger schools in most cases have more developed infrastructure already while the smaller schools have a lot of developmental expenditure to meet.

Nevertheless, using enrolment for the determination of the subsidy for the schools is logical considering the fact that schools with higher costs to educate student populations should receive more funding than their counterparts. On the other hand base on earlier argument by Linda, it can be further argued that vertical equity has not been achieved because small schools with more infrastructural need are given less subsidy because of their low enrolment. Another argument supporting the use of enrolment figures for the subsidy is that

originally, the fees which were absorbed as subsidy were paid by students hence the only criterion is the enrolment figure.

As noted earlier, the subsidy for secondary education in Ghana is open to all students irrespective of their economic background. The government grants partial subsidy which does not cover every cost involved in secondary education. Somehow, participants anticipate that, in future, government may not be able to afford subsidy payment as it is currently subsidising for all students judging from the way it is struggling to pay. Again, the government could be investing much more in the richest students than in the poorest because many of those who can pay will enrol for secondary education and will eventually benefit from government subsidy, while those who cannot pay the subsidised fee will find it difficult to enrol for secondary education in order to benefit from any subsidy.

The viewpoint of all the HOSs was that the subsidy should be targeted at only those who cannot pay their school fees. A HOS explained:

"General subsidies do not benefit some poor students. This is because for some of the students who benefit from these subsidies, their parents could easily afford payment. There are, however, others; whom the subsidies are inadequate to cover their cost of education"[Sam].

The concern therefore has to do with how to adequately target the needy students. In this regard, an attempt was made in the course of the study to identify the criterion to be used in determining who cannot afford. In responding to how one can identify parents who cannot pay, a HOS pointed out:

"These include single parents, artisans, orange sellers etc. It will also be dependent on the schools. For instance, in my school about 90% of the students came from private schools where they paid fees but in another school about 90% are from the public schools who could not afford the fees for the private school. Economic conditions can change all things being equal, those who go to private schools are more likely to afford. Others also do struggle to take their children to private basic because they think the public is not teaching well. If we the school authorities are given the opportunity, with our counsellors, we could provide those who cannot pay for their school fees"[David].

Another HOS also suggested:

"This should be based on scientific analysis using variables such as the rate of payment and default, single parenting, high income earners, low income levels and those in the rural areas. We can also make use of other people's research. A lot of parents come here to tell us a lot of things and all these can be considered"[Sam].

Another HOS talked about giving the subsidy based on economic circumstances of the student:

"I will investigate their background (occupation and kinds of home) and of course for most of them we know their backgrounds, why they are unable to pay fees"[Linda].

It is clear, from the above examples, that the identification of students who cannot pay fees should also be traced to the employment status of the parents (those unemployed, lower income earners as well as big size families).

With respect to targeting those who cannot pay, the HOSs noted that the targeting process should include both the economic status of the individual students and the poverty index of the geographical areas in which the schools are situated. However, the HOSs noted that this cannot be easily accomplished without the deployment of a scientifically validated process, which would enhance the objectivity of the selection process to eliminate any procedural injustice.

Thus in the absence of a scientifically validated process for targeting students who cannot pay, it would be difficult to have an equitable subsidy system. In explaining the difficulties in identifying those who cannot pay, many of the participants suggested that government should pay for only those who cannot pay. A HOS shared this story:

"There was this boy who could not pay his fees, but when we delved into it we saw that the father had two kids from a broken home, and the man was a care taker for a landed property which was not developed and this was where the man and the student with his sister were sleeping. We actually visited the place and realised that there was no way this man can afford. Sometimes the man wakes up in the morning goes to hustle but gets nothing. So when we met the counselling unit, we started contributing every month to pay for his fees. So I think that targeted subsidies should be the way forward" [David].

In relation to this, one of the parents exclaimed:

"That one cannot be. How can the government know those who are in need? In that case the fees must be reduced for all of us" [Jane].

Among the factors to be considered for targeting, participants suggested that the academic performance of the students should also be considered. To support this, one HOS narrated a story about a brilliant student in his school who could not pay his fees. According to him, with that background information, it would be wrong to dismiss the performance of students as one of the criteria to be considered for targeting.

In making a recommendation to the criteria for the selection of those who cannot pay, a HOS whose school is located in a rural area stated:

"I say we should target the deprived areas because, I know even in Accra, you will find individuals who will find it difficult in paying their school fees, but when you come to deprived areas like this school, majority of the students find it difficult in paying their full fees and there are even some students who are paying for their own fees in school" [Linda].

This suggestion brought into fore the need to consider geographical deprivation as one of the criteria for targeting. Some participants were also of the view that foreigners should be excluded from enjoying the secondary school subsidy. This meant that the nationality of the students should also form a critical component in the criteria for targeting the subsidy.

Fundamentally, targeting students who cannot pay does not seem to be an easy task without the involvement of all the relevant stakeholders who should make inputs to scientifically determining students in this category. The difficult process of identifying students who cannot pay can be explained by Reschovsky and Imazeki (2000) and Odden and Picus (2004) assertion that there is currently no consensus in the education fraternity about the best alternatives to measure the cost of providing an adequate education. However by employing factors like; the health of the parents, the intelligence children, employment status, character of the student (with the help of their HOSs) and sustainable livelihood

approach, identifying the 'unequal students among the 'unequals' could be done with little difficulty.

A parent who suggested NGOs should be involved to identify the needy said:

"I think NGOs have to liaise with the school authorities to help identify the needy ones" [Julie].

Another parent indicated:

"There are pros and cons, there are some people who cannot make it all the way by way of their unstable circumstances, and they are not yet taking big pay. They cannot fund it, such people should be helped, and those who can pay should pay just like tax process. Those who earn more pay more, those who earn less pay less – I mean there should be balanced equation" [Kwame].

The suggestion here is to follow the taxation process to exempt certain students who cannot pay. However, opportunities for access, rights of education, equity and fairness in education are matters that need to be considered. In sum, the current criterion applies schools' enrolment for the distribution of the subsidy without considering the economic background of the students and schools. Therefore, since the needs of the individual students as well as the schools vary, there is the need to apply a methodically validated process to identify those students who cannot pay.

#### **6.4.2 Equity in Relation to Affordability**

The foregoing discussions about parents' ability to pay show that, if government ceases to subsidise secondary education, some parents will suffer. In order to illustrate the level of affordability, HOSs were asked to share their views on the proportion of parents who could afford to pay school fees and also needy schools.

A HOS indicated:

"From the rate at which fees are collected, 60% of parents can pay. At least 30% cannot pay at all. Even with the subsidisation, there are some



who cannot pay at all. If targeting is done well then government will have little to pay"[Linda].

However statistical analysis of the 2011 and 2012 financial statements of the three schools as shown in Table 5.10 in Chapter Five reveals that only an average of 3% of the expected school fees were in arrears. This means that 97% of the expected fees were collected. Specifically, Table 5.10 also shows that only 4.83% of the expected fees were in arrears for the School where the head claimed 30% cannot pay at all. Therefore, it is impossible to have at least 30% of the students who cannot pay anything.

Further analysis of the list of student debtors in the financial statement (2012) of the same school revealed that, out of a total of 894 students in the school, 149 (17%) were on the debtors list as having some outstanding fees to be settled. Additionally, of the 149 students, 106 (71.1%) owed less than Gh¢200.0 out of an annual fee of Gh¢915.0. These statistics refute the claimed by the head.

In relation to affordability the responses by HOSs seem to be the reflection of the situation in their schools and the kind of students admitted.

The study therefore probed further into the possibility of making parents pay more fees than what they have been paying. Participants' responses from the interview on how much their children were being fed on in a day at school compared to the same amount spent on them at home was therefore relevant to provide evidence on affordability. Though some parents said the feeding cost and the absorbed fees are unrealistic, they claimed they could not afford to pay full fees. One of the parents from the low income class indicated:

"This would worry us. While I have no money to pay for even one, the money is just not there to pay. To be honest with you, I am not earning anything and even my daughter is being catered for by the Headmistress" [Korby].

A HOS confirmed that secondary school education seems unaffordable to those in low income occupations:

"Yes, you sometimes meet some who are from low economic background. Some even come to beg and you can see the person has not

got it. Some even come here who are petty orange sellers, single parents and even some are artisans who get work periodically like carpenters" [Linda].

One of the HOSs in exploring whether or not students could afford the charging of realistic fees also remarked:

"Yes and No. Yes, because some parents whose wards went to the JHS in private schools were paying twice this amount that we charge here. Then, no, because you sometimes meet some people who are at the lower level of the economic ladder who sometimes come to beg to be given time to pay and you can see that the person has not gotten the money" [Sam].

As part of determining how much parents should contribute meaningfully towards secondary education of their wards, the study further probed into how much parents spend daily feeding their wards at home. Generally, it was noted that among the parents in the higher income bracket (parents who are gainfully employed), an average of Gh¢10 is spent, while the lower income parents (the unemployed, pensioners), spend average Gh¢3.50.

Commenting on the fees, a parent said:

"Oh yes, personally I will say it is unrealistic because in the house I spend more than GH¢3.00 on a meal. He further added that at least a double would be ok to make it comfortable for the students"[Linus].

It is clear that the low income category which cannot afford secondary education is made up of; the petty traders, single parents and artisans. This indicates that the ability to pay either the current fees or any other additional fee could be largely influenced by the economic status of the parents. While parents in the low income category said they may not be able to pay any additional fees, one in banking, whose ward's fee is around Gh¢200 cedis per term, declared that even if the fee was increased to 300 cedis per term, he will not find any problem paying. According to the Ghana Living Standard Survey (2008), the average annual household expenditure in Ghana is GH¢1,918 and the mean annual per capita consumption expenditure in Ghana is GH¢644 implying an overall average expenditure of about GH¢2 per person per day. Food expenditure accounts for two-fifth of total household expenditure.

A HOS confirmed that some parents can easily pay without any struggle:

"When a parent came to me asking for the fees to be paid and she was told, she burst into laughter and paid even more in advance, yes there are some parents who cannot even pay the subsidised fees and that some students have been withdrawn from schools because they cannot pay" [David].

This means that there are some parents who can afford an increase in fees while for others even the payment of current fees is problematic. This finding is consistent with those by the Ghana Centre for Democratic Development (2010) where only a small proportion of participants concluded that the grants had significantly reduced the financial burden of parents because of the charge of other fees which parents were unable to pay. Therefore, if targeting is adequately carried out, the impact of the subsidy in enhancing equitable access and participation in secondary education could be more significant than at present.

Relating this to the earlier findings where head teachers are still charging additional fees suggests that parents are still caring the financial burden, which the subsidy was originally introduced to release them from. Therefore, in the absence of more effective monitoring and supervision mechanisms for checking the types of charges levied on students by heads of schools, parents would still have additional cost even if proper targeting is done in identifying those who cannot pay.

The views of all the TOSED were sought as to whether they think the government can actually continue to afford to pay the subsidy. All TOSED affirmed that the subsidy is contributing significantly to enhanced participation; yet, they could not hide their perceptions on the inability of government to continue to afford paying the subsidy.

According to a TOSED:

"It could be easily deduced that government is finding it difficult to pay. Even though individually it is small, put together it is a huge sum of money, so you see the government has to find ways and means to pull these and that together to be able to pay one term, the other term is in arrears, sometimes it goes like that. This is why I am saying that eventually this subsidy will cease because it is not sustainable" [Abu].

It can therefore be concluded that affordability of school fees for many parents especially the poor, would be extremely difficult in the absence of government subsidy. Further, as indicated above, the sustainability of the subsidy is questionable given difficulties government has had in providing the funds on time. Sustainability of the subsidy with adequate targeting of only those who cannot pay is essential. Government could finance heavy infrastructure developments in the schools such as the building of classrooms, dormitories and accommodation for teachers, while the other non-salary expenditures could be paid by parents. However this could again result in eliminating poor students from gaining access and participation.

#### **6.4.3 Adequacy of School Subsidy**

The study probed further to find out whether the current level of the subsidy is adequate in financing of secondary education. First, questions were asked to explore the quantum of school expenditure and secondly, whether the subsidy received is able to cover those school expenses. Various responses emerged on how much of annual expenditure of the schools is covered by the subsidy. For example, one of the HOSs was of the view that the percentage of the subsidy against the total amount of the expenditure in his school was between three and 5%.

Analysis of the 2011 and 2012 financial statements as depicted in Table 5.10 in Chapter Five on the proportion of the schools' subsidy against their total annual expenditure revealed that, the subsidy covered an average of 4.64% of the total annual expenditure of the schools. This implies that the subsidy covered only a marginal proportion of the expenditure of the schools, thereby making them inadequate.

The HOSs however agreed that, in reality, subsidy cover some school expenses and allow some children to access school.

The following response provides further evidence to support participants' claim that although the subsidy is inadequate it is still considered an essential provision that enhances school access and participation. One of the HOSs comments:

"If you say education is expensive try ignorance. I suggest that government increases subsidy to cover about 50% of the fees being paid if only it can afford"[Sam].

These statements express a sense of urgency and the need for government to subsidise education adequately to protect the interest of society against education deprivation. However the government is struggling to do so. This may be due to the way the subsidy is being managed. The fact that some parents are unable to pay the fees of their wards indicates that in order to be able to equitably participate in the educational system; some students need additional assistance in the form of subsidy. However it is noted that identifying the students who require additional resources and how much additional resource they require will not be easy as argued by Berne and Stiefel (1999).

It is believed that government will be able to afford the current subsidy for secondary education when targeting is carried out to give assistance to only those who cannot pay. This is expected to help minimise the undue delays to the release of the subsidy. Government would save resources which could provide more infrastructure as pointed out by one of the HOSs and alluded to by a parent.

In examining reasons behind the perception that the subsidy is inadequate, HOSs were asked to give the reasons for their claim why they believe this is the case. They expressed concern about the cost of the utilities component of the subsidy. It was revealed from their argument that the utility component of the subsidy would be adequate for day schools but inadequate for boarding schools as they spend more on utilities. One of the HOSs indicated:

"There is a disadvantage in the subsidy with respect to utilities. Assuming you have a purely day school with a population of 1,200 which is collecting the six cedis and I am a boarding school with the same student population who would use these facilities; the water, iron especially during the weekend. So we wrote a petition that we were forced by the circumstance to ask the students to pay some additional fees but GES did not give an approval" [David].

HOSs' concern over inadequacy of the subsidy for boarding schools appears to be genuine in view of higher cost involved in running boarding schools. Comparatively, for running

day schools with the same subsidy, the HOSs said the subsidy was more realistic. Interestingly, while financing utilities has been a major problem for the boarding schools, it was noted in Figure 5.5 and Figure 5.6 that since 2009, utilities has not been increased. Furthermore, although with the exception of textbook user fees and utility, there was a consistent increase in the various items under the subsidy for all the other categories from 2009 to 2013, these increase are marginal and do not have significant effect on the financing of the schools.

The study explored further whether HOSs would prefer to charge realistic fees to depending on the government for the subsidy. A HOS said:

"We would have preferred to charge realistic fees, but again we have people who are disadvantaged, 40% of students cannot pay and this is a substantial population of people who are unable to pay at all. Yes I prefer charging realistic fees, but again you cannot rule out the government totally, we still need the support from the government" [Linda].

This means that, although the heads prefer to charge realistic fees, there is the need for government to continue to provide for those who cannot pay. The views of the parents with respect to the inadequacy of the subsidy were also explored by asking them whether or not the boarding fees they currently pay was adequate to cover feeding per day compared to how much they spent in the house. This was done to ascertain whether or not this is one of the reasons for charging unapproved fees.

One of the parents who is a highly educated and in the high income category (banking) stated:

"More is spent on feeding the child at home than at school" [Linus].

The parents' perceptions were primarily that, irrespective of their economic background, they spent more on the child at home as compared to boarding school.

The views of the parents and HOSs on inadequacy of fee payment were in line with that of GES headquarters management. According to Abu:

"The fees being charged were not enough. For me that is not realistic. We are doing that only because we think the parents are poor and they are only unable to cater for the increase. Left to me alone the thing should be increased to about GH¢3.00 per student per day. That would have been more beneficial to the students" [Abu].

However, one of the HOSs recommended that for a realistic figure to be determined for boarding fees there is the need for research evidence. He stated:

"The determination of a realistic fee for boarding students should be done scientifically by first asking experts to come out with a standard menu guide which will suggest the menu that will provide quality food for the students. This should be costed and given to a committee comprising of all stakeholders to meet and decide on what the approved boarding fee should be" [Sam].

Relating this to subsidies means that one key factor which also accounts for the inadequacy of the current subsidy is that the fixing of the subsidy is not standardised making it obsolete over a period of time. This implies that the schools are not benefiting as they ought to since prices of items increase on daily basis. It is therefore clear from the HOSs responses that costs for feeding students in boarding schools appear to contribute to the high cost of running boarding schools.

Accordingly, the cost of feeding students in the boarding house was further probed. Two of the HOSs said they charge GH¢2.20 Ghana cedis per student per day on feeding. However, all the parents and HOSs claimed that an average amount of GH¢3.50 is the ideal amount for the feeding of a student in boarding institution for a day. Until recently, when MOE approved feeding fees to go up to Gh¢3.2, at the beginning of the 2013/2014 academic year, boarding fees were Gh¢2.2 Ghana cedis per student per day.

One HOS complained that the current fees are still unrealistic:

"The approved fees are not realistic because, from the perspective of the boarders, the boarding fees are supposed to cover three square meals of which the GH¢2.2 cedis per day is not enough. In effect, we are only adding up debts because we have to feed the students" [Linda].

The arrangement of the HOSs seem to suggest that the government had not provided sufficient and absolute levels of funding to enable all children to achieve at high levels while the subsidy is unable to cover for the cost it is supposed to. This further suggests that Ghana's system of providing education subsidy falls short of Saavedra's (2002) description of a good education financing system. Also, the findings suggest that financing secondary education in Ghana is grappling with the issue of adequacy which is one of the main recurring issues of funding as observed by Tsang (2001), Levin (1995) and Monk (1990).

The reasons expressed by all participants for the unrealistic boarding fees charged, support the need for government to pay attention to the current subsidy payment which is still inadequate. Thus because of government's inability to finance secondary education fully, it is providing partial subsidy at the secondary level. Due to this, the poor who cannot afford the remaining fees may be excluded from participating in secondary education. This may result in the introduction of unfairness and inequity in the provision of education.

This is evident, as there are still some individuals who cannot afford the partially subsidised fees and for that matter would drop out from school. This deduction is consistent with Fernandez et al. (1994) who argue that by choosing to subsidize only partially the cost of an education, higher- income individuals can effectively exclude poorer individuals from receiving this education and simultaneously extract resources from them.

In responding to how government could afford to subsidise secondary education adequately, one of the parents said in support of those who cannot pay:

"A levy could be put on those working in the formal sector say 1% for five years and government could use this to finance most of the informal sector parents who are unable to finance the education of their wards"  
[Julie].

This response suggests that government uses its revenue procedures in the formal sector to finance education for the deprived.



In sum, the subsidy provided by government to finance secondary education is inadequate especially with respect to boarding students. The inadequate funding is likely to lead, all other things being equal to, a lack of optimum educational outputs and outcomes for all those who are supposed to benefit.

## **6.5 Chapter Summary**

In managing the secondary education subsidy to promote equity, this chapter concludes that the subsidy has not sufficiently lessened the financial burden of parents considering the fact that there are a number of additional fees which parents pay. Transparency and accountability in the management of the subsidy have not been largely promoted due to the exclusion of the relevant stakeholders in the use of the subsidy. Also, there are inadequate internal control mechanisms in promoting the efficient use of the subsidy since enrolment figures are not verified and authenticated.

Essentially, the releases of the subsidy have been unduly delayed as a result of several contingent factors. This has affected the efficient planning and use of the subsidies by the HOSs. Government inability to timely release the subsidy seems to be the major factor that contributes to the undue delays in the releases of the subsidy.

The current system for the distribution of the subsidy shows that equity has been largely ignored and that there are some students who are benefiting from the subsidy while their parents could readily afford it. On the other hand there are others who, by their current economic status such as low income level or ill health of parents find it extremely difficult to finance their education. The current system of subsidising secondary education in the country is giving students with different needs the same amount of resources (subsidy) thereby giving different students' unequal opportunities for participation.

This contradicts the basic philosophical assumption of the vertical equity theory, which postulates that students with different needs should be given different amounts of resources so that each may have an equal opportunity for success.

Fundamentally, there is the need to sustain subsidy payment since it enhances access and participation for certain individuals in the low income group. However, the subsidy is inadequate in covering the cost of running of the schools.

## **CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS**

### **7.1 Introduction**

This chapter presents a summary of the major findings from the study as well as conclusions, recommendations and directions for further research. The chapter also highlights the implications of the findings from the study for policy formulation and also outlines the significant lessons emanating from the study.

### **7.2 Summary of Key Findings**

The first major research question of the study examined the management of secondary school subsidy in providing an efficient source of funding for schools and students. The following key findings and their corresponding conclusions are made:

There are inadequate control mechanisms guiding the request for and management of the subsidy. Some HOSs have not extensively adhered to the guidelines for requesting school subsidy such as submitting of enrolment figures. Also there is a lack of evidence to prove that the enrolment figures submitted are verified before payment is made, which might create the opportunity for malfeasance. Therefore, the study concludes that the internal control mechanisms for the utilisation of the subsidy are weak.

The major stakeholders involved in decision making regarding the utilisation of the subsidy at the school level include only HOSs and accountants. Hence there is a lack of an all-inclusive-participatory approach in the decision making process in relation to the utilisation of school subsidy at the school level. This implies that there is lack of transparency at the school level in the management of the subsidy. Therefore, there is lack of social accountability in the management of the subsidy.

There are high levels of disparities and discrepancies in the enrolment figures submitted to EMIS and that for the subsidy. However there is no evidence of reconciliation of the two data sets. The magnitudes of the disparities were also alarming especially where some schools did not see the need to participate in the EMIS census.

There have been undue delays and inconsistencies in timing of the releases of subsidy by the MOF to schools which negatively affect the budgeting processes of the schools. This makes the disbursement and delivery process of the subsidy unfavourable for many HOSs in running activities of the schools. Furthermore, the inconsistencies in the release of schools subsidy have contributed to HOSs charging additional and or unapproved fees in order to cover administration and running costs. Externally, the process for sourcing the funds is too complex and fragmented while internally, many HOSs do not monitor the process of getting students to append their signature on the signed list. Therefore, the supreme objective of introducing the subsidy to lessen the financial burden of parents has been defeated.

The second research question of the study focused on the equitability of the subsidy as a system of financing secondary education in Ghana. The key findings and conclusion emanating from the study in relation to this research question are that:

There is the absence of an adequate targeting mechanism to identify poor students who cannot finance secondary education.

Fundamentally, the current system of subsidising secondary education in Ghana has largely ignored vertical equity. There is therefore an inherent potential risk of excluding poor students from gaining access to participate in secondary education.

Additionally the use of enrolment data by GES as the only basis for subsidy allocation to schools was noted to be inequitable and unfair. There were also inequities among the various items covered under the subsidy with utility being the most inequitable subsidy item between boarding and day schools. These have resulted to per-school inequity in the system of subsidising secondary education and rather giving more funds to well-endowed schools with higher enrolment.

The current financing system of providing secondary education subsidy in the country is rather giving students with different needs the same amounts of resources, which therefore gives different students unequal opportunities for participation. Current approach of subsidising secondary education in Ghana has not largely enhanced equal access and participation in secondary education due to the lack of adequate targeting of students using the philosophical underlying assumption of the unequal treatment of the 'unequals'. The subsidy is uniform giving to everybody irrespective of economic background and also partial since it does not cover all the costs involved in secondary education. However, the study found that some parents had difficulties in paying the extra fees while others could easily afford. In conclusion, per-pupil vertical equity has largely been ignored in the management of the subsidy. Thus the provision of subsidy as a mechanism of financing secondary education is inequitable from the vertical equity perspective; investing much more in the richest students than the poorest students who lack the ability to pay. Overall, a proportion of people would be incapable of accessing secondary education without proper targeting of government subsidy.

The sustainability of the subsidy as a mechanism for improving participation by government and for households was studied. Government seem to be struggling with the payment of the subsidy and this is evident from the long delays associated with the releases of the subsidy. Basically, government budgets allocations are insufficient to provide secondary education in an equitable and sustainable manner.

### **7.3 Lessons Learnt**

The supreme principle of the subsidy (absorbing the additional financial burden of parents) has been defeated through charging of numerous fees by some HOSs as a result of the delay in the release of the subsidy.

While there have not been effective internal control mechanisms to monitor the type of fees charged by HOSs, there is a higher likelihood that some HOSs could be charging additional

fees without authorisation. Rules emphasising the involvement of the relevant stakeholders in the use of schools subsidy are lacking.

The current mechanism for subsidy delivery to secondary schools risks delays that could impact on quality. The late releases of subsidy have negatively affected the implementation of planned activities of many schools.

The current approach to subsidising the fees of secondary education in Ghana is partially excluding the very poor as the rich seemed to benefit more. Thus the subsidy has not substantially reduced the financial burden of parents while equity has largely been ignored in the current system of management of SHS subsidy in the country.

The GoG seems to be struggling in the payment of the secondary education subsidy. This therefore suggests that government alone cannot finance secondary education. Therefore, to provide equitable access and participation in secondary education, there should be a cost-sharing policy while designing appropriate interventions for those who cannot pay. By so doing, government can save adequate funds to create more access.

Similarly, progressive taxation could also be an alternative form of enhancing equity in the financing of secondary education. In this instance, progressive taxation will reduce the burden of parents with a lower ability to pay, as the concept shift the costs to parents with a higher ability-to-pay.

In the absence of a scientifically tested approach for targeting students who cannot pay, it would be difficult to have an equitable subsidy system. If targeting is adequately carried out, the impact of the subsidy in enhancing equitable access and participation in secondary education could be more significant. This demands real and sustained commitment from political leaders.

It is difficult to target funding according to students' need when there is limited information on pupil's characteristics, and there is no systems through which such data can be collected. Imperatively, a reliable data at the school level on pupil characteristics and socio-economic

background is a prerequisite for effective need-based per pupil allocations. However, targeting students who cannot pay could be difficult and inequitable without the involvement of all the relevant stakeholders.

### **Personal Experience**

Acting as the Financial Controller of the Ghana Education Service, the predominant findings of this research has impacted on me the researcher in the following areas:

- i. The study has shown that in the face of limited educational resources, it is essential to strictly adhered to efficient measures as well as equity principles in resource allocation.
- ii. Considering the disparities noted between EMIS data and that submitted for enrolment, this study has also informed me that I should play a critical role in the collection and reconciliation of the two dataset in order to have credible data to efficiently disburse educational resources.

The Professional Doctorate has made me appreciate the importance of research and how it can impact on my work. I have a much more critical and analytical approach to issues. The exposure I had through; face to face discussions with other international students, quality lectures from experienced lecturers and the seminars attended in the course of this programme has also positively influenced my discourse. This has help to improve my contributions and presentations during meetings and seminars and in the writing of reports. I am abreast with variety of international best practices in relation to education financing as a result of the host of literature read. Even though the Ghana Education Service is an implementation agency and plays only an advisory role in policy formulation, I have played active role in recent times in the formulation of any policy concerning education finance at the pre-tertiary level.

### **7.4 Recommendations**

The following main recommendations are proposed for the effective allocation, disbursement and utilisation of SHS subsidy based on the key findings emanating from this study:

### **7.4.1 Government**

#### **Cost-sharing Policy for Financing of Secondary Education: Inclusive Financing**

The cost of education should be borne proportionally by government and parents. The proposal for a cost-sharing policy of financing secondary education is based on the fact that government benefits from an educated population while parents tend to gain from the investments made in the education of their wards. Moreover, government is experiencing difficulties in providing adequate subsidy to fully cover the cost of secondary education. However, in the cost-sharing policy, there is the need to ensure equity by instituting interventions that would adequately target students who cannot afford the payment of their fees.

#### **Equity Mechanism for the Management of the Subsidy**

Instead of government focusing solely on increasing resources for education, increases in spending must be accompanied by a more equitable and targeted distribution of funding. Specifically, to enhance per-pupil and per-school equity in the allocation of school subsidy, funds should be allocated to students and schools, based on their relative educational needs. Students should be categorised on the basis of ability to pay, with the most disadvantaged group receiving the most resources (subsidy). In this regard, there is the need to perform a socio-economic profile analysis to identify students who cannot bear the cost of their education, using economic and social welfare indicators which include the following:

- i. Income of parents (either unemployed or employed in petty occupations)
- ii. Living conditions of family of students measured by indicators used by the Ghana Living Standard Surveys (GLSS) including household consumption expenditure, covering food and non-food items (including housing).
- iii. Health condition of parents (incapacitated)
- iv. Type of school attended

Furthermore, to ensure adequate targeting, there is the need to include all the relevant stakeholders including parents, teachers and community leaders who could make inputs in scientifically determining students in this category.



### **Per-pupil Funding using a Formula weighted according to Needs**

Since the payment of school fees remains a major barrier to access for many students from poor homes, school subsidy can only ease the financial burden of such students when adequacy is in place. Hence there should be a paradigm shift by government towards needs-based financing of secondary education, using a differentiated per-pupil allocation, with weights for aspects such as household income, gender, location, occupation of parents and health status of parents. Available data from the GLSS could be used in determining household incomes as well as other characteristics.

### **Modification of Formula for Disbursement of the Subsidy to Schools**

Currently, enrolment data of the respective schools is the major determinant in the allocation of the subsidy to schools. Basically, schools with higher costs to educate student populations should receive more funding than their counterparts to compensate for their numbers. However, to ensure adequacy and equity, the formula for disbursement of the current subsidy which is solely based on enrolment figures should be modified to provide more resources to schools with more needs. The modified formula could contain variables for resource-based financing using weights such as:

- i. Type of school (boarding or day)
- ii. Size of school
- iii. Infrastructural demand
- iv. Geographical location of the school

### **Improving Information Management System for Subsidy Request and Allocation**

The Ministry of Education in collaboration with the management of GES should develop an information management system which could pick information automatically on enrolment figures from schools. Better information systems are needed to record, track and monitor government allocations and disbursements, to enable better resource management, and to allow schools to account for costs termly and yearly.

### **Annual Review of the Subsidy**

It is recommended that a review of the subsidy and its progress is carried out annually. This review should describe the progress, gaps and proposed adjustments in terms of, but not limited to, priorities and desired outcomes over the short, medium and long-term as well as roles and responsibilities, and institutional arrangements for secondary school subsidy.

### **7.4.2 Management of Ghana Education Service**

#### **Monitoring and Supervision of the Collection of an Unapproved fee by Heads of Schools**

There should be effective monitoring and supervision of the types of fees charged by HOSs to address the weaknesses in the management of the subsidy. This can be done by undertaking random checks on students' bills across schools in identifying items for which they have been billed.

#### **Reconciliation of Enrolment Data from EMIS with Data for the Subsidy**

There should be periodic reconciliation of enrolment figures between EMIS figures and those submitted for the subsidy. This would address the discrepancies between the two sets of data.

#### **Involvement of CHASS in the Collection of Enrolment Figures**

The Conference of Heads of Assisted Secondary Schools (CHASS) should be authorised by the Director General of GES to assist in the collection of the signed list of students from the various schools at their regional secretariat and submit them to the GES Headquarters. The involvement of CHASS would play two major roles. This would serve as a form of peer review in the verification of the enrolment data submitted by HOSs for the subsidy and again help to reduce the undue delay since they are in direct contact with their members.

#### **Institutionalisation of a Performance Management System (PMS)**

Since regular, constructive feedback on performance is vital if HOSs are to build on their strengths, achieve their full potential, and make the maximum contribution to the management of school subsidy, a Performance Management System (PMS) should be

institutionalised by the GES for the management of school funds. The implementation of PMS is to help provide a formal, recorded and regular review of the performance of HOSs in the management of school funds as a plan for future development.

To effectively implement the PMS, the study recommends the following steps:

- i. Setting performance standards: The performance standards must be understandable, subject to measurement and reasonable, clear and objective enough to be understood and measured. The expectations of GES in terms of work performance by HOSs in managing the subsidy must be clarified enough through the adoption of the Specific, Measurable, Achievable, Reliable, Time bound (SMART) Analysis framework.
- ii. Communicating those standards: Once the performance standards are established, it is necessary to communicate these expectations to HOSs. It would be dangerous for GES to assume that all HOSs know what is expected of them in their job performance (subsidy management). In other words, HOSs must be told clearly and precisely what the standards and expectations are in relation to the utilisation of the subsidy and how those standards are to be met.
- iii. Discuss results with HOSs: There is the need to discuss successes and challenges in the management of the subsidy that needs to be addressed in order to provide the management of GES with an opportunity to guide better performance.
- iv. Organise training: The weakness of the HOSs from the performance evaluation should give indications of the areas that need further training.

### **Participation in EMIS Census**

In relation to monitoring and supervision, considering the fact that some schools did not submit their enrolment data to EMIS, there is the need to put in place stringent measures to ensure that schools, which do not abide by this provision, are not given any subsidy. Participation in the EMIS Census is essential in generating adequate and reliable data for scientific policy formulation in relation to school subsidy.

### **7.4.3 Heads of Schools**

While a lack of data on students from extremely poor homes is a significant barrier to targeting the education needs of children equitably, HOSs are advised to compile a list of children in this category using the welfare indicators mentioned above. This is expected to ease the targeting process.

## **7.5 Contribution to the Field**

### **7.5.1 Substantive Issues**

Although there have been several empirical studies on public school financing in Ghana; literature on the role of subsidies in improving access and participation in secondary education in Ghana is limited. This study therefore bridged that gap by presenting in-depth empirical understanding on the need to manage subsidies to promote access and participation in secondary education. It also points out the necessity to uphold the principles of; equity, efficiency and affordability in making financing decisions especially in the allocation of resources.

The study reveals that, the current approach of financing secondary education in Ghana has not largely enhanced equal access and participation due to the lack of proper targeting of students who lacked the ability to pay for their education.

### **7.5.2 Theoretical Issues**

In addressing equity in education financing, Vesely and Crampton (2004) argue that those who have more income should pay more for education, because they have the ability to pay.

This study concludes that one of the best theoretical impetuses to understanding the philosophy underlying the financing of secondary education in order to promote equitable

access and participation is the vertical equity theory. Basically, the key theoretical issues emanating from this study are that, schools have students with different ability to pay for their education and these students should be treated differently in relation to resource allocation. This is essential to give each student an equal opportunity for participating in education. Again it is important to recognise that due to limited resources, policies in relation to education financing must consider the principles of equity, affordability and adequacy. It is therefore prudent that all Social Intervention Programmes (SIPs), like subsidies in education consider targeting as one of the paramount issues at the policy formulation stage.

### **7.5.3 Methodological issues**

The blend of both positivist and interpretivist research paradigms by combining qualitative and statistical methods made it possible to analyse a wide range of data from primary and secondary sources needed to draw the necessary conclusion. Again the mixed method application using primary and secondary data allowed validation of views with statistical analysis.

## **7.6 Direction of further Studies**

Given the small nature of the sample size used in this study; a further study should be done nation-wide to uncover the details of any inequity in the provision of secondary school educational financing.

In Addition, research should be conducted using a more structured statistical technique such as the coefficient of variation to measure the funding levels of all the districts in the country. This is essential to reveal how tightly they are clustered around the state-wide mean spending figure. Also, the fiscal neutrality score should be calculated to reveal the degree of any differences in funding which are related to the wealth of the school district.

It should also be investigated whether cost-sharing policy in financing secondary education in Ghana could promote competition and eventually efficiency and quality.

An assessment of the EMIS census and its impact on eliminating any disparities in the financing of secondary education in relation to the use of subsidy should be undertaken.

To enhance transparency in the use of the subsidy, the government through the MOE could publish how much of the subsidy each school is getting in the newspapers.

Finally to quantitatively establish the trend on the impact of the subsidy on access and participation, further studies should consider more schools.

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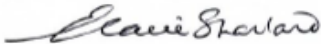


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**APPENDICES**  
**APPENDIX A**  
**ETHICS APPROVAL**



<b>Social Sciences &amp; Arts Cross-School Research Ethics Committee</b> <b>CERTIFICATE OF APPROVAL</b>	
Reference Number:	1112/07/06
School:	ESW
Title of Project	Financing secondary education in Ghana: managing subsidies to promote meaningful access and participation.
Principal Investigator: (Supervisor)	Christian Koramoah (Sayed/Novelli)
Expected Start Date:*	03/09/12
<p><small>*NB. If the <u>actual</u> project start date is delayed beyond 12 months of the <u>expected</u> start date, this Certificate of Approval will lapse and the project will need to be reviewed again to take account of changed circumstances such as legislation, sponsor requirements and University procedures</small></p>	
<p><b>This project has been given ethical approval by the Social Sciences/Arts Research Ethics Committee (C-REC). Please note the following requirements for approved submissions:</b></p> <p><b>Amendments to research proposal</b> - Any changes or amendments to the approved proposal, which have ethical implications, must be submitted to the committee for authorisation prior to implementation.</p> <p><b>Feedback regarding any adverse and unexpected events</b> - Any adverse (undesirable and unintended) and unexpected events that occur during the implementation of the project must be reported to the Chair of the Social Sciences C-REC. In the event of a serious adverse event, research must be stopped immediately and the Chair alerted within 24 hours of the occurrence.</p>	
Authorised Signature	
Name of Authorised Signatory (C-REC Chair or nominated deputy)	Dr Elaine Sharland      16/08/12

## APPENDIX B

## APPROVAL LETTER FROM GES

## GHANA EDUCATION SERVICE

*In case of reply the number and date  
of this letter should be quoted.*

***Our Ref. GES/AF/CON/14/01***



HEADQUARTERS  
P. O. BOX M.45  
ACCRA

21<sup>ST</sup> DEC. 2013

**CHRISTIAN KORAMOAH  
THE APOSTOLIC CHURCH-GHANA  
P.O. BOX OS 130  
OSU- ACCRA**

**REF: APPROVAL FOR DOCTORAL ACADEMIC RESEARCH**

Following your application to carry out a research on *“Financing Secondary Education in Ghana: Managing Subsidies to promote meaningful access and participation*, I am pleased to inform you that your request to our outfit to authorize our staff both at the Headquarters and School level to volunteer information for the completion of your research has been approved.

The approval was based on the impact such a study could have on policy formulation in relation to educational financing for the promoting of access and participation to secondary education in Ghana

We also look forward to receiving the key findings emanating from your research.

We wish you the best of luck in your academic research endeavor

Thank You.

**STEPHEN ADU  
DIRECTOR BASIC EDUCATION DIVISION  
FOR DIRECTOR GENERAL**

## APPENDIX C

### RESEARCH PARTICIPANTS CONSENT FORM

**TITLE OF STUDY: FINANCING SECONDARY EDUCATION IN GHANA:  
MANAGING SUBSIDIES TO PROMOTE MEANINGFUL  
ACCESS AND PARTICIPATION**

Project Approval Reference: [c-recess@sussex.ac.uk](mailto:c-recess@sussex.ac.uk)

I agree to take part in the above research study which is being conducted by Christian Koramoah, a student of the School of Education, University of Sussex in the United Kingdom. I have had an informed explanation of the purpose of the research and my level of involvement. I have read and understood the explanatory statements which I would keep for records. I understand that by agreeing to take part means that I am willing to:

- i. Allow the researcher to interview me (One on One)
- ii. Allow the interview to be audio-taped
- iii. Make myself available for a further interview/discussion/interaction

I understand that any information I provide would be treated as confidential and that no information that in grant would lead to the identification of any individual in the reporting of the research either by the researcher or any other party.

I understand that my participation is voluntary and that I can choose to participate in part or the entire project.

I can also withdraw at any stage or phase of the project without being penalised or disadvantaged in any way

I would like the researcher to continue to negotiate with me for my consent at any stage of the project.

Name: .....

Signature: .....

Date: .....

Independent witness to participant's voluntary and informed consent (If this is necessary for your research for example where the relationship between participants which might be deemed to unduly influence the participants voluntary concerned).

I believe that..... (name) understands the above research and gives his/her consent voluntarily.

Name: .....

Signature: .....

Address: .....

Date: .....

## **APPENDIX D**

### **FINANCING SECONDARY EDUCATION IN GHANA: MANAGING SUBSIDIES TO PROMOTE EQUITABLE ACCESS TO SECONDARY EDUCATION INTERVIEW GUIDE FOR HEADS OF SCHOOLS**

#### **Introduction**

This study is designed for academic purpose. The study seeks to examine the management of secondary school subsidy in providing an efficient source of funding for schools and students, assess the equitability of the subsidy as a system of financing secondary education in Ghana as well as the sustainability of the subsidies as a mechanism for improving participation by government and for households.

This study will contribute to efficient policy formulation on the management of secondary school subsidies in particular to promoting equitable access. You have been selected as one of the most important stakeholders in the management of the subsidy to volunteer information for the completion of this study. You are however assured that information provided to complete this study would be treated with the strictest confidentiality.

Thank you in advance for participating in the study

#### **SECTION A: BACKGROUND INFORMATION**

1. Position in the Ghana Education Service .....
2. How long have you been in your position.....
3. Gender.....

## **SECTION B: MANAGEMENT OF SECONDARY SCHOOL SUBSIDY**

4. What processes are involved in sourcing for the subsidy from the Headquarters  
.....
5. What are the items covered in the subsidy provided by the Government?  
.....
6. How consistent has the release of the subsidy been?  
.....
7. What factors in your view if any affect the timely release of the subsidy? How can such factors be addressed?  
.....
8. How does the untimely release of the subsidy affect the running cost of the school?  
.....
9. Do you charge additional fees aside the subsidy? If Yes, kindly indicate what these additional fees are?  
.....
10. Are there any processes which must be followed to charge these additional fees? Kindly outline the processes if any.  
.....
11. Are there variations in the payment of these additional fees across day and boarding students? What factors account for these variations?  
.....
12. How frequent are students (day and boarding) required to pay these additional fees?  
.....

13. What is your view on heads of school receiving training in the management of school subsidy?

.....

14. Is there any specific manual that guides you in the use of the subsidy?

.....

15. Who are involved in the management of the subsidy at the school level?

.....

16. What mechanisms have been instituted in the school in accounting for the use of the subsidy?

.....

### **SECTION C: ADEQUACY OF SECONDARY SCHOOL SUBSIDY**

17. In your view, is the subsidy provided by the Government adequate for the running costs of schools? Explain

.....

18. In your estimation, what will you suggest to be the ideal fee for secondary school?

.....

19. How does the adequacy/inadequacy of the subsidy affect the running costs of the school?

.....



## **SECTION D: AFFORDABILITY OF SECONDARY SCHOOL SUBSIDY**

20. What is your position on:

- i. Government alone financing secondary education? Can he afford

.....

- ii. Parents alone financing the education of their wards?

.....

- iii. Both parent and Government financing the education of the child?

.....

21. How do parents response to the charging of these additional fees? Are they able to pay?

.....

## **SECTION E: EQUITABILITY IN THE MANAGEMENT OF SECONDARY SCHOOL SUBSIDY**

22. What is your view on the Government financing the education of every child with respect to their parents' ability to pay?

.....

23. Assuming the Government decides to provide free secondary education, which group of students (in terms of ability to pay) should have it free?

.....

24. How can such students be determined in a more equitable and fair manner?

.....

**FINANCING SECONDARY EDUCATION IN GHANA: MANAGING SUBSIDIES  
TO PROMOTE EQUITABLE ACCESS TO SECONDARY EDUCATION  
INTERVIEW GUIDE FOR HEADQUARTERS OFFICIALS**

**Introduction**

This study is designed for academic purpose. The study seeks to examine the management of secondary school subsidy in providing an efficient source of funding for schools and students, assess the equitability of the subsidy as a system of financing secondary education in Ghana as well as the sustainability of the subsidies as a mechanism for improving participation by government and for households.

This study will contribute to efficient policy formulation on the management of secondary school subsidies in particular to promoting equitable access. You have been selected as one of the most important stakeholders in the management of the subsidy to volunteer information for the completion of this study. You are however assured that information provided to complete this study would be treated with the strictest confidentiality.

Thank you in advance for participating in the study

**SECTION A: BACKGROUND INFORMATION**

1. Position in the Ghana Education Service .....
2. How long have you been in your position.....
3. Gender.....

**SECTION B: MANAGEMENT OF SECONDARY SCHOOL SUBSIDY**

4. What are the main reasons for the provision of educational subsidies as articulated in the policy document and by various stakeholders?  
.....
5. What processes are involved in sourcing for the subsidy from the Government  
.....
6. What are the items covered in the subsidy provided by the Government?  
.....

7. How consistent has the release of the subsidy been?

.....

8. What factors in your view if any affect the timely release of the subsidy?. How can such factors be overcome?

.....

9. How does the untimely release of the subsidy affect the running cost of the school?

.....

10. How often if any do you receive complaints from parents about heads of schools charging additional fees?

.....

11. Are there any processes which must be followed to charge these additional fees? Kindly outline the processes if any

.....

12. How often do you conduct training for Heads of Schools on the management of the subsidy?

.....

13. Is there any specific manual that guides heads of schools in the use of the subsidy?

.....

14. How do you ensure that heads of schools used the subsidy for the intended purpose?

.....

15. How do you ensure that schools receive exactly how much they are supposed to receive?

.....

### **SECTION C: ADEQUACY OF SECONDARY SCHOOL SUBSIDY**

16. What is the basis for the calculation and allocation of the subsidy to schools?

.....

17. In your view, is the subsidy provided by the Government adequate for the running costs of schools? Explain.

.....

18. In your estimation, what will you suggest to be the ideal fee for secondary school?

.....

19. How does the adequacy/inadequacy of the subsidy affect the running costs of schools?

.....

#### **SECTION D: AFFORDABILITY OF SECONDARY SCHOOL SUBSIDY**

20. What is your position on:

- i. Government alone financing secondary education? Can he afford

.....

- ii. Parents alone financing the education of their wards?

.....

- iii. Both parent and Government financing the education of the child?

.....

#### **SECTION E: EQUITABILITY IN THE MANAGEMENT OF SECONDARY SCHOOL SUBSIDY**

21. What is your view on the Government financing the education of every child with respect to their parents' ability to pay?

.....

22. Assuming the Government decides to provide free secondary education, which group of students (in terms of ability to pay) should have it free?

.....

23. How can such students be determined in a more equitable and fair manner?

.....

**FINANCING SECONDARY EDUCATION IN GHANA: MANAGING SUBSIDIES  
TO PROMOTE EQUITABLE ACCESS TO SECONDARY EDUCATION  
INTERVIEW GUIDE FOR PARENTS**

**Introduction**

This study is designed for academic purpose. The study seeks to examine the management of secondary school subsidy in providing an efficient source of funding for schools and students, assess the equitability of the subsidy as a system of financing secondary education in Ghana as well as the sustainability of the subsidies as a mechanism for improving participation by government and for households.

This study will contribute to efficient policy formulation on the management of secondary school subsidies in particular to promoting equitable access. You have been selected as one of the important parents in the payment of school fees to volunteer information for the completion of this study. You are however assured that information provided to complete this study would be treated with the strictest confidentiality.

Thank you in advance for participating in the study.

**SECTION A: BACKGROUND INFORMATION**

1. Occupation .....
2. Gender.....

**SECTION B: PARENTS AWARENESS OF SECONDARY SCHOOL SUBSIDY**

3. On the average, how much do you pay as fees every term?  
.....
4. How much do you spend in total on your ward per term (fees+dues+all levies+ expenses on visitations)?  
.....
5. Kindly give a detailed breakdown of all the fees and levies you pay to this school every term?  
.....
6. Are you aware that currently, the Government is absorbing some of the fees you are supposed to pay?  
.....

7. If yes how much is government directly paying on your behalf every term?

.....

### **SECTION C: ADEQUACY OF SECONDARY SCHOOL SUBSIDY**

8. How much are you currently paying for the feeding of your ward per day?

.....

9. Is that adequate as compared to how much you use to feed her/him per day at home?

.....

10. Realistically, would it be too much for you if you are asked to contribute more money than you are paying now to provide better education for your ward?

.....

### **SECTION D: AFFORDABILITY OF SECONDARY SCHOOL SUBSIDY**

11. What is your position on:

i. Government alone financing secondary education? Can he afford

.....

ii. Parents alone financing the education of their wards?

.....

iii. Both parent and Government financing the education of the child?

.....

iv. How do you feel about schools charging additional fees? Are you able to pay?

.....

### **SECTION E: EQUITABILITY IN THE MANAGEMENT OF SECONDARY SCHOOL SUBSIDY**

12. What is your view on the Government financing the education of every child with respect to parents' ability to pay?

.....

13. Assuming the Government decides to provide free secondary education, which group of parents (in terms of ability to pay) should have it free?

.....

14. How can such students be determined in a more equitable and fair manner?

.....

**APPENDIX E****FORM A-C****APPLICATION FOR APPROVAL OF AUTHORISED LEVIES IN  
2<sup>ND</sup> CYCLE INSTITUTIONS****P.T.A DUES****FORM A**

A. Name of School

.....

Name of Head of School

.....

Name of Board of Chairman

.....

B. Details of Application for levy (The request must indicate school enrolment by class and dues to be charged per student)

SIGNATURE:

.....  
BOARD CHAIRMAN.....  
PTA CHAIRMAN

DATE:.....

DATE: .....

SCHOOL HEAD: .....

MMD DIRECTOR.....

DATE:.....

DATE:.....

CERTIFIED:

.....  
REGIONAL DIRECTOR

DATE: .....

APPROVED/NOT APPROVED

.....  
DIRECTOR-GENERAL

DATE:.....

❖ Please complete in Triplicate

**APPLICATION FOR APPROVAL OF AUTHORISED LEVIES IN**  
**2<sup>ND</sup> CYCLE INSTITUTIONS**

**DEVELOPMENT PROJECTS/ACADEMIC PROGRAMMES/ OTHER SCHOOL ACTIVITIES**

**FORM B**

**A. NAME OF SCHOOL:**

.....

**NAME OF HEAD OF SCHOOL:**

.....

**NAME OF BOARD OF CHAIRMAN:**

.....

**NAME OF PTA CHAIRMAN:**

.....

**B. Details of project embarked on:**

- (i) Type and name of Project/Programme/Activity
- (ii) Benefit to School
- (iii) Estimate cost of the Project/Programme/Activity:
- (iv) Date of Commencement of Project/Programme/Activity
- (v) Expected Date of Completion:
- (vi) Student Population:
- (vii) Levy per student per/Term/Year:
- (viii) Any other information (i.e. Other sources of financial support, etc.)

**SIGNATURE:.....**

**BOARD CHAIRMAN**

**PTA CHAIRMAN**

**DATE:.....**

**DATE:.....**

**SCHOOL HEAD M/M/D DIRECTOR**

**DATE:.....**

**DATE:.....**

I certify that the project/programme/activity will/will not enhance education delivery in the school.

**Recommended/Not Recommended**

.....

**APPROVED/NOT APPROVED**

**REGIONAL DIRECTOR**

.....

**DIRECTOR-GENERAL**

**DATE:.....**

**DATE:.....**

❖ Please complete in Triplicate



**APPLICATION FOR APPROVAL OF AUTHORISED LEVIES IN**  
**2<sup>ND</sup> CYCLE INSTITUTIONS**

**SUMMARY: ON-GOING PROJECT**

**FORM C**

**Name of School:.....**

TYPE OF ACTIVITY	ESTIMATED COST	DATE OF COMMENCEM ENT OF ACTIVITY	DATE FO COMPLETI ON OF ACTIVITY	STUDENT POPULATI ON	LEVY PER STUDE NT	REMAR KS
1. PROJECTS						
2. PROG.						
3. OTHERS (SPECIFY)						

Name and Signature of Board Chairman:

.....Date:.....

Name and Signature of PTA Chairman:

.....Date:.....

Name and Signature of School Head:

.....Date: .....

Name and Signature of M/M/D Director:

.....Date:.....

I certify that the project/programme/activity will/will not enhance education delivery in the school.

Recommended/Not Recommended.

.....  
REGIONAL DIRECTOR

APPROVED/NOT APPROVED

DATE: .....

DIRECTOR-GENERAL

DATE:.....

❖ Please complete in Triplicate

## **APPENDIX F**

### **PARTICIPANT INFORMATION SHEET - GENERAL**

#### **Study Title**

#### **FINANCING SECONDARY EDUCATION IN GHANA:**

Managing Subsidies to Promote Meaningful Access and Participation.

Dear Participant,

#### **Participant Information Sheet**

You are cordially invited to take part in this study with the title stated above. Please before you take a decision whether to take part or not, it is vital to read this carefully and understand why the research is being done, the role you will play and your level of involvement.

#### **Purpose of the Study**

The study aims at exploring whether there is efficient disbursement and utilization of the subsidy to public senior high schools in Ghana and also whether the policy on subsidies is helping to improve meaningful access and participation in secondary schools in general. It is specifically to determine empirical evidence to support the assertion that subsidy should be targeted at and aligned to learner needs to ensure equity. This study will contribute to the understanding of the secondary school subsidies in particular. The research will therefore not only be a theoretical exercise but will also attempt to find practical solutions to problems relating to the management of the subsidy and educational financing in general. The findings will also be a reference material for researchers and policy makers.

The study will involve in-depth interviews, starting from August 2012 to September 2012, one-on-one interviews of stakeholders at the regional/district education offices and selected schools. The purpose is to understand the perceptions, activities and views of all involved in the research with regard to management of secondary school subsidies.

The theoretical and social concepts of vertical and horizontal equities as well as efficiency, effectiveness and social justice will underpin all arguments in this study. Resource allocation, sustainability, adequacy, targeting, affordability and exclusion will feature in this exercise

### **Why Have I Being Invited?**

You have been chosen because you are seen as a participant who has the expertise and experiences in management of educational funds. However your involvement and participation is entirely voluntary. Consequently, you may decide to take part or not to take part. If you agree to take part, after reading this information sheet you are asked to sign a consent form. On the other hand if you decide not to take part, you are free to pull out, without stating any reason or reasons.

As regards confidentiality and anonymity, I will make all attempts to safeguard participants' anonymity and confidentiality, while recognising that in small-scale research, anonymity of respondents in the local context cannot be completely guaranteed.

### **What Happen to Me If I Take Part?**

Semi-structured interviews will be conducted with education managers particularly; directors, heads of second cycle institutions, parents teacher associations, civil society and other stakeholders, their views on how subsidies could be managed to promote meaningful access and participation at the secondary level. As regards the interview, the researcher would like to ask for your permission to use audiotape to record it.

### **What Are The Possible Benefits of Taking Part?**

The study seeks to detail the views of directors, heads of second cycle institutions, parents, civil society, and other stakeholders who are directly involved in managing educational funds, on how subsidies to second cycle institutions are being managed at the moment and suggest ways to improve upon their management to promote meaningful access and participation at that level. Hopefully the views expressed and suggestions made, apart from contributing to knowledge about management of educational funds, will also inform the policy makers on certain issues to take into consideration as they take decisions on funding of education in Ghana.

### **Will What I Say In This Study Be Kept Confidential?**

To ensure that what you say is kept confidential, the following actions will be performed:

- (i) All the electronic versions of the study will be kept in a computer using a password known only to the researcher.
- (ii) Pseudonyms will be used when reporting from transcription data as well as case study locations. Each interviewee will be given the option of being referred to by a pseudonym of his/her or choice.

- (iii) The research will contribute to the thesis for my Doctor of Education degree and will therefore be in a public domain. It will also be deposited with the Ghana Education Service as the sponsoring body.

### **What Do I Do If I Want to Take Part?**

If you want to take part, you are requested to sign the consent form which has also been provided and return this to me (using my contact details below). I will then contact you about your involvement in the research.

### **What Will Happen to The Results of The Research Study?**

See (iii) on paragraph - will what I say in this study be kept confidential? The results of the study which will be presented as a thesis for my Ed.D (Doctorate) degree will be published.

### **Who Has Reviewed The Study?**

The research has been approved by a Cluster-based Research Ethics Committee (C-REC) or through the School of Education and Social Work ethical review process.

### **Contact for Further Information**

For any information, you may contact the following for further information. Researcher: Christian Koramoah, Ghana Education Service Headquarters, Box M 45, Accra Ghana Tel: 233 (0) 204343020 or

Supervisor Dr.Yusuf Sayed, School of Education and Social Work, Essex House University of Sussex, Falmer, UK, BN1 9QQ. Tel: 00 44 (0) 1323871124/ 07790805349.